

Appendix J:
Traffic Supporting Information



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DATE: May 25, 2023
TO: Cecilia So, FirstCarbon Solutions
FROM: Alex So, Urban Crossroads, Inc.
JOB NO: 15470-01 VMT

TRACT 38625 SALT CREEK PROJECT VEHICLE MILES TRAVELED (VMT) SCREENING EVALUATION

Urban Crossroads, Inc. is pleased to provide the following Vehicle Miles Traveled (VMT) Screening Evaluation for the Tract 38625 Salt Creek Project (**Project**), which is located north of the Salt Creek Channel, west of Briggs Road, and south of Simpson Road in the City of Menifee.

PROJECT OVERVIEW

The proposed Project consists of 330 single family dwelling units on 55.2 acres. A preliminary site plan for the proposed Project is found in Attachment A.

BACKGROUND

The California Environmental Quality Act (CEQA) requires all lead agencies to adopt VMT as the measure for identifying transportation impacts for land use projects. To comply with CEQA, the City of Menifee adopted analytical procedures, screening tools, and impact thresholds for VMT, which are documented in the [City of Menifee Traffic Impact Analysis Guidelines for Vehicle Miles Traveled](#) (January 2022) (**City Guidelines**) (1) The City Guidelines were used to determine if the proposed Project can be screened from further VMT analysis.

VMT SCREENING

The City Guidelines provide 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 the Project's parcel to determine if its location meets one or more of the land use screening criteria identified in the City Guidelines. The City of Menifee's VMT screening steps as described within the City Guidelines are listed below and a land use project need only to meet one to result in a less than significant impact:

- Step 1: Transit Priority Area (TPA) Screening
- Step 2: Low VMT Area Screening
- Step 3: Project Type Screening

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:

- 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 results, the Project is not located within a ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor. (See Attachment B). Riverside Transit Authority (RTA) services the surrounding area and its closest stop is over two miles from the Project site.

TPA Screening step is not met.

STEP 2: LOW VMT AREA SCREENING

The City Guidelines states 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. City Guidelines identifies low VMT generating traffic analysis zones as those that generate a VMT per service population below the County of Riverside General Plan Buildout VMT per service population.

The latest version of the Riverside County Transportation Model (RIVCOM) has been utilized to determine the existing VMT per service population for the TAZ in which the Project is located (TAZ 1138). TAZ 1138 was found to generate 5.82 VMT per service population, which is below the

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.”).

County of Riverside's General Plan Buildout VMT per service population of 33.6. Therefore, the Project is located in a low VMT generating area.

Low VMT Area Screening step is met.

STEP 3: PROJECT TYPE SCREENING

The City Guidelines presumes 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 buildings, etc.) to have a less than significant impact absent substantial evidence to the contrary. The Project does not intend to develop any local serving retail or other local serving essential services uses.

In addition, City Guidelines also indicates 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 (2). The proposed Project is anticipated to generate 3,112 trip ends per day, which is above the 110 daily vehicle trip threshold (see Attachment B).

The Project Type Screening step is not met.

CONCLUSION

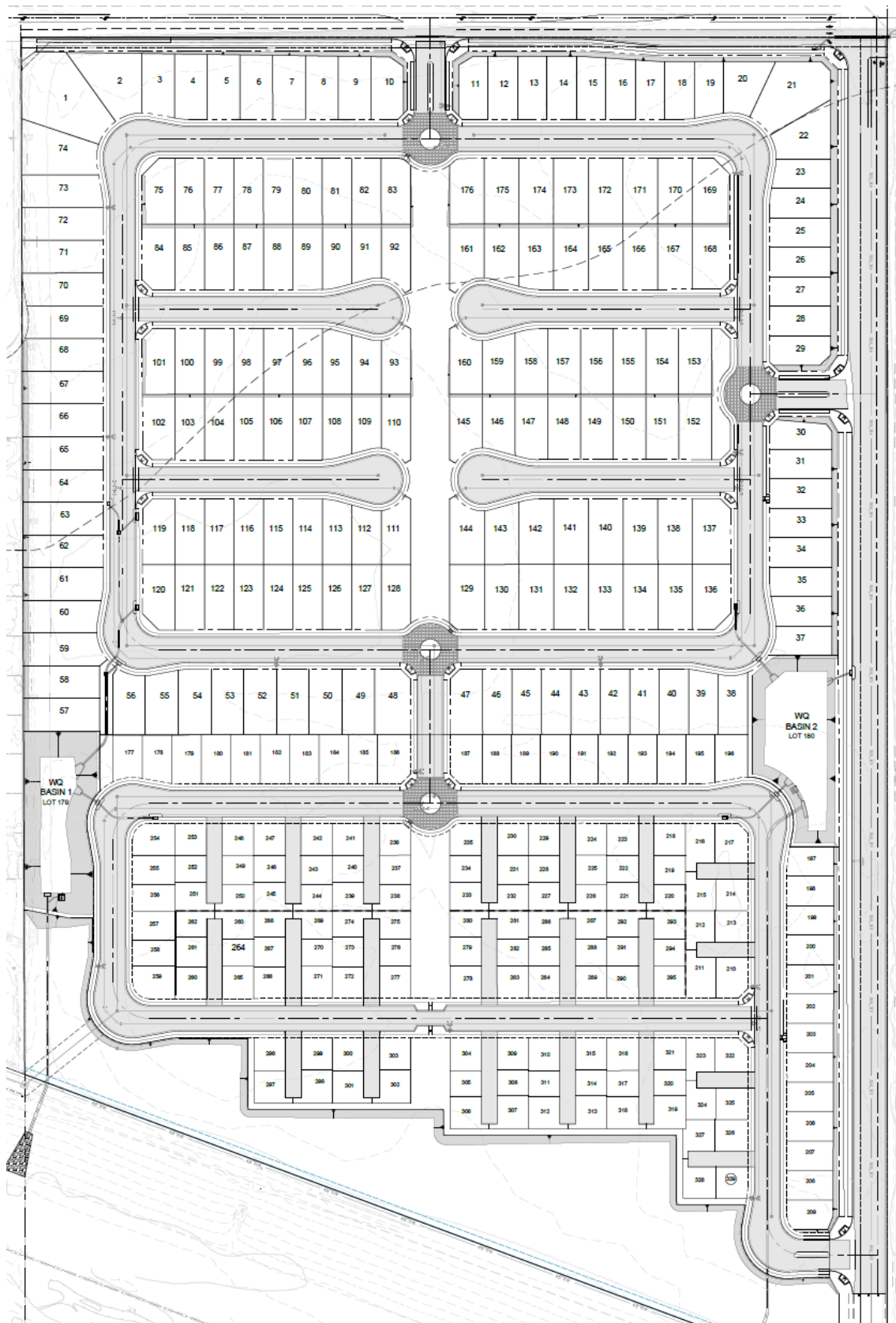
In Summary, the proposed Project was evaluated consistent with the City Guidelines and was found to meet the Low VMT Area Screening step. Therefore, the Project is presumed to have a less than significant impact and no further VMT analysis is required.

If you have any questions, please contact me directly at aso@urbanxroads.com.

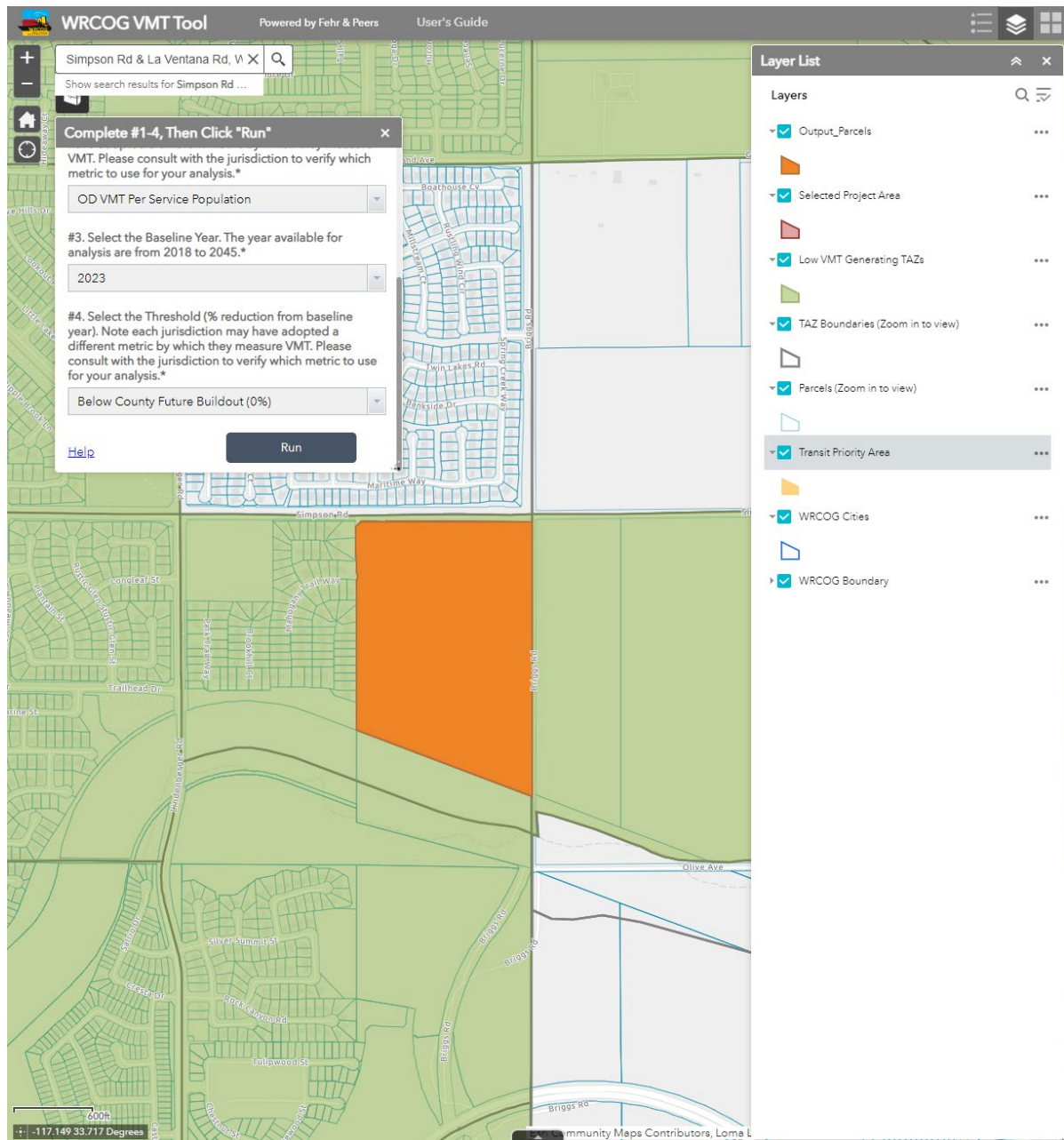
REFERENCES

1. **City of Menifee.** *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled.* City of Menifee : s.n., January 2022.
2. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.

ATTACHMENT A
PRELIMINARY SITE PLAN



ATTACHMENT B
WRCOG SCREENING TOOL



ATTACHMENT C
PROJECT TRIP GENERATION DATA

TABLE 1: TRIP GENERATION RATES

Land Use ¹	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single Family Detached Residential	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43

¹ Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

² DU = Dwelling Units

TABLE 2: PROJECT TRIP GENERATION SUMMARY

Project	QuantityUnits ¹	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Single Family Detached Residential	330 DU	60	171	231	195	115	310	3,112

¹ DU = Dwelling Units

SALT CREEK (TTM NO. 38625, RTP 23-039)

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	1
1.3 Analysis Scenarios	3
1.4 Study Area	3
1.5 Deficiencies	6
1.6 Recommendations	7
1.7 On-Site Circulation	10
2 Methodologies	12
2.1 Level of Service.....	12
2.2 Intersection Capacity Analysis.....	12
2.3 Traffic Signal Warrant Analysis Methodology	14
2.4 Off-Ramp Queuing Analysis	15
2.5 Minimum Acceptable Levels of Service (LOS).....	15
2.6 Deficiency Criteria	16
2.7 Project Fair Share Calculation Methodology	16
3 Area Conditions	18
3.1 Existing Circulation Network	18
3.2 City of Menifee General Plan Circulation Element	18
3.3 County of Riverside General Plan Circulation Element.....	22
3.4 Transit Service.....	22
3.5 Bicycle & Pedestrian Facilities.....	22
3.6 Existing (2023) Traffic Counts	30
3.7 Intersection Operations Analysis	30
3.8 Traffic Signal Warrants Analysis	30
3.9 Queuing Analysis	32
3.10 Project Deficiencies and Recommended Improvements.....	33
4 Projected Future Traffic.....	34
4.1 Project Trip Generation	34
4.2 Project Trip Distribution	34
4.3 Modal Split.....	36
4.4 Project Trip Assignment.....	36
4.5 Background Traffic.....	36
4.6 Cumulative Development Traffic.....	38
5 E+P Traffic Conditions.....	44

5.1	Roadway Improvements	44
5.2	E+P Traffic Volume Forecasts	44
5.3	Intersection Operations Analysis	44
5.4	Traffic Signal Warrants Analysis	44
5.5	Off-Ramp Queuing Analysis	46
5.6	Project Deficiencies and Recommended Improvements	47
6	Opening Year (2029) Traffic Conditions	48
6.1	Roadway Improvements	48
6.2	Without Project Traffic Volume Forecasts	48
6.3	With Project Traffic Volume Forecasts	48
6.4	Intersection Operations Analysis	51
6.5	Traffic Signal Warrants Analysis	51
6.6	Off-Ramp Queuing Analysis	52
6.7	Project Deficiencies and Recommended Improvements	53
7	Local and Regional Funding Mechanisms	56
7.1	Riverside County Transportation Uniform Mitigation Fee (TUMF)	56
7.2	City of Menifee Development Impact Fee (DIF) Program	56
7.3	Road and Bridge Benefit District (RBBD)	56
7.4	Measure A	56
7.5	Fair Share Contribution	57
8	References	58

APPENDICES

Appendix 1.1: Traffic Study Scoping Agreement

Appendix 1.2: Site Adjacent Queues

Appendix 3.1: Traffic Counts

Appendix 3.2: Existing (2023) Conditions Intersection Operations Analysis Worksheets

Appendix 3.3: Existing (2023) Conditions Traffic Signal Warrant Analysis Worksheets

Appendix 3.4: Existing (2023) Conditions Off-Ramp Queuing Analysis 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 (2029) Without Project Conditions Intersection Operations Analysis Worksheets

Appendix 6.2: Opening Year (2029) With Project Conditions Intersection Operations Analysis Worksheets

Appendix 6.3: Opening Year (2029) Without Project Conditions Traffic Signal Warrant Analysis Worksheets

Appendix 6.4: Opening Year (2029) With Project Conditions Traffic Signal Warrant Analysis Worksheets

Appendix 6.5: Opening Year (2029) Without Project Conditions Off-Ramp Queuing Analysis Worksheets

Appendix 6.6: Opening Year (2029) With Project Conditions Off-Ramp Queuing Analysis Worksheets

Appendix 6.7: Opening Year (2029) Without Project Conditions Intersection Operations Analysis Worksheets With Improvements

Appendix 6.8: Opening Year (2029) With Project Conditions Intersection Operations Analysis Worksheets With Improvements

LIST OF EXHIBITS

Exhibit 1-1: Preliminary Site Plan	2
Exhibit 1-2: Study Area.....	5
Exhibit 1-3: Site Access Recommendations	8
Exhibit 3-1: Existing Number of Through Lanes and Intersection Controls	19
Exhibit 3-2: City of Menifee General Plan Circulation Element	20
Exhibit 3-3: City of Menifee Roadway Cross-Sections	21
Exhibit 3-4: County of Riverside's Sun City/Menifee Area Plan Circulation Element.....	23
Exhibit 3-5: County of Riverside General Plan Roadway Cross-Sections	24
Exhibit 3-6: Existing Transit Facilities	25
Exhibit 3-7: City of Menifee General Plan Transit Routes	26
Exhibit 3-8: City of Menifee General Plan Bicycle Routes	27
Exhibit 3-9: Existing Pedestrian Facilities	28
Exhibit 3-10: County of Riverside's Sun City/Menifee Area Plan Bicycle Routes.....	29
Exhibit 3-11: Existing (2023) Traffic Volumes.....	31
Exhibit 4-1: Project Trip Distribution.....	35
Exhibit 4-2: Project Only Traffic Volumes	37
Exhibit 4-3: Cumulative Development Location Map	39
Exhibit 4-4: Cumulative Only Traffic Volumes (Actual Vehicles).....	40
Exhibit 5-1: E+P Traffic Volumes.....	45
Exhibit 6-1: Opening Year (2029) Without Project Traffic Volumes	49
Exhibit 6-2: Opening Year (2029) With Project Traffic Volumes	50

LIST OF TABLES

Table 1-1: Intersection Analysis Locations 4

Table 1-2: Summary of LOS.....6

Table 1-3: Summary of Improvements.....11

Table 2-1: Signalized Intersection LOS Thresholds.....13

Table 2-2: Unsignalized Intersection LOS Thresholds 14

Table 2-3: Traffic Signal Warrant Analysis Locations 15

Table 3-1: Intersection Analysis for Existing (2023) Conditions 32

Table 3-2: Peak Hour Queuing Summary for Existing (2023) Conditions 33

Table 4-1: Project Trip Generation Summary 34

Table 4-2: Cumulative Development land use Summary 41

Table 5-1: Intersection Analysis for E+P Conditions 46

Table 5-2: Peak Hour Queuing Summary for E+P Conditions 46

Table 6-1: Intersection Analysis for Opening year (2029) Conditions 52

Table 6-2: Peak Hour Queuing Summary for Opening Year (2029) Conditions.....53

Table 6-3: Intersection Analysis for Opening year (2029) Conditions With IMprovements 54

Table 7-1: Project Fair Share Calculations.....57

LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CA MUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
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
PHF	Peak Hour Factor
Project	Salt Creek
RBBD	Road and Bridge Benefits District
RCTC	Riverside County Transportation Commission
RTA	Riverside Transit Agency
TA	Traffic Analysis
TUMF	Transportation Uniform Mitigation Fee
v/c	Volume to Capacity
vp/hgpl	Vehicles per Hour Green per Lane
WRCOG	Western Riverside Council of Governments

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1 INTRODUCTION

This report presents the results of the Traffic Analysis (TA) for Salt Creek development ("Project"), which is located at the southwest corner of Briggs Road and Simpson Road in the City of Menifee. 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 TA has been prepared in accordance with the City of Menifee's LOS Traffic Study Guidelines (dated October 2020). (1) The City 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 Simpson Road and Briggs Road will be stop controlled for exiting (egress) traffic and will allow for full turning movements (no access restrictions).
- Project to construct Simpson Road at its ultimate half-section width along the Project's frontage as a Secondary Arterial (100-foot right-of-way) from the Project's western boundary to Briggs Road, consistent with the City's standards.
- Project to construct Briggs Road at its ultimate half-section width along the Project's frontage as a Major Roadway (118-foot right-of-way) from the Project's southern boundary to Simpson Road, consistent with the City's standards. Project will pay fair share contributions for an additional 12-feet of pavement beyond the centerline on the east side of Briggs Road.

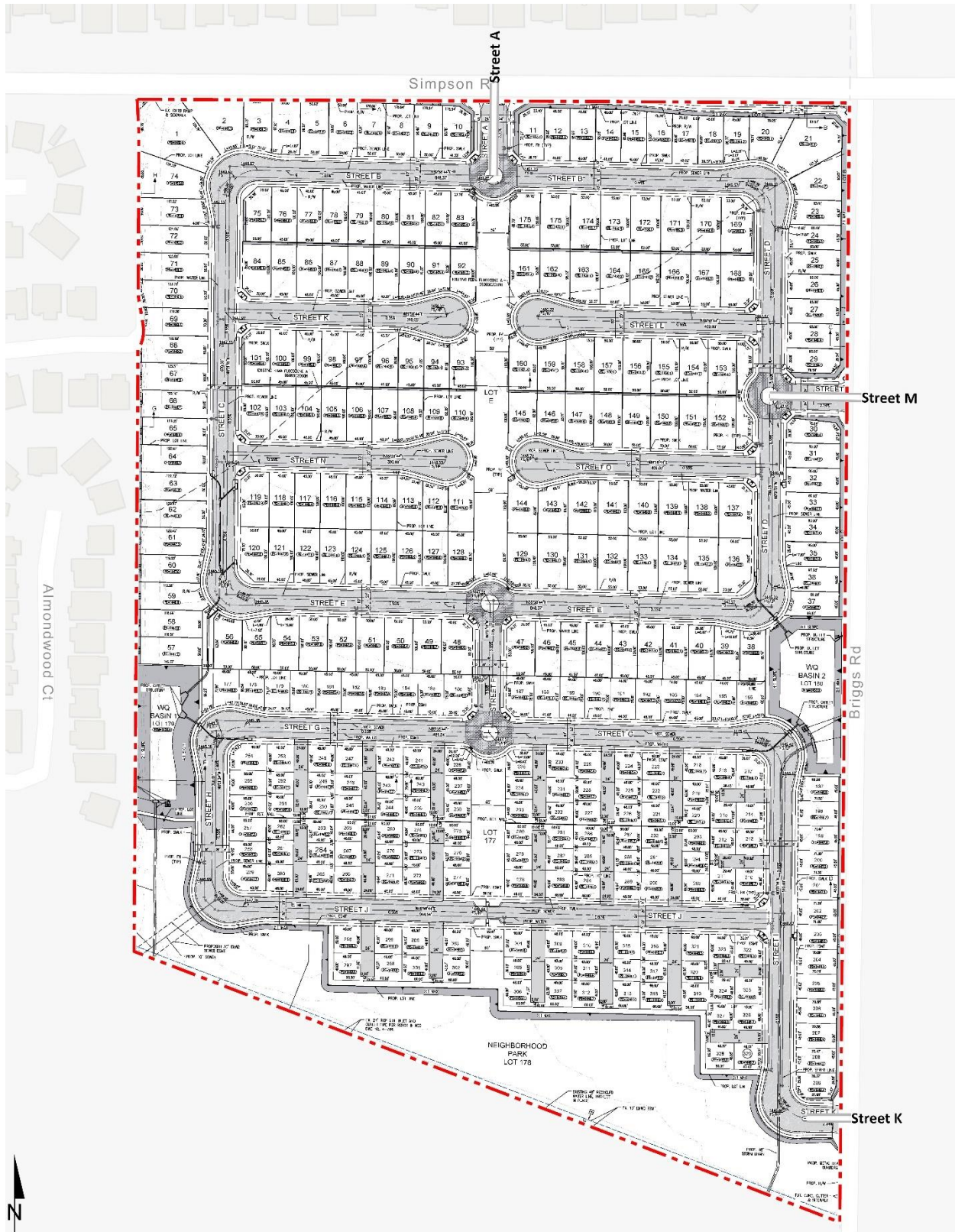
Additional details and intersection lane geometrics are provided in Section 1.6 *Recommendations* of this report.

1.2 PROJECT OVERVIEW

The preliminary site plan for the proposed Project is shown on Exhibit 1-1. The Project is proposed to consist of 330 single family detached residential dwelling units. Access is proposed along Simpson Road via a single driveway (Street A) and two points of access on the future southern extension of Briggs Road (Street M and Street K). All driveways are assumed to allow for full access (no turn restrictions). The Project is anticipated to have an Opening Year of 2029. Regional access to the Project site is accommodated from the I-215 Freeway via Newport Road.

In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) were used to estimate the trip generation. (2) The Project is anticipated to generate 3,112 two-way vehicle trip-ends per day with 231 AM peak hour trips and 310 PM peak hour trips. 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.

EXHIBIT 1-1: PRELIMINARY SITE PLAN



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 (2023) Conditions
- Existing plus Project (E+P) Conditions
- Opening Year (2029) Without Project Conditions
- Opening Year (2029) With Project Conditions

1.3.1 EXISTING (2023) CONDITIONS

Information for Existing (2023) 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 May 2023.

1.3.2 E+P CONDITIONS

The E+P analysis determines traffic deficiencies that would occur on the existing roadway system with the addition of Project traffic.

1.3.3 OPENING YEAR (2029) CONDITIONS

The Opening Year (2029) traffic conditions analysis determines the potential near-term cumulative circulation system deficiencies. To account for growth in traffic between Existing (2023) traffic conditions and the Project Opening Year (2029), a growth rate of 2.0 percent was assumed (2.0% per year compounded over 6 years or 1.02^6 years for a total of 12.62%). 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 within the year. The resulting traffic growth utilized in the TA (traffic generated by related projects) would therefore tend to overstate rather than understate background cumulative traffic deficiencies under 2029 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 12 study area intersections shown on Exhibit 1-2 and listed in Table 1-1 were selected for evaluation in this TA based on consultation with City of Menifee staff. 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 Guidelines. (1) 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 of Menifee and throughout the County of Riverside for estimating a potential area of influence (i.e., study area).

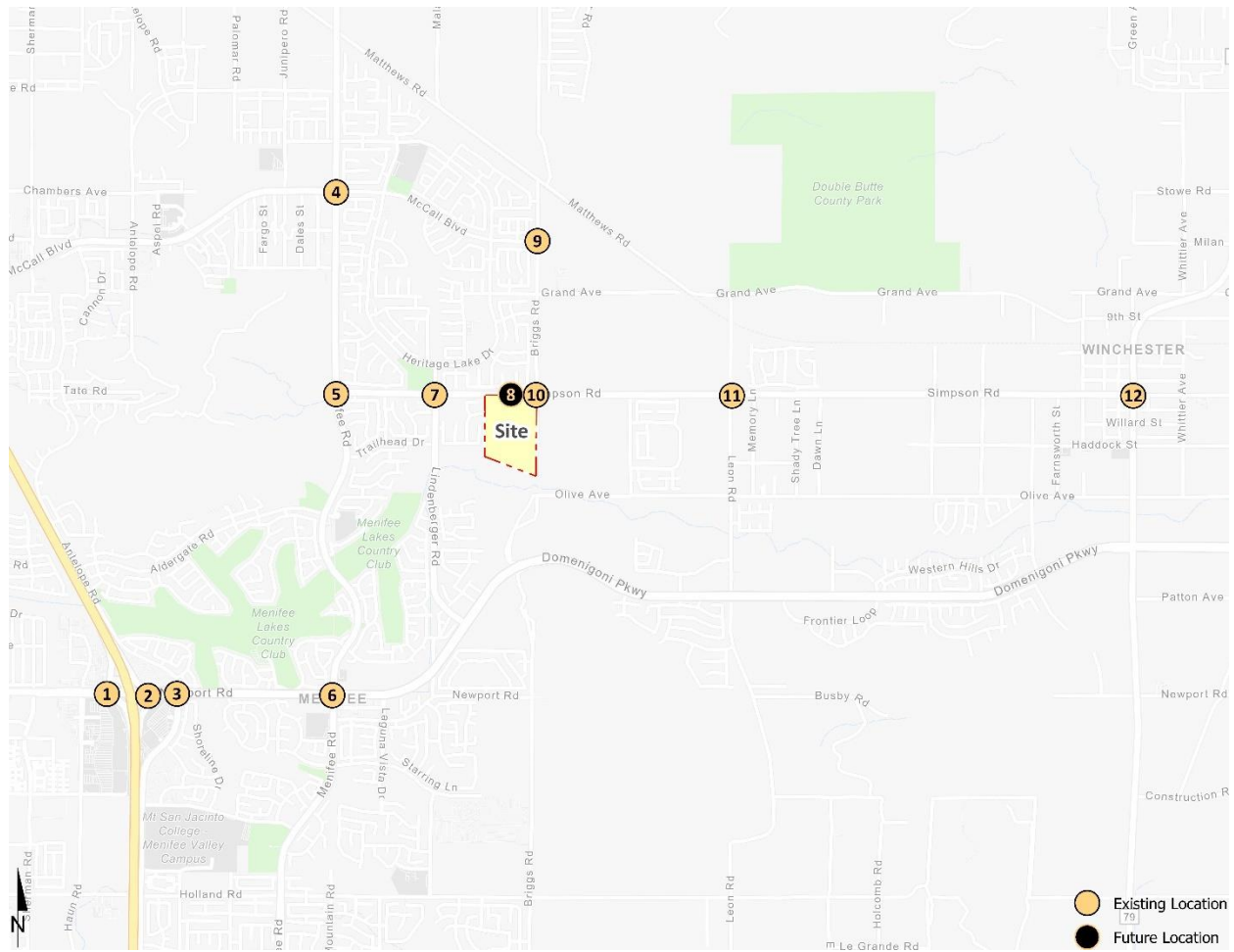
The intent of the Congestion Management Program (CMP) is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. Counties within California have developed CMPs with varying methods and strategies to meet the intent of the CMP legislation. There are no study area intersections identified as a County of Riverside CMP location.

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

ID	Intersection	Traffic		CMP?
		Control ¹	Jurisdiction	
1	I-215 SB Ramps & Newport Rd.	TS	Caltrans, Menifee	No
2	I-215 NB Ramps & Newport Rd.	TS	Caltrans, Menifee	No
3	Antelope Rd. & Newport Rd.	TS	Menifee	No
4	Menifee Rd. & McCall Bl.	TS	Menifee	No
5	Menifee Rd. & Simpson Rd.	TS	Menifee	No
6	Menifee Rd. & Newport Rd.	TS	Menifee	No
7	Lindenburger Rd. & Simpson Rd.	TS	Menifee	No
8	Street A & Simpson Rd.	CSS	Menifee	No
9	Briggs Rd. & McCall Bl.	TS	Menifee, Riverside County	No
10	Briggs Rd. & Simpson Rd.	AWS	Menifee, Riverside County	No
11	Leon Rd. & Simpson Rd.	CSS	Riverside County	No
12	Winchester Rd. (SR-79) & Simpson Rd.	TS	Caltrans, Riverside County	No

¹ TS = Traffic Signal; AWS = All-way Stop; CSS = Cross-Street Stop; **CSS** = Future Improvement

EXHIBIT 1-2: STUDY AREA 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 *Opening Year (2029) Traffic Conditions* includes the detailed analysis. A summary of Level of Service (LOS) results for all analysis scenarios is presented in Table 1-2.

TABLE 1-2: SUMMARY OF LOS

# Intersection	Existing		E+P		2029 Without Project		2029 With Project	
	AM	PM	AM	PM	AM	PM	AM	PM
1 I-215 SB Ramps & Newport Rd.	●	●	●	●	●	●	●	●
2 I-215 NB Ramps & Newport Rd.	●	●	●	●	●	●	●	●
3 Antelope Rd. & Newport Rd.	●	●	●	●	●	●	●	●
4 Meniffee Rd. & McCall Bl.	●	●	●	●	●	●	●	●
5 Meniffee Rd. & Simpson Rd.	●	●	●	●	●	●	●	●
6 Meniffee Rd. & Newport Rd.	●	●	●	●	●	●	●	●
7 Lindenburger Rd. & Simpson Rd.	●	●	●	●	●	●	●	●
8 Street A & Simpson Rd.	N/A	N/A	●	●	N/A	N/A	●	●
9 Briggs Rd. & McCall Bl.	●	●	●	●	●	●	●	●
10 Briggs Rd. & Simpson Rd.	●	●	●	●	●	●	●	●
11 Leon Rd. & Simpson Rd.	●	●	●	●	●	●	●	●
12 Winchester Rd. (SR-79) & Simpson Rd.	●	●	●	●	●	●	●	●

● = A - D
 ● = E
 ● = F

1.5.1 EXISTING (2023) CONDITIONS

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

1.5.2 E+P CONDITIONS

The study area intersections are anticipated to continue to operate at an acceptable LOS during the peak hours.

1.5.3 OPENING YEAR (2029) CONDITIONS

The following study area intersections are anticipated to operate at an unacceptable LOS under Opening Year (2029) Without Project traffic conditions:

- Antelope Road & Newport Road (#3) – LOS E AM peak hour; LOS F PM peak hour
- Meniffee Road & McCall Boulevard (#4) – LOS F AM and PM peak hours
- Meniffee Road & Newport Road (#6) – LOS F AM and PM peak hours
- Briggs Road & Simpson Road (#10) – LOS F AM and PM peak hours
- Leon Road & Simpson Road (#11) – LOS F AM and PM peak hours

With the addition of Project traffic, there are no additional study area intersections anticipated to operate at an unacceptable LOS during the peak hours, under Opening Year (2029) 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 Exhibit 1-3. The proposed pedestrian circulation is provided in Exhibit 1-4. There are currently no striped bike lanes along Simpson Road. Bike lanes should be striped along Simpson Road once the north and south sides of the roadway are built to their ultimate width (east and west of the Project site) to provide complete and through bike lanes along Simpson Road, in compliance with the City's General Plan and Complete Street Act of 2008.

Recommendation 1 – Street A & Simpson Road (#8) – The following improvements are necessary to accommodate site access:

- Project to install a stop control on the northbound approach and construct a shared left-right turn lane (Project driveway).
- Project to construct an eastbound shared through-right turn lane.
- Project to construct a westbound left turn lane with a minimum of 100-feet of storage.

Recommendation 2 – Briggs Road & Simpson Road (#10) – The following improvements are necessary to accommodate site access:

- Project to install a stop control on the northbound approach (all-way stop control) and construct a northbound left turn lane with a minimum of 100-feet of storage and a shared through-right turn lane.
- Project to construct a 2nd eastbound through lane. It should be noted, this 2nd eastbound through lane will be striped out until such time in the future when Simpson Road is widened to the east to provide an additional receiving lane. As such, Exhibit 1-3 shows the opening day lane geometrics (excludes the 2nd eastbound through lane, which will be striped out in the interim until Simpson Road is widened to the east).
- Project to construct an eastbound right turn lane with a minimum of 125-feet of storage.

Recommendation 3 – Simpson Road is an east-west oriented roadway located on the Project's northern boundary. Project to construct Simpson Road at its ultimate half-section width along the Project's frontage as a Secondary Arterial (100-foot right-of-way) from the Project's western boundary to Briggs Road, consistent with the City's standards.

Recommendation 4 – Briggs Road is a north-south oriented roadway located on the Project's eastern boundary. Project to construct Briggs Road at its ultimate half-section width along the Project's frontage as a Major Roadway (100-foot right-of-way) from the Project's southern boundary to Simpson Road, consistent with the City's standards. Project will pay fair share contributions for an additional 12-feet of pavement beyond the centerline on the east side of Briggs Road.

On-site traffic signing and striping should 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.

EXHIBIT 1-3: SITE ACCESS RECOMMENDATIONS

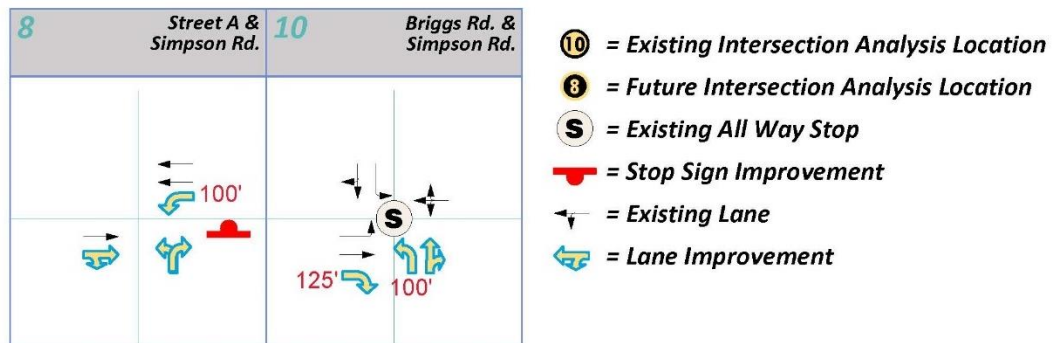
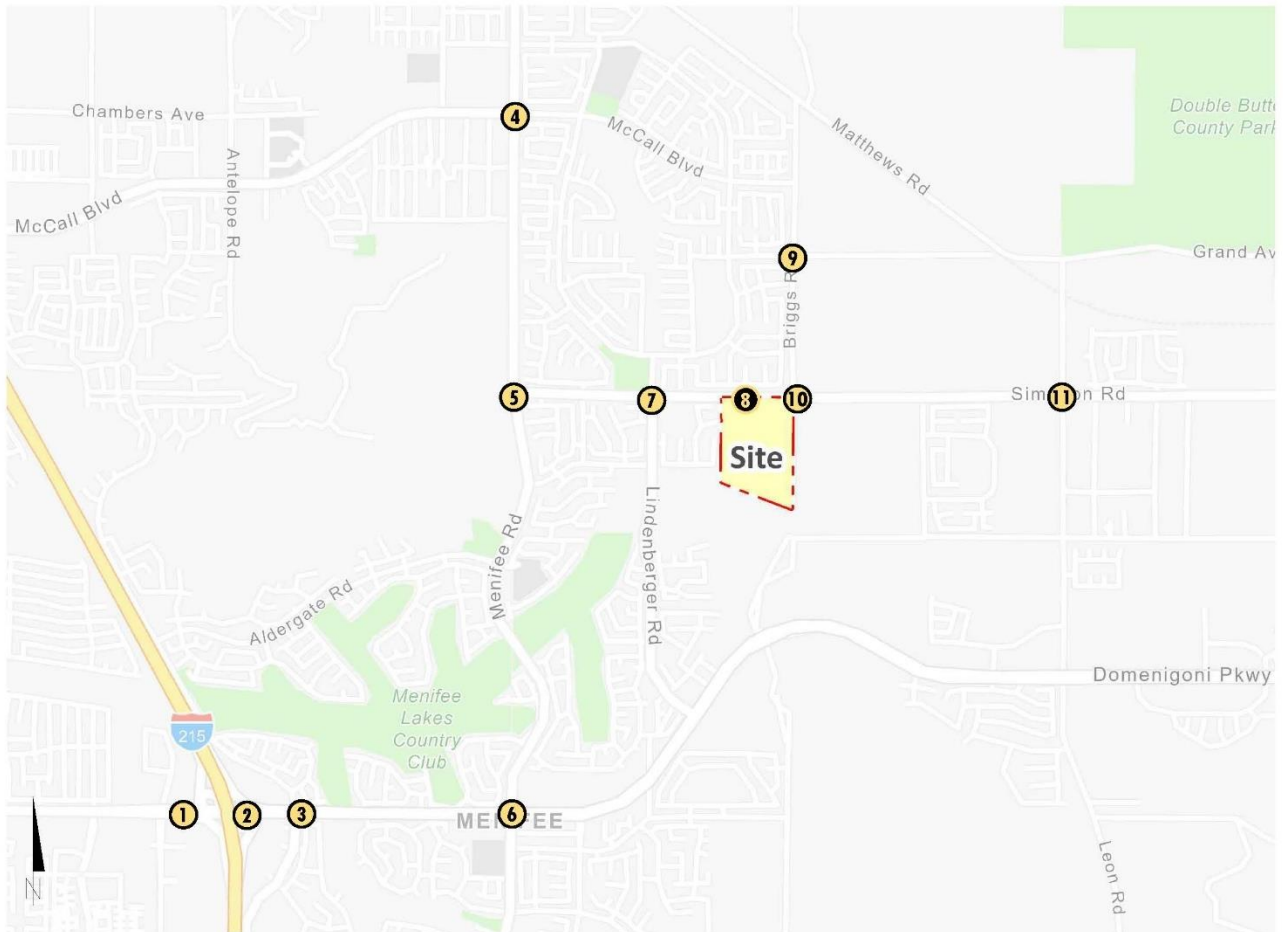
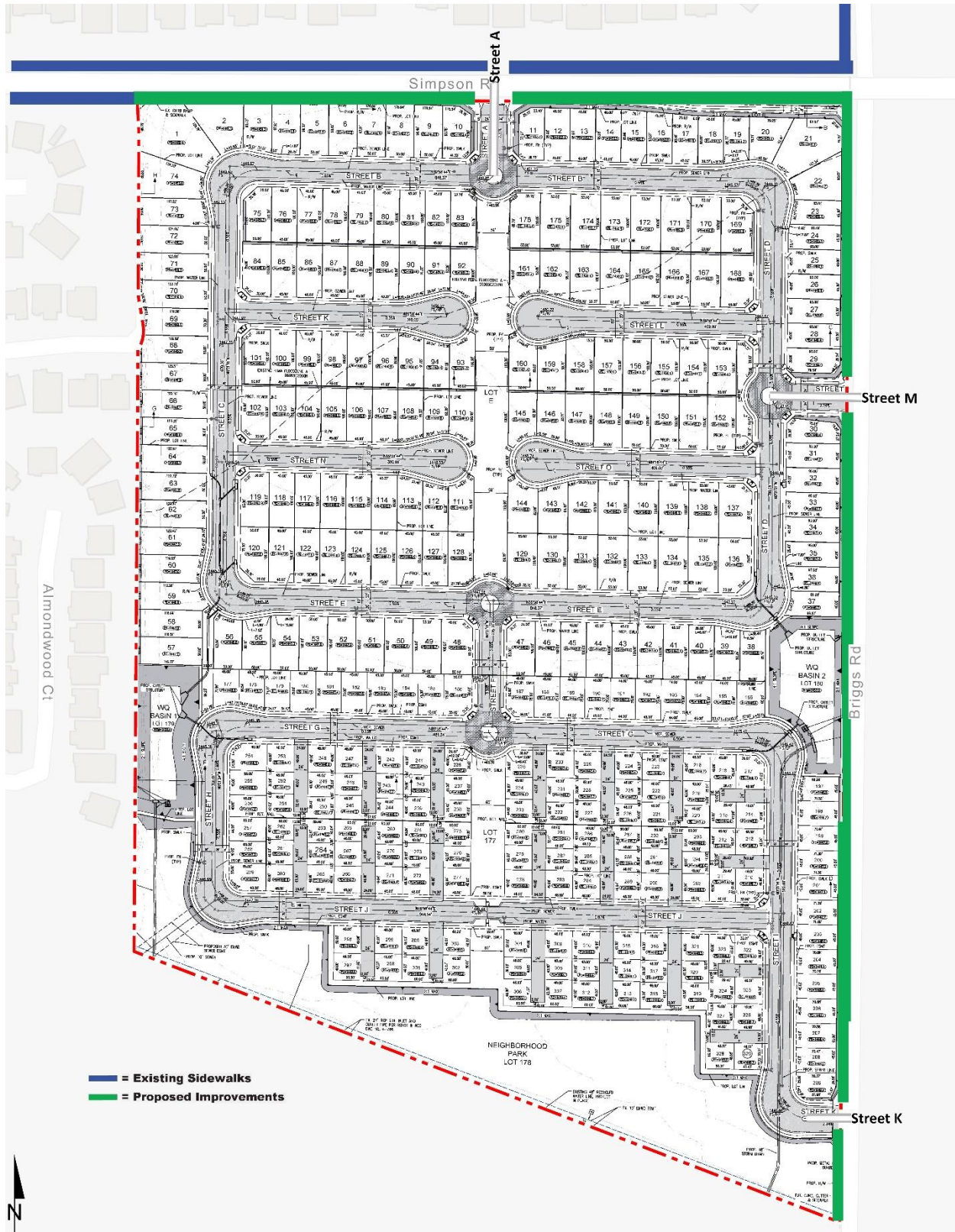


EXHIBIT 1-4: PEDESTRIAN CIRCULATION



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

1.6.2 OFF-SITE RECOMMENDATIONS

The recommended improvements needed to address the cumulative deficiencies identified under Existing (2023), E+P, and Opening Year (2029) traffic conditions are shown in Table 1-3. 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 payment of fees or 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*).

1.6.3 QUEUING ANALYSIS AT THE PROJECT DRIVEWAYS

A queuing analysis was conducted at the study area intersections for Opening Year (2029) With Project traffic conditions to ensure 95th percentile queues would not result in any spillback over existing or proposed adjacent intersections. The analysis was conducted for the weekday AM and weekday PM peak hours. The results have been provided in Appendix 1.2. No queuing issues are anticipated at the Project access points.

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. The 95th percentile queue is not necessarily ever observed; it is simply based on statistical calculations (or Average Queue plus 1.65 standard deviations). Many agencies utilize the 95th percentile queues for design purposes. 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.

1.7 ON-SITE CIRCULATION

The preliminary site plan is provided previously on Exhibit 1-1. As discussed previously in Section 1.2 *Project Overview*, access is proposed along Simpson Road via a single driveway (Street A) and two points of access on the future southern extension of Briggs Road (Street M and Street K). All driveways are assumed to allow for full access (no turn restrictions). The proposed project would include on-street parking available on all public streets in tract, in addition to private residential parking within garages and on driveways.

As shown previously in Table 1-2, the site adjacent study intersections are anticipated to operate at an acceptable LOS during the peak hours under E+P traffic conditions. The Project will be widening Simpson Road in the eastbound direction as part of the site adjacent and site access recommendations (see Section 1.6). Based on the preliminary site plan, there is not anticipated to be any cut-through traffic since the internal roadways do not provide faster travel routes. The minimum turn pocket lengths necessary to accommodate the queuing are shown previously on Exhibit 1-3.

TABLE 1-3: SUMMARY OF IMPROVEMENTS

#	Intersection Location	Jurisdiction	Analysis Scenario			Improvements in DIF, TUMF, etc. ¹	Project Responsibility ²	Project Fair Share ³	
			Existing (2023)	E+P	2029 Without Project				2029 With Project
3	Antelope Rd. & Newport Rd.	Menifee	None	None	Stripe an EB right turn lane	Same	No	Fair Share	5.0%
4	Menifee Rd. & McCall Bl.	Menifee	None	None	Add 2nd SB left turn lane	Same	No	Fair Share	4.0%
6	Menifee Rd. & Newport Rd.	Menifee	None	None	Modify the traffic signal to implement lead-lag operations for the EB/WB left turns	Same	No	Fair Share	5.3%
10	Briggs Rd. & Simpson Rd.	Menifee, Riverside County	None	None	Install a Traffic Signal	Same	Yes (DIF	Fees	14.8%
					Stripe a 2nd SB left turn lane	Same	No	Fair Share	
					Add WB right turn lane	Same	No	Fair Share	
						Add NB left turn lane	No	Construct	
						Add NB shared through-right turn lane	No	Construct	
						Restripe the SB right turn lane to a shared through-right turn lane	No	Construct	
						Add EB right turn lane	No	Construct	
						Add WB left turn lane	No	Fair Share	
11	Leon Rd. & Simpson Rd.	Riverside County	None	None	Install a Traffic Signal	Same	No	Fair Share	2.8%
					Add NB left turn lane	Same	No	Fair Share	
					Add SB left turn lane	Same	No	Fair Share	
					Add EB left turn lane	Same	No	Fair Share	
					Restripe the EB right turn lane to provide a 2nd EB through lane	Same	No	Fair Share	
					Add WB left turn lane	Same	No	Fair Share	
					Add 2nd WB through lane	Same	No	Fair Share	

¹ Improvements included in the City of Menifee's Development Impact Fee 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.

Represents the fair share percentage for the Project during the most impacted peak hour. Identifies the Project's responsibility to construct an off-site improvement, contribute fair share, or fee payment towards the improvements shown. If identified as a Project construct obligation/in a fee program, then no fair share percentage has been identified.

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

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.

2.1 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. (3) The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The City of Menifee requires signalized intersection operations analysis based on the methodology described in the HCM. (3) 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 in Table 2-1. A saturation flow rate of 1900 vehicles per hour per lane has been utilized and is consistent with the rates utilized in other nearby projects within the City of Menifee and throughout the County of Riverside.

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), $V/C \leq 1.0$	Level of Service, $V/C \leq 1.0^1$
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 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., $PHF = [Hourly Volume] / [4 \times Peak 15\text{-minute Flow Rate}]$). 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. (3) Consistent with the City's guidelines, a saturation flow rate of 1900 vehicles per hour green per lane (vphgpl) has been utilized.

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Menifee requires the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (3) 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 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. (4)

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 should be considered if one or more of the signal warrants are met. (4) 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 urban characteristics (e.g., adjacent major streets operating at or below 40 miles per hour) or rural characteristics (e.g., 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.

Future intersections that do not currently exist have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets. Traffic signal warrant analyses were performed for the following study area intersections shown in Table 2-3.

TABLE 2-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

ID	Intersection	Jursidiction
8	Street A & Simpson Rd.	Menifee
10	Briggs Rd. & Simpson Rd.	Menifee, Riverside County
11	Leon Rd. & Simpson Rd.	Riverside County

The traffic signal warrant analysis for Existing (2023) conditions are presented in Section 3 *Area Conditions*. The traffic signal warrant analyses for future conditions are presented in Section 5 *Opening Year (2029) Traffic Conditions* 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 OFF-RAMP QUEUING ANALYSIS

A queuing analysis has been performed for the study area off-ramp intersections at the I-215 Freeway/Newport Road interchange. Specifically, the queuing analysis is utilized to identify any potential queuing and “spill back” onto the I-215 Freeway mainline from the off-ramps or out of the turn pockets.

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. There are two footnotes which appear on the Synchro outputs. One footnote 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 other footnote indicates whether or not the volume for the 95th percentile queue is metered by an upstream signal. If the upstream intersection is at or near capacity, the 50th percentile queue represents the maximum queue experienced.

2.5 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

The City of Menifee has identified LOS D as the standard 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. (1)

2.6 DEFICIENCY CRITERIA

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies. Consistent with the City of Menifee's traffic study guidelines, the following criteria shall be used to determine if the addition of project traffic would be responsible for LOS deficiencies and whether feasible intersection improvements should be identified to improve performance: (1)

- If the pre-Project condition at an intersection 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).
- 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. This type of impact would be considered a "cumulative" project impact in which the project would be required to contribute a fair share payment toward reducing the impact.

2.7 PROJECT FAIR SHARE CALCULATION METHODOLOGY

Improvements found to be included in the Transportation Uniform Mitigation Fee (TUMF) program and/or City's Development Impact Fee (DIF) program will be identified as such. For improvements that do not appear to be in either of the pre-existing fee programs, a fair share contribution based on the Project's proportional share may be imposed in order to address the Project's share of deficiencies in lieu of construction. It should be noted that fair share calculations are for informational purposes only and the City Traffic Engineer will determine the appropriate improvements to be implemented by a project (to be identified in the conditions of approval).

Fair share contributions may be recommended to mitigate significant impacts under the E+P scenario if the existing condition is at an unacceptable LOS E or F. Per the City of Menifee traffic study guidelines, all fair share contributions shall be calculated using the following equation (5):

$$d = \frac{c}{(b - a)}$$

Where:

a = Existing Traffic Volume

b = Opening Year Cumulative With Project Volume

c = Proposed Project Trips

d = Fair Share Percentage

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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 freeway off-ramp queuing analyses.

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the agreement with City of Menifee staff (Appendix 1.1), the study area includes a total of 12 existing and future intersections as shown previously on Exhibit 1-3. 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 the 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 describes the City of Menifee General Plan roadway cross-sections.

Urban Arterials are six-lane divided roadways (typically divided by a raised median or painted two-way turn-lane) with a 152-foot right-of-way and a 110-to-126-foot curb-to-curb measurement. These roadways serve both regional through-traffic and inter-city traffic and typically direct traffic onto and off-of the freeways. The following study area roadways within the City of Menifee are classified as an Urban Arterial:

- Newport Road
- McCall Boulevard, east of the I-215 Freeway
- Menifee Road, north of McCall Boulevard

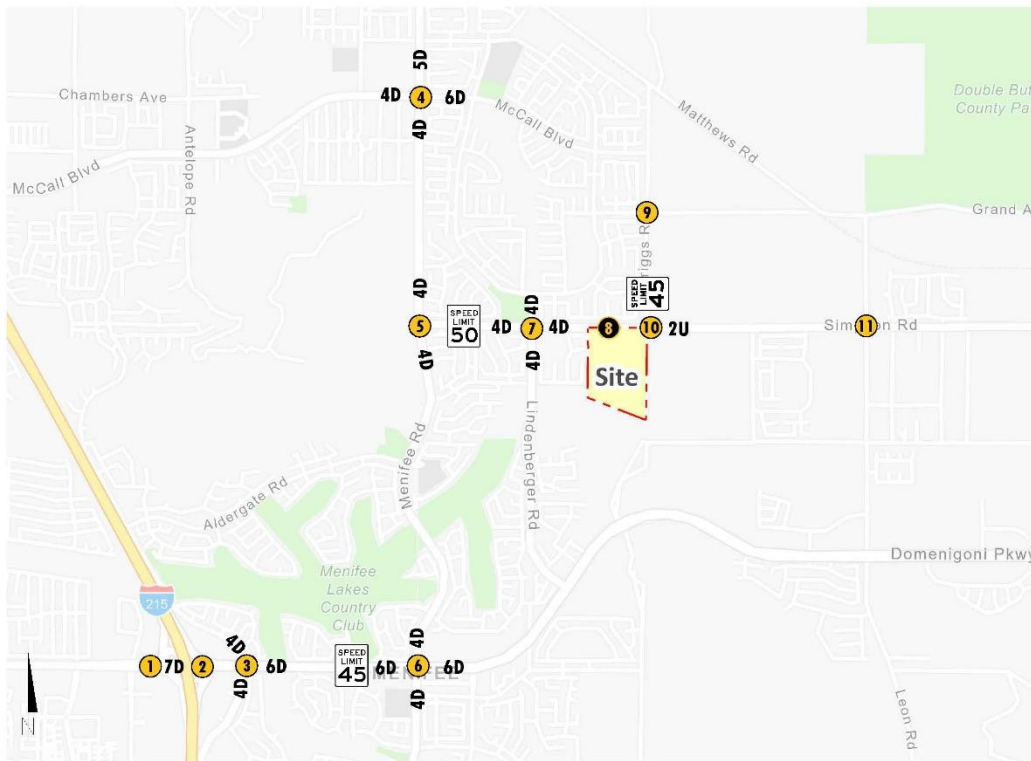
Arterial Roadways are four-lane roadways and include a painted or raised median. These roadways typically have a 106-to-128-foot right-of-way and an 82-to-86-foot curb-to-curb measurement. These roadways typically direct traffic through major development areas. The following study area roadway within the City of Menifee are classified as an Arterial Roadway:

- Menifee Road, south of McCall Boulevard

Major Roadways are four-lane roadways and may include a painted median. 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:

- Antelope Road, south of Newport Road
- Briggs Road

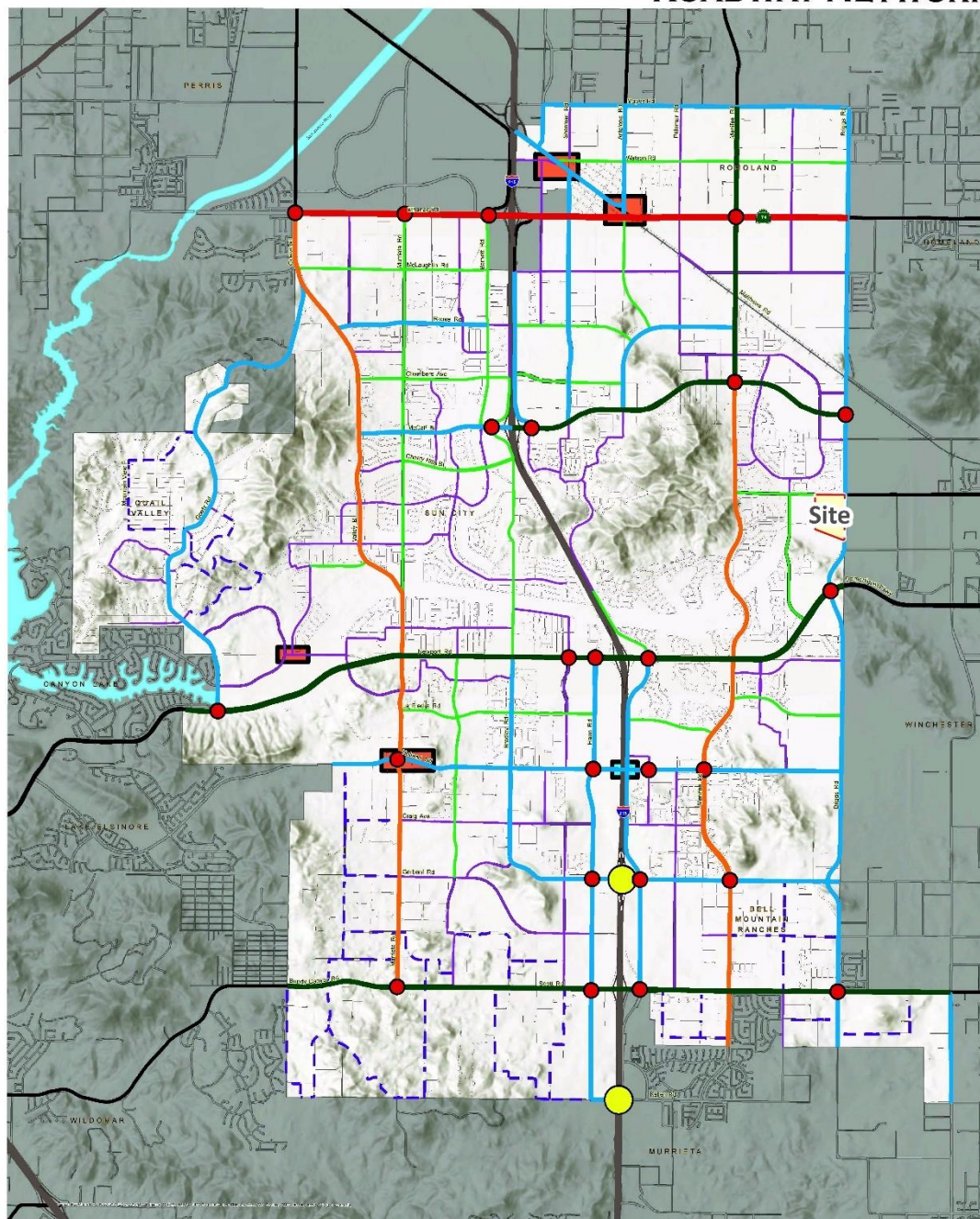
EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



1 I-215 SB Ramps & Newport Rd	2 I-215 NB Ramps & Newport Rd	3 Antelope Rd. & Newport Rd.	4 Menifee Rd. & McCall Bl.	5 Menifee Rd. & Simpson Rd.
6 Menifee Rd & Newport Rd.	7 Lindenburger Rd & Simpson Rd.	8 Street A & Simpson Rd.	9 Briggs Rd. & McCall Bl.	10 Briggs Rd. & Simpson Rd.
		Future Intersection		
11 Leon Rd. & Simpson Rd.	12 Winchester Rd (SR-79) & Simpson Rd.	 = Existing Intersection Analysis Location  = Future Intersection Analysis Location 2 = Number of Lanes D = Divided  = Speed Limit (MPH)  = Traffic Signal  = All Way Stop  = Stop Sign  = Existing Lane  = Free Right Turn RTO = Right Turn Overlap		

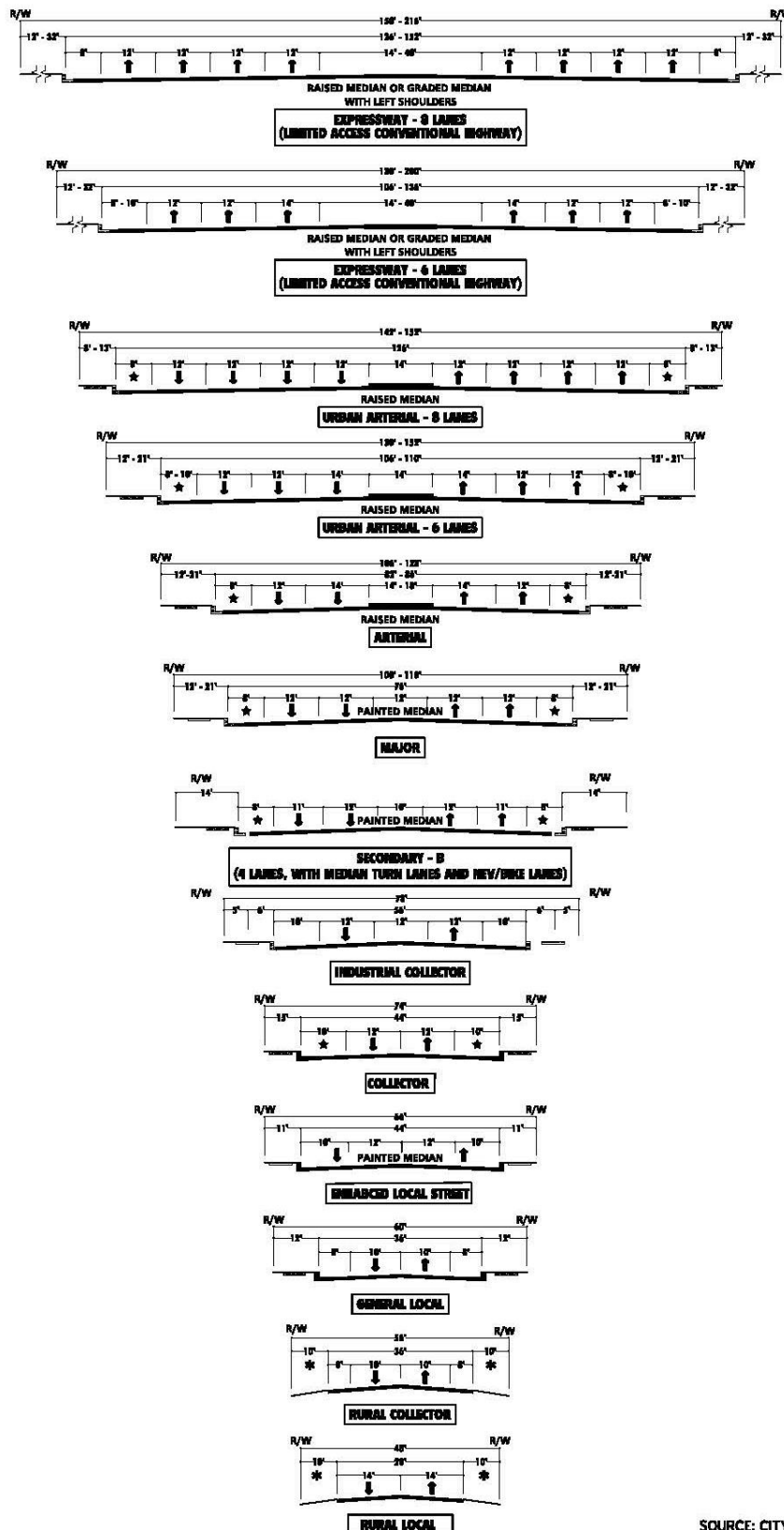
EXHIBIT 3-2: CITY OF MENIFEE GENERAL PLAN CIRCULATION ELEMENT

EXHIBIT C-3
ROADWAY NETWORK



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

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



SOURCE: CITY OF MENIFEE GENERAL PLAN

Secondary Streets are four-lane roadways and may include a painted median. These roadways typically have a 100-foot right-of-way and a 72-foot curb-to-curb measurement. These roadways typically direct traffic through major development areas and a lesser capacity than Major Roadways. The following study area roadways within the City of Menifee are classified as a Secondary Street:

- Antelope Road, north of Newport Road
- Lindenberger Road, south of Simpson Road
- Simpson Road

Collector Streets are two-lane roadways and provide on-street parking on both sides. These roadways typically have a 74-foot right-of-way and a 44-foot curb-to-curb measurement. These roadways provide connections to secondary streets, arterials, and freeways, with most traffic being through-traffic or intra-city traffic. The following study area roadway within the City of Menifee is classified as a Collector Street:

- Lindenberger Road, north of Simpson Road

3.3 COUNTY OF RIVERSIDE GENERAL PLAN CIRCULATION ELEMENT

Exhibit 3-4 shows the County of Riverside's Sun City/Menifee Area Plan Circulation Element and Exhibit 3-5 shows the County of Riverside General Plan roadway cross-sections.

3.4 TRANSIT SERVICE

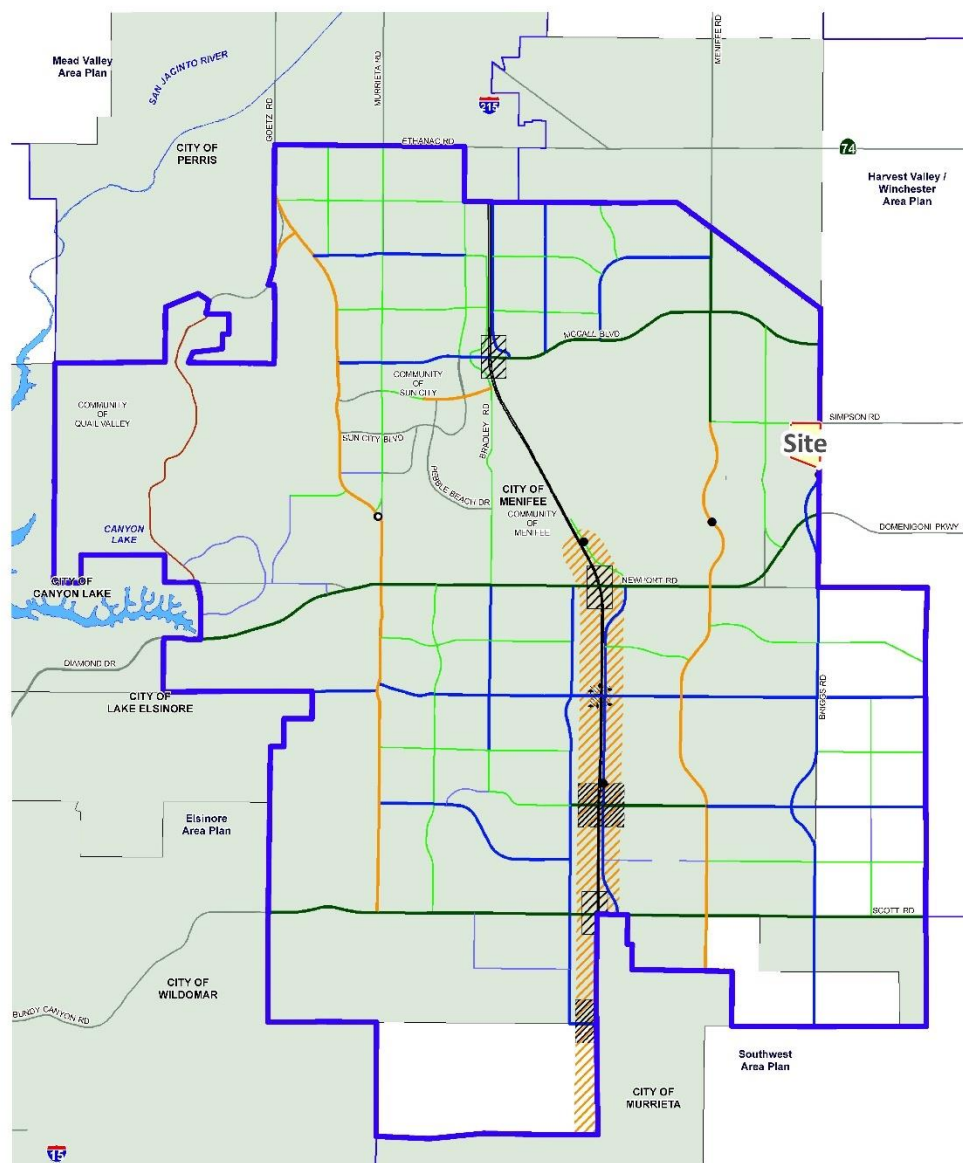
The study area is currently served by Riverside Transit Agency (RTA) with bus service along Newport Road, Menifee Road, and Antelope Road. The existing transit routes within the study area are shown on Exhibit 3-6 while the City of Menifee General Plan Transit Routes are shown on Exhibit 3-7. RTA Route 74 could potentially serve the Project if service is extended along Newport Road in the vicinity of the Project site. 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.

3.5 BICYCLE & PEDESTRIAN FACILITIES

Exhibit 3-8 illustrates the City of Menifee General Plan proposed bike facilities. As shown on Exhibit 3-8, there is a proposed Class I Subregional Route (off-road bike trail) located along the Salt Creek Channel. There are proposed Class II Community On-Street Bike Lanes along Lindenberger Road, Simpson Road, and Briggs Road within the vicinity of the Project site.

Exhibit 3-9 shows the existing pedestrian facilities within the study area. As shown on Exhibit 3-9, there are existing sidewalks located along portions of Briggs Road and Simpson Road. Field observations indicate moderate pedestrian and bicycle activity within the study area.

EXHIBIT 3-4: COUNTY OF RIVERSIDE'S SUN CITY/MENIFEE AREA PLAN CIRCULATION ELEMENT



Data Source: Riverside County Transportation

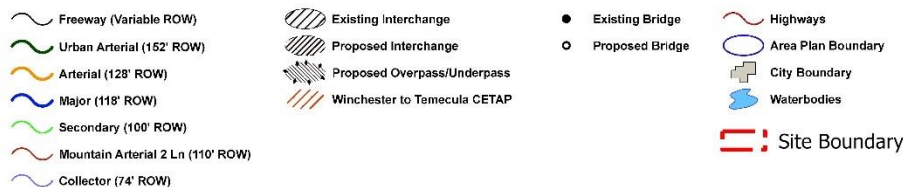
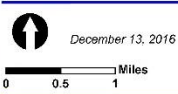


Figure 6

15470-07 TA Report



Disclaimer: Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the accuracy of the data provided, and assumes no liability for any errors or omissions in the data provided, and assumes no responsibility for any inaccuracies or errors in the data provided, and assumes no responsibility for any inaccuracies or errors in the data provided.



SUN CITY/MENIFEE
 AREA PLAN
 CIRCULATION

The figure consists of 13 cross-sectional diagrams of highways, each with a title and dimensions:

- EXPRESSWAY - 8 LANES (LIMITED ACCESS CONVENTIONAL HIGHWAY)**: Shows a cross-section with a raised median or graded median with left shoulders. Dimensions include 12' - 32' for shoulders, 14' - 40' for the main travel lanes, and 12' - 32' for the outer shoulders.
- EXPRESSWAY - 6 LANES (LIMITED ACCESS CONVENTIONAL HIGHWAY)**: Similar to the 8-lane version but with a narrower main travel lane width of 12' - 32'.
- URBAN ARTERIAL - 8 LANES**: Features a raised median and a 14' - 12' main travel lane width.
- URBAN ARTERIAL - 6 LANES**: Features a raised median and a 12' - 31' main travel lane width.
- ANTENNAL**: Features a raised median and a 10' - 12' main travel lane width.
- MAJOR**: Features a painted median and a 12' - 31' main travel lane width.
- SECONDARY - B (4 LANES, WITH MEDIAN TURN LANES AND NEW/DIKE LANES)**: Features a painted median and a 12' - 31' main travel lane width.
- INDUSTRIAL COLLECTOR**: Features a painted median and a 12' - 31' main travel lane width.
- COLLECTOR**: Features a painted median and a 12' - 31' main travel lane width.
- EMBANKED LOCAL STREET**: Features a painted median and a 12' - 31' main travel lane width.
- GENERAL LOCAL**: Features a painted median and a 12' - 31' main travel lane width.
- RURAL COLLECTOR**: Features a painted median and a 12' - 31' main travel lane width.
- RURAL LOCAL**: Features a painted median and a 12' - 31' main travel lane width.

24

EXHIBIT 3-6: EXISTING TRANSIT FACILITIES

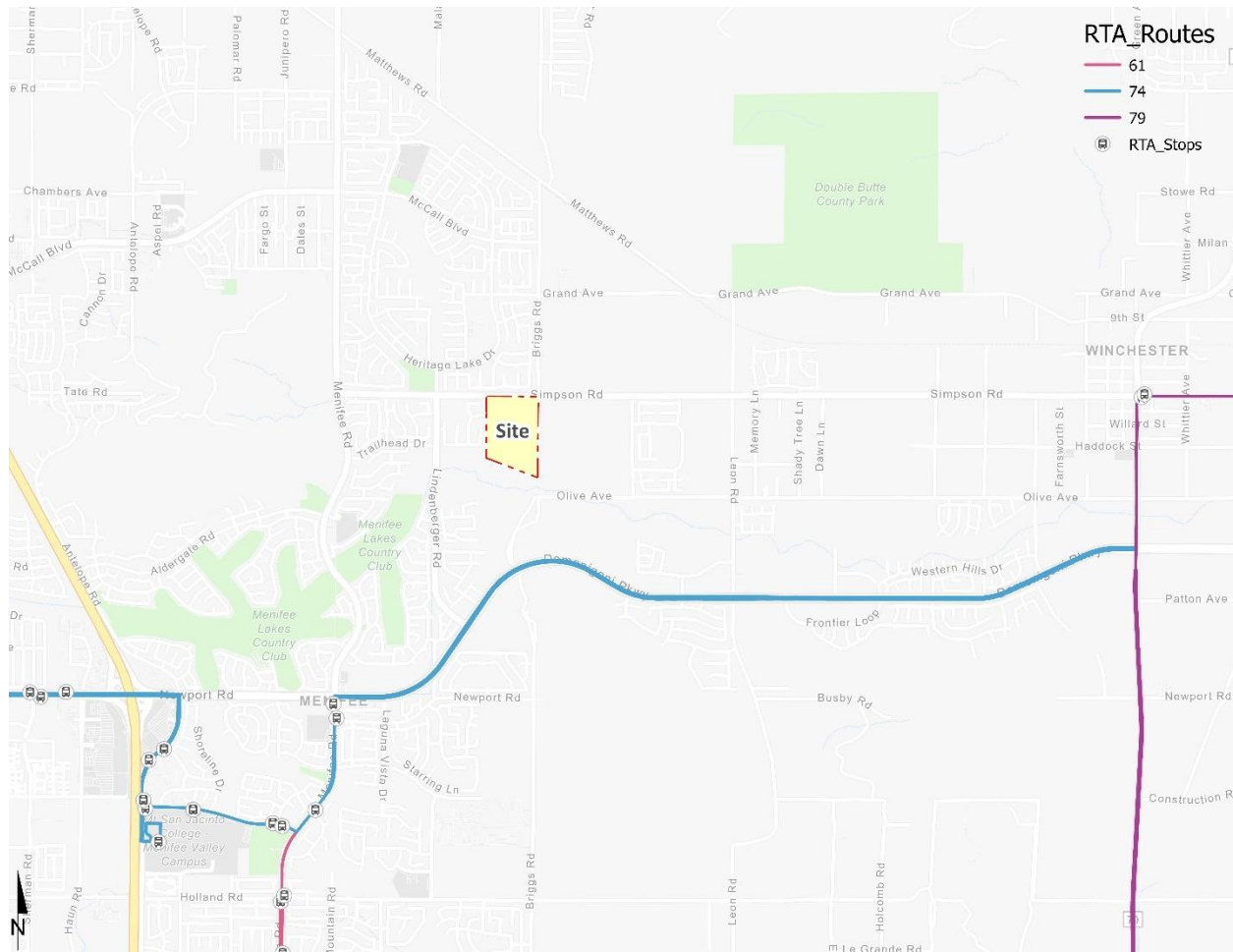


EXHIBIT 3-7: CITY OF MENIFEE GENERAL PLAN TRANSIT ROUTES

EXHIBIT C-5
POTENTIAL TRANSIT SERVICES

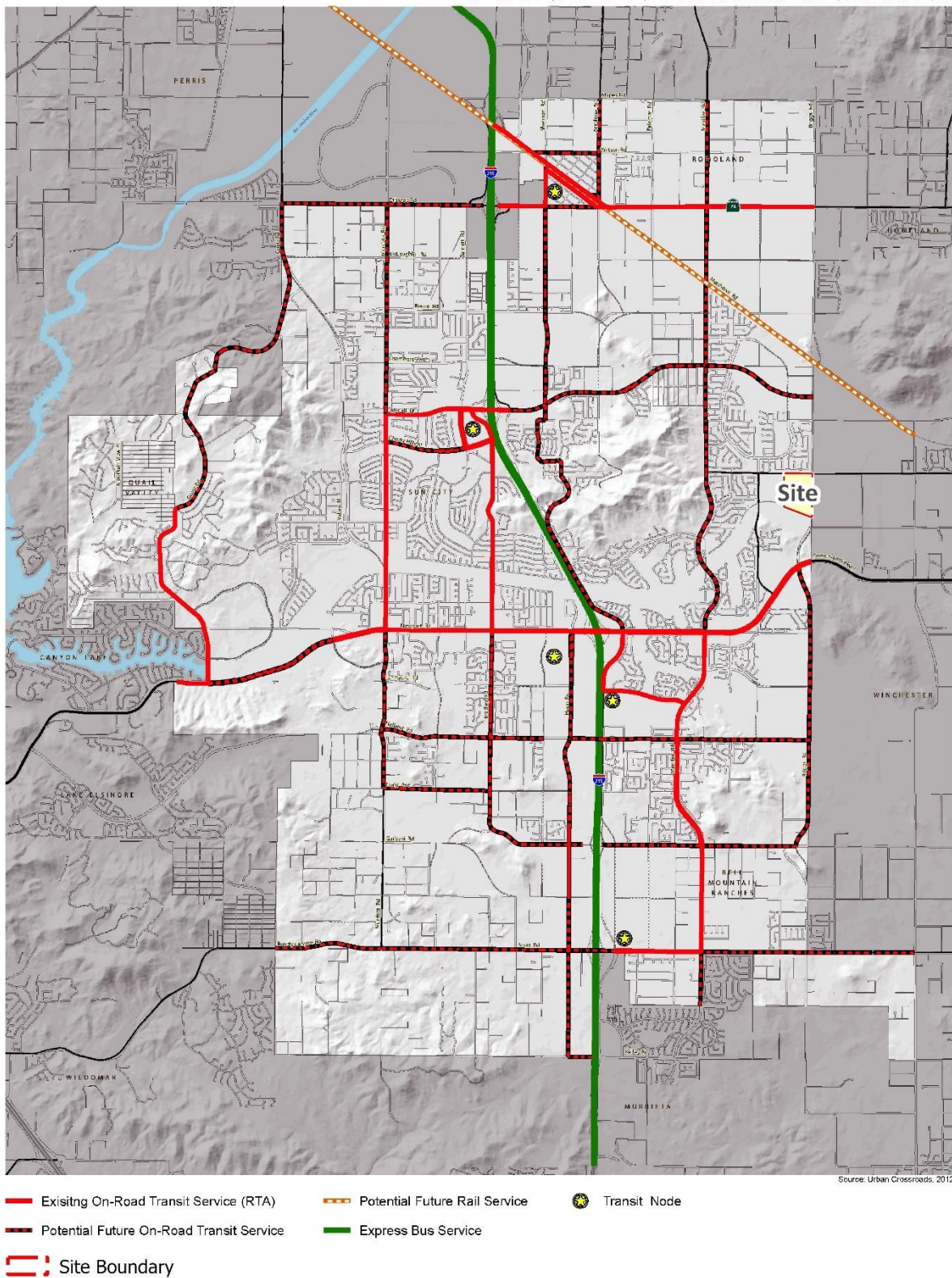
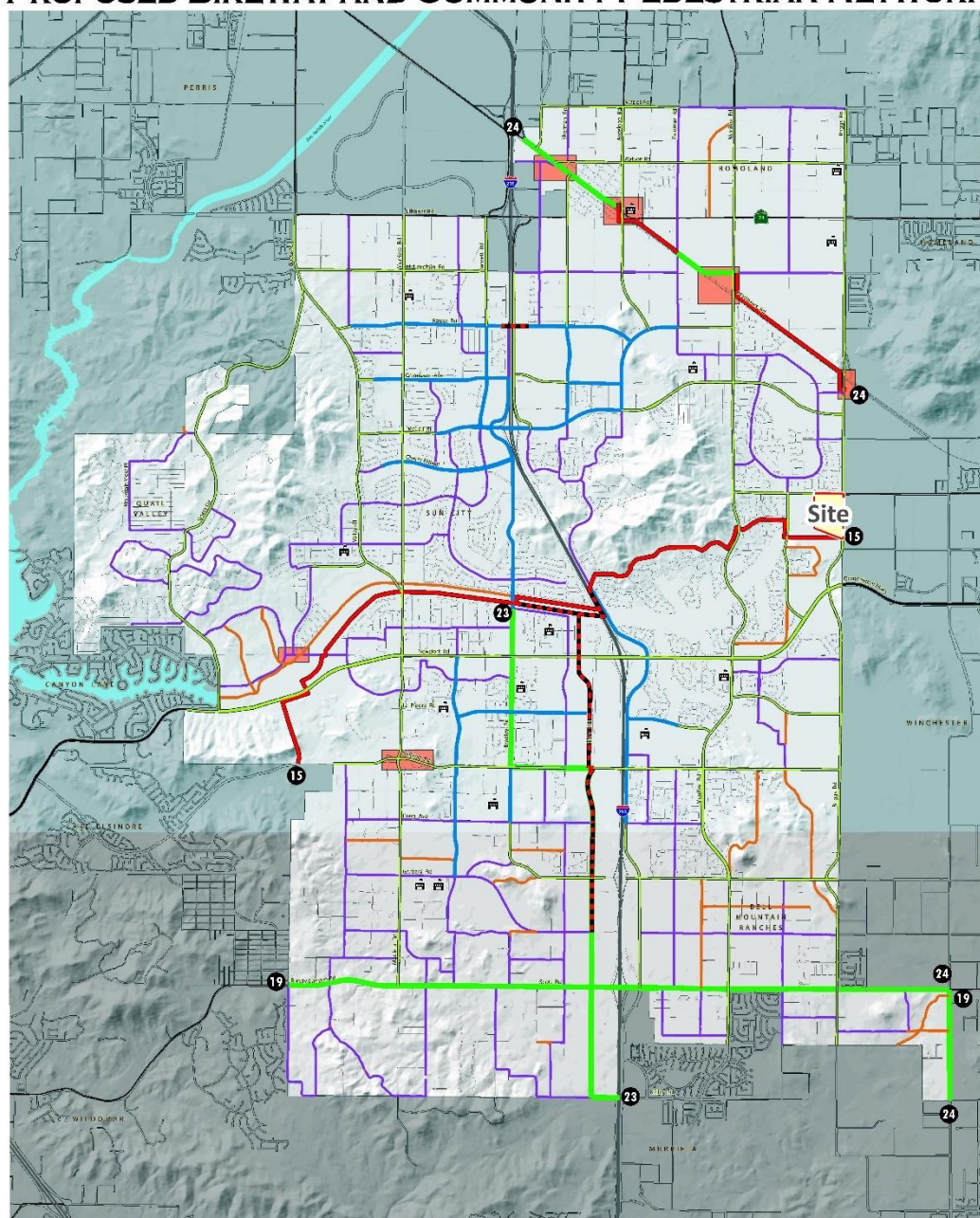


EXHIBIT 3-8: CITY OF MENIFEE GENERAL PLAN BICYCLE ROUTES

EXHIBIT C-4
PROPOSED 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 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)



MENIFEE
GENERAL PLAN

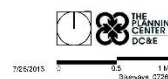


EXHIBIT 3-9: EXISTING PEDESTRIAN FACILITIES

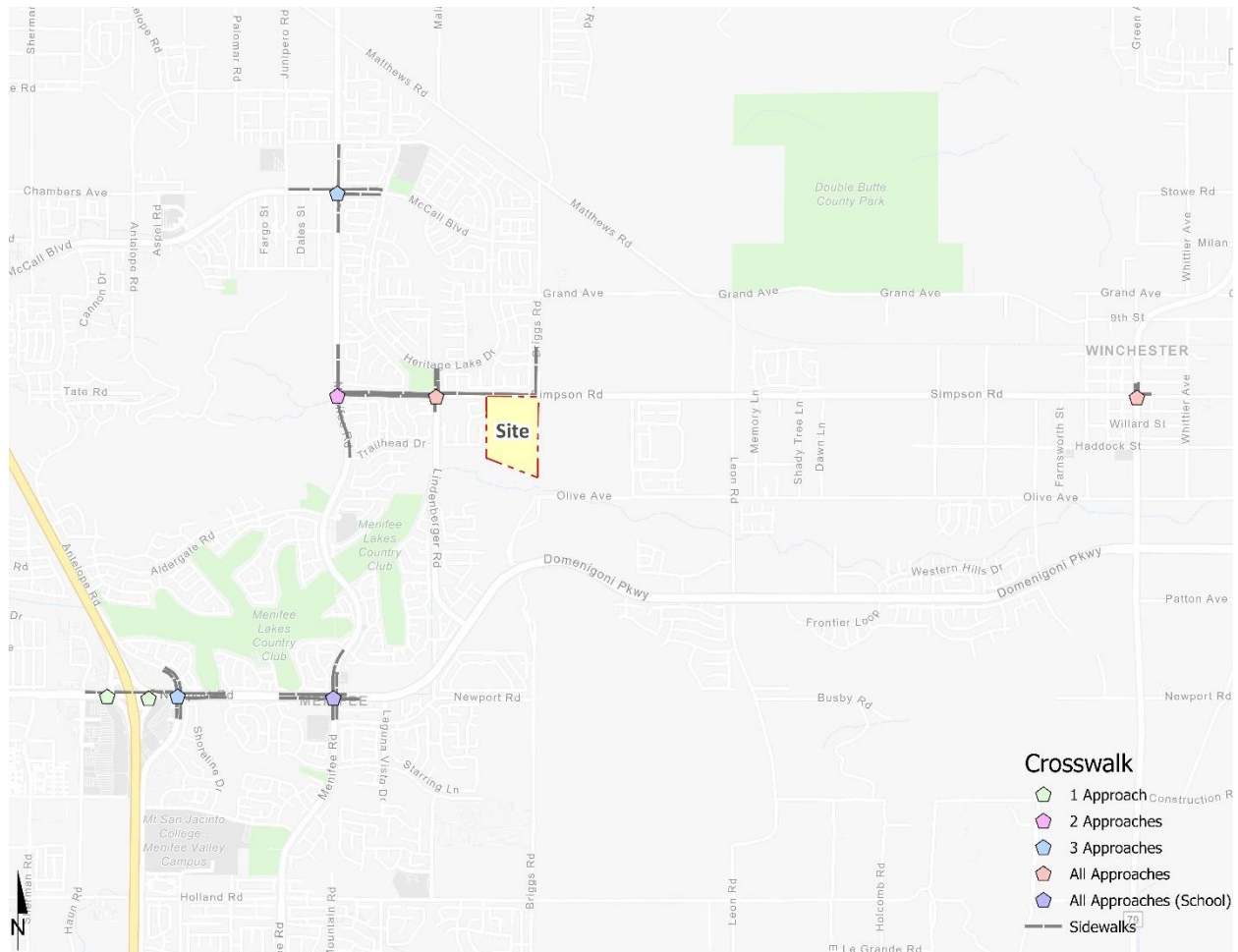
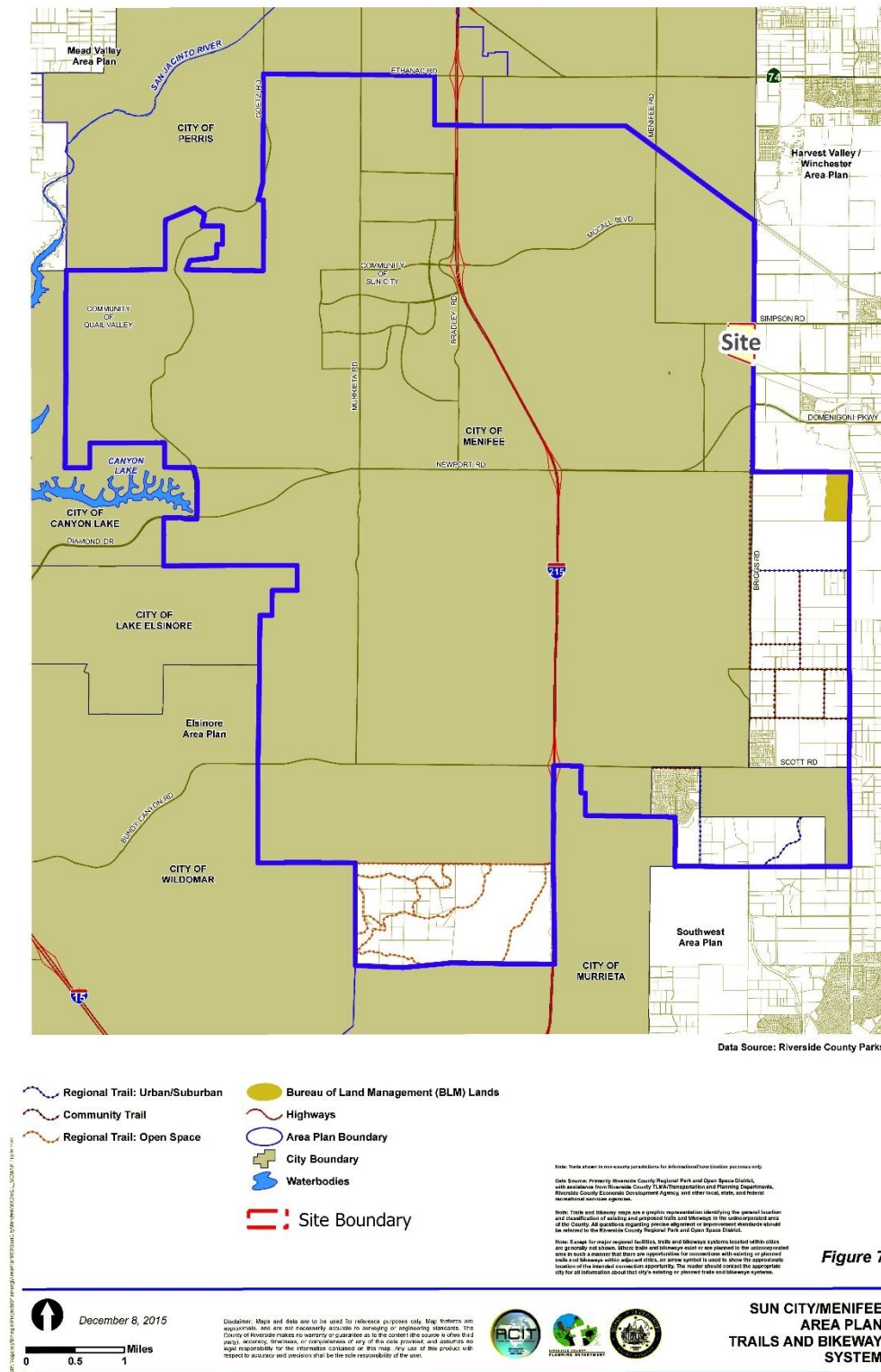


EXHIBIT 3-10: COUNTY OF RIVERSIDE'S SUN CITY/MENIFEE AREA PLAN BICYCLE ROUTES



3.6 EXISTING (2023) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in May 2023. 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)

The 2023 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 3-11. 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:

$$\text{Weekday PM Peak Hour (Approach Volume + Exit Volume)} \times 13.62 = \text{Leg Volume}$$

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 7.34 percent. As such, the above equation utilizing a factor of 13.62 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 7.34 percent (i.e., $1/0.0734 = 13.62$) and was assumed to sufficiently estimate ADT volumes for planning-level analyses. Existing weekday AM and weekday PM peak hour intersection volumes, in actual vehicles, are also shown on Exhibit 3-11.

3.7 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 in Table 3-1, which indicates that the study area intersections are currently operating at an acceptable LOS during the peak hours. The intersection operations analysis worksheets are included in Appendix 3.2 of this TA.

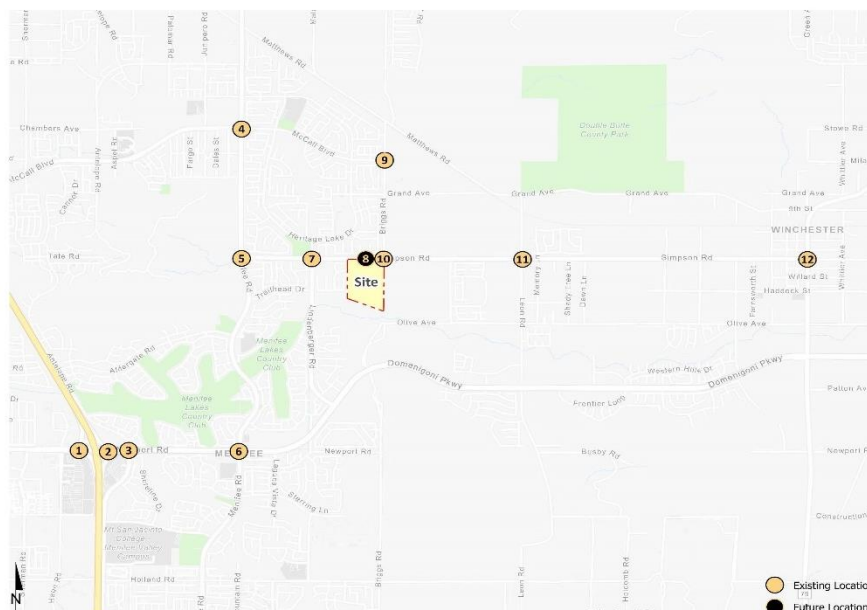
3.8 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. The following unsignalized study area intersection currently meets a traffic signal warrant for Existing (2023) traffic conditions:

- Briggs Road & Simpson Road (#10)

Existing conditions traffic signal warrant analysis worksheets are provided in Appendix 3.3.

EXHIBIT 3-11: EXISTING (2023) TRAFFIC VOLUMES



1	I-215 SB Ramps & Newport Rd.	2	I-215 NB Ramps & Newport Rd.	3	Antelope Rd. & Newport Rd.	4	Menifee Rd. & McCall Bl.	5	Menifee Rd. & Simpson Rd.
25,200 497(734) 332(559) 1325(2044) → 652(439) → 72,050	71,300 ↑ 983(558) ← 1676(2073) 6,000 1254(2123) → 403(480) → 71,300	6,000 ↑ 484(439) ← 2302(2079) 357(552) 579(873) 25,950	18,750 304(370) 85(118) 94(133) 157(441) → 1319(1926) → 271(422) → 72,300	55,300 ↑ 105(155) ← 1924(1546) 83(125) 558(602) 62(160) 83(177) 21,850	12,500 157(148) 279(216) 164(75) 114(195) → 353(345) → 284(194) → 16,700	10,750 ↑ 179(48) ← 407(246) 45(25) 308(159) → 274(235) → 39(49) → 11,950	13,400 0(1) 336(316) 58(173) 0(1) → 298(361) → 267(143) → 13,100	93(130) 0(1) 277(141) 298(361) → 267(143) →	
6	Menifee Rd. & Newport Rd.	7	Lindenburger Rd. & Simpson Rd.	8	Street A & Simpson Rd.	9	Briggs Rd. & McCall Bl.	10	Briggs Rd. & Simpson Rd.
18,150 429(315) 303(205) 119(94) 244(357) → 1172(1501) → 119(139) → 49,900	44,300 ↑ 61(67) ← 1269(1155) 113(108) 164(196) → 191(294) → 113(117) → 14,400	4,600 55(43) 190(86) 50(16) 52(49) → 204(195) → 29(33) → 8,000	8,500 ↑ 48(31) ← 205(234) 95(55) 57(35) → 111(114) → 145(94) → 5,700	8,450 ← 338(310) 418(310) → 8,450	6,350 255(114) 286(94) 274(150) → 91(56) → 5,050	11,950 59(49) → 337(109) → 4,200	8,400 122(75) 108(74) 166(76) → 252(234) → 8,400	69(81) ← 216(235)	
11	Leon Rd. & Simpson Rd.	12	Winchester Rd. (SR-79) & Simpson Rd.						
8,500 0(1) 314(278) → 46(30) → 4,450	7,800 ← 250(266) 12(12) 35(50) → 17(16) → 4,450	17,150 157(69) 584(425) 16(31) 173(84) → 155(172) → 82(47) → 7,550	7,600 ↑ 19(33) ← 201(110) 184(65) 37(71) → 340(629) → 44(148) → 18,850						

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

Average Daily Trips

TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2023) CONDITIONS

#	Intersection	Traffic Control ¹	Delay ² (secs.)		Level of Service	
			AM	PM	AM	PM
1	I-215 SB Ramps & Newport Rd.	TS	14.2	21.1	B	C
2	I-215 NB Ramps & Newport Rd.	TS	13.1	25.5	B	C
3	Antelope Rd. & Newport Rd.	TS	31.2	45.2	C	D
4	Meniffee Rd. & McCall Bl.	TS	29.4	21.8	C	C
5	Meniffee Rd. & Simpson Rd.	TS	12.4	12.9	B	B
6	Meniffee Rd. & Newport Rd.	TS	28.9	29.0	C	C
7	Lindenburger Rd. & Simpson Rd.	TS	19.0	17.1	B	B
8	Street A & Simpson Rd.		Future Intersection			
9	Briggs Rd. & McCall Bl.	TS	11.9	11.3	B	B
10	Briggs Rd. & Simpson Rd.	AWS	12.1	11.3	B	B
11	Leon Rd. & Simpson Rd.	CSS	15.0	14.6	C	B
12	Winchester Rd. (SR-79) & Simpson Rd.	TS	21.9	19.6	C	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 QUEUING ANALYSIS

Queuing analysis findings are presented in Table 3-2. As shown in Table 3-2, there are currently no study area off-ramps experiencing queuing issues during the peak hours under Existing (2023) traffic conditions. Worksheets for Existing (2023) traffic conditions queuing analysis are provided in Appendix 3.4.

TABLE 3-2: PEAK HOUR QUEUING SUMMARY FOR EXISTING (2023) 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 & Newport Rd. (#1)	SBL	1,700	298	398	Yes	Yes
	SBL/R	840	258	358	Yes	Yes
	SBR	500	255	348	Yes	Yes
I-215 NB Ramps & Newport Rd. (#2)	NBL	1,350	294	434	Yes	Yes
	NBL/R	1,350	308	481	Yes	Yes
	NBR	375	255	377	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.

3.10 PROJECT DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

3.10.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

As shown previously in Table 3-1, the study area intersections are currently operating at an acceptable LOS during the peak hours under Existing (2023) traffic conditions. As such, no improvements have been identified.

3.10.2 IMPROVEMENTS TO ADDRESS DEFICIENCIES FOR OFF-RAMP QUEUES

As shown previously in Table 3-2, there are no study area off-ramps that are currently experiencing queuing issues under Existing (2023) traffic conditions. As such, no improvements have been identified.

4 PROJECTED FUTURE TRAFFIC

The Project is proposed to consist of 330 single family detached residential dwelling units (see Exhibit 1). The proposed Project is anticipated to have an opening year of 2029. Access is proposed along Simpson Road via a single driveway (Street A) and two points of access on the future southern extension of Briggs Road (Street M and Street K). All driveways are assumed to allow for full access (no turn restrictions).

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development. Trip generation rates for the proposed Project are shown in Table 4-1. The trip generation rates used for this analysis are based upon information collected by the ITE as provided in their Trip Generation Manual (11th Edition, 2021). (2) The following ITE land use code has been utilized for this Project:

- Single Family Detached Residential (ITE Land Use Code 210)

A summary of the proposed Project trip generation is shown in Table 4-1. As shown in Table 4-1, the proposed Project is anticipated to generate 3,112 two-way trips per day with 231 AM peak hour trips and 310 PM peak hour trips.

TABLE 4-1: PROJECT TRIP GENERATION SUMMARY

Land Use ¹	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single Family Detached Residential	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43

¹ Trip Generation Source: Institute of Transportation Engineers (ITE) Trip Generation Manual Eleventh Edition (2021).

² DU = Dwelling Units

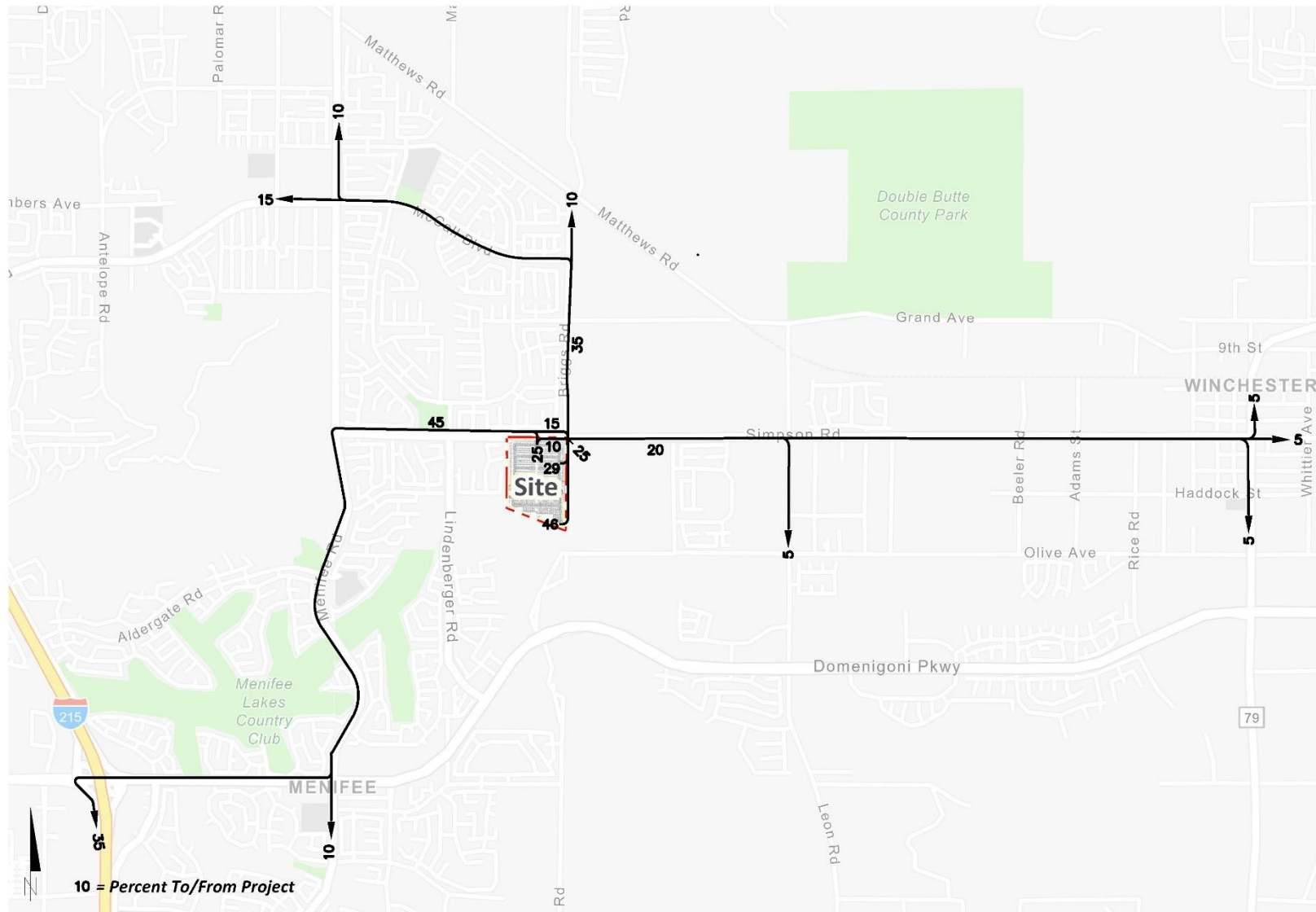
Project	Quantity Units ¹	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Single Family Detached Residential	330 DU	60	171	231	195	115	310	3,112

¹ DU = Dwelling Units

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 the Project traffic would distribute. The Project trip distribution was developed based on anticipated travel patterns to and from the Project site and were reviewed and approved by City staff during the scoping process (see Appendix 1.1). The Project trip distribution patterns are shown on Exhibit 4-1.

EXHIBIT 4-1: PROJECT TRIP DISTRIBUTION



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 peak hour intersection turning movement volumes, in actual vehicles, are shown on Exhibit 4-2 for the net Project trip generation.

4.5 BACKGROUND TRAFFIC

Future year traffic forecasts have been based upon background (ambient) growth at 2.0% per year, compounded annually. The total ambient growth is 12.62% for 2029 traffic. 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. The traffic generated by the proposed Project is manually added to the base volume to determine Opening Year forecasts.

[illegible]

1	I-215 SB Ramps & Newport Rd.	2	I-215 NB Ramps & Newport Rd.	3	Antelope Rd. & Newport Rd.	4	Menifee Rd. & McCall Bl.	5	Menifee Rd. & Simpson Rd.
550	550 ↑ 60(40)	550 ← 60(40) ↗ 21(68)	550 ← 60(40) ↗ 21(68)	1,100 ← 60(40) 21(68) →	1,100 ← 60(40) 21(68) →	300 6(20) ↑ 17(12) ← 26(17) 9(29) →	800 6(20) ↑ 17(12) ← 26(17) 9(29) →	1,400 ↖ 77(52) ↘ 27(88)	1,400 ↖ 77(52) ↘ 27(88)
6	Menifee Rd. & Newport Rd.	7	Lindenburger Rd. & Simpson Rd.	8	Street A & Simpson Rd.	9	Briggs Rd. & McCall Bl.	10	Briggs Rd. & Simpson Rd.
1,400	1,400 60(40) 17(12) 21(68) ↘ 6(20) ↗	1,400 ← 77(52) 27(88) →	1,250 ← 51(34) ↖ 6(20) 18(58) → 9(29) ↘	1,250 ← 51(34) ↖ 6(20) 18(58) → 9(29) ↘	300 6(20) 15(49) ↘ 43(29) ↘ 17(12) ↗	1,100 3(10) 18(59) 9(6) ↘ 9(6) ↗ 18(58) ↘	1,100 3(10) 18(59) 9(6) ↘ 9(6) ↗ 18(58) ↘	600 3(10) 18(59) 9(6) ↘ 9(6) ↗ 18(58) ↘	600 3(10) 18(59) 9(6) ↘ 9(6) ↗ 18(58) ↘
1,100	Leon Rd. & Simpson Rd.	1,400	Winchester Rd. (SR-79) & Simpson Rd.	1,400		800		1,100	
11	Leon Rd. & Simpson Rd.	12	Winchester Rd. (SR-79) & Simpson Rd.						
450	450 ← 9(29) 26(17) → 9(6) ↘	150 3(10) 9(6) ↘ 9(6) → 9(6) ↘ 3(10) 3(10)	150 ← 3(10) 26(17) → 9(6) ↘						
600		450							

Average Daily Trips

The traffic analysis includes the following traffic conditions, with the various traffic components:

- Opening Year (2029) Without Project
 - Existing 2023 volumes
 - Ambient growth traffic (12.62%)
 - Cumulative Development traffic
- Opening Year (2029) With Project
 - Existing 2023 volumes
 - Ambient growth traffic (12.62%)
 - Cumulative Development traffic
 - Project Traffic

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 projects listed are those that would generate traffic and would contribute traffic to study area intersections. Exhibit 4-3 illustrates the cumulative development location map. A summary of cumulative development projects and their proposed land uses are shown in Table 4-2. If applicable, the traffic generated by individual cumulative projects was manually added to the Opening Year (2029) forecasts to ensure that traffic generated by the listed cumulative development projects in Table 4-2 is reflected as part of the background traffic. In an effort to conduct a conservative analysis, the cumulative projects are added in conjunction with the ambient growth identified in Section 4.5 *Background Traffic*. Cumulative ADT and peak hour intersection turning movement volumes, in actual vehicles, are shown on Exhibit 4-4 for near-term traffic conditions. The cumulative development project trip generation summary is provided in Appendix 4.1.

EXHIBIT 4-3: CUMULATIVE DEVELOPMENT LOCATION MAP

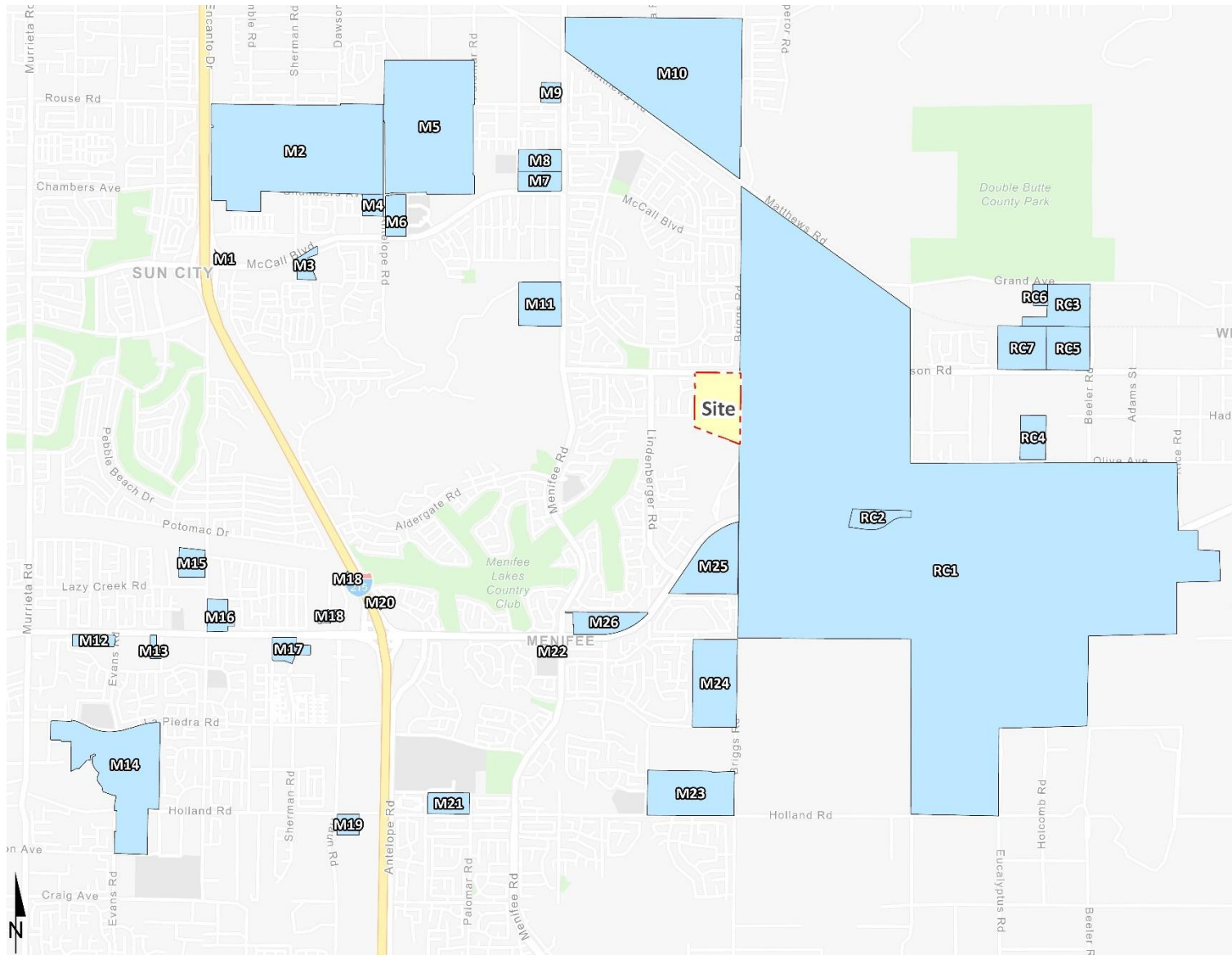
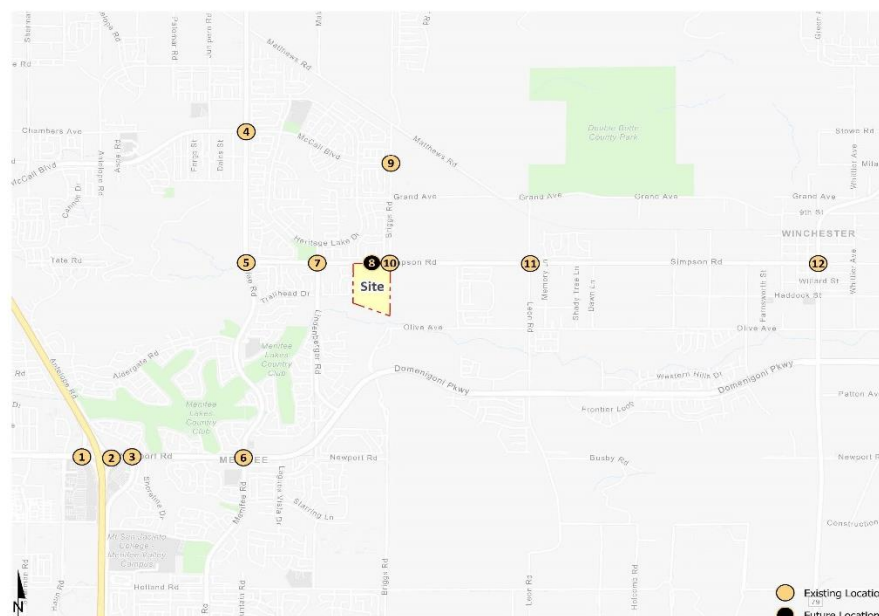


EXHIBIT 4-4: CUMULATIVE ONLY TRAFFIC VOLUMES (ACTUAL VEHICLES)



1 I-215 SB Ramps & Newport Rd.	2 I-215 NB Ramps & Newport Rd.	3 Antelope Rd. & Newport Rd.	4 Menifee Rd. & McCall Bl.	5 Menifee Rd. & Simpson Rd.
4,900 184(222) 52(150) 82(69) 416(507) 359(710) 108(120) 16,050	3,300 117(101) 457(463) 259(598) 15,050	700 21(22) 4(8) 2(9) 532(523) 2(9) 12(24) 291(694) 12(21) 14,050	10,100 78(92) 180(414) 359(303) 364(307) 182(420) 8,100	2,200 92(104) 21(47) 41(34) 58(130) 3,100
6 Menifee Rd. & Newport Rd.	7 Lindenburger Rd. & Simpson Rd.	8 Street A & Simpson Rd.	9 Briggs Rd. & McCall Bl.	10 Briggs Rd. & Simpson Rd.
2,500 92(104) 366(345) 345(294) 58(130) 191(466) 51(114) 13,400	900 41(34) 21(47) 900	900 41(34) 21(47) 900	17,600 262(396) 232(378) 170(458) 192(376) 16,000	15,300 15(16) 408(741) 607(600) 26(18) 10(19) 11(28) 15,400
11 Leon Rd. & Simpson Rd.	12 Winchester Rd. (SR-79) & Simpson Rd.			
1,650 96(71) 515(382) 287(199) 237(566) 183(203) 15,400	11,950 46(96) 523(361) 7(16) 81(75) 25(38) 2,350	300 12(12) 32(34) 202(597) 9,900		

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

Average Daily Trips

TABLE 4-2: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

No.	Project Name	Land Use	Quantity ¹
County of Riverside			
RC1	Winchester Hills Specific Plan No. 293	Specific Plan	
RC2	Winchester Hills TTM No. 38255	Single Family Residential	164 DU
RC3	TR31857	Single Family Residential	140 DU
RC4	TR32282	Single Family Residential	62 DU
RC5	TR32394	Single Family Residential	166 DU
RC6	TR33225	Single Family Residential	14 DU
RC7	TR33700	Single Family Residential	128 DU
City of Menifee:			
M1	McCall/Encanto Gas Station (PP PLN20-0003)	Gas Station	11,340 TSF
M2	Legado Specific Plan	Single Family Residential	1,061 DU
		Community Center	10 TSF
		Sports Park	11.23 TSF
		Shopping Center	225 TSF
M3	PP 2016-124	Fast-food w/ Drive-Thru	6,200 TSF
		Retail	1,000 TSF
		Gas Station & Market / Car Wash	12 VFP
M4	Cypress & Sands Apartments (DEV2022-020)	Apartments	136 DU
M5	TR 29835	Single Family Residential	543 DU
	TR 31098	Single Family Residential	264 DU
M6	Beyond Menifee (DEV2023-004)	Retail & Office	17.3 AC
		Residential	240 DU
M7	McCall Square (CUP 3549/2017-089)	Self-Storage Facility	152,893 TSF
		Grocery Store	45,000 TSF
		Pharmacy	14,600 TSF
		Shopping Center	11,500 TSF
		Restaurants	6,100 TSF
		Fast-food w/ Drive-Thru	3,500 TSF
		Gas Station & Market / Car Wash	16 VFP
M8	Village at Junipero (DEV2022-006, PLN22-0030)	Apartments	240 DU
M9	TTM 38346 (DEV2022-002)	Multifamily (Low-Rise) Residential	162 DU
M10	Menifee Valley Specific Plan (SP PLN21-0217)	Mixed Use, Residential	1,711 DU
M11	Menifee Coastline (PLN23-0063)	Single Family Residential	52 DU
M12	Newport Pointe (DEV 2019-053)	Gym	21,312 TSF
		Grocery Store	25,428 TSF
		Retail	8,000 TSF
		Fast-food	2,155 TSF
		Car Wash	2,700 TSF
		C-Store	3,000 TSF
		Oil/Lube	3,297 TSF

No.	Project Name	Land Use	Quantity ¹
M13	Montessori School (PLN20-0023)	Childcare Center	13.648 TSF
	Popeye's Restaurant (PLN20-0348)	Fast-food w/ Drive-Thru	2.364 TSF
M14	Estrella (TR 36803)	Single Family Residential	80 DU
	Quartz Ranch (TR 28786, 28791-28794)	Single Family Residential	314 DU
	Boulder View Estates (TR32934)	Single Family Residential	15 DU
M15	Riverwalk (PLN21-0238)	Single Family Residential	199 DU
M16	Menifee Crossroads	High Turnover (Sit-Down) Restaurant	4.500 TSF
		Fast-Food w/o Drive Thru	4.000 TSF
		Fast-Food w/ Drive Thru	2.000 TSF
		General Office	25.400 TSF
		Medical-Dental Office	18.400 TSF
		Commercial Retail	10.700 TSF
		Supermarket	37.400 TSF
	Menifee Self Storage (PLN21-0372)	Self-Storage Facility Expansion	45.075 TSF
M17	Krikorian Theatre (CUP 2016-130)	Shopping Center (w/ theater, food, bowling)	170.410 TSF
	Menifee Medical Office Building	Medical-Dental Office	33.800 TSF
M18	Chick-Fil-A (PLN21-0393)	Fast-food w/ Drive-Thru	4.929 TSF
	Washbank Express Carwash (DEV2022-024)	Car Wash & Office	1.650 AC
M19	StaxUp Storage Facility Expansion (DEV2022-005)	Self-Storage Facility Expansion	19.975 TSF
M20	Hampton Inn (PLN22-0212)	Hotel	71 Rooms
M21	Del Oro North (PP 2015-164)	Senior Adult Attached Housing	100 DU
		Apartments	238 DU
M22	O'Reilly Auto Parts (PLN21-0254)	Auto Parts Store	7.228 TSF
M23	Nautical Cove Residential	Single Family Residential	239 DU
M24	Rockport Ranch (TR 2016-285, SP 2016-286)	Single Family Residential	305 DU
M25	Diamond Bros (TR 37671)	Single Family Residential	197 DU
M26	Newport and Menifee Commercial (PM 2018-118)	Shopping Center	138.091 TSF
	Menifee Village (TR 37828)	Single Family Residential	91 DU

¹ TSF = Thousand Square Feet; DU = Dwelling Unit; AC = Acres; VFP = Vehicle Fueling Positions

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5 E+P TRAFFIC CONDITIONS

This section discusses the methods used to develop E+P traffic forecasts, and the resulting intersection operations, traffic signal warrant, and freeway 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 along the Project's frontage and driveways).

5.2 E+P TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus the addition of Project traffic. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for E+P traffic conditions are shown on Exhibit 5-1.

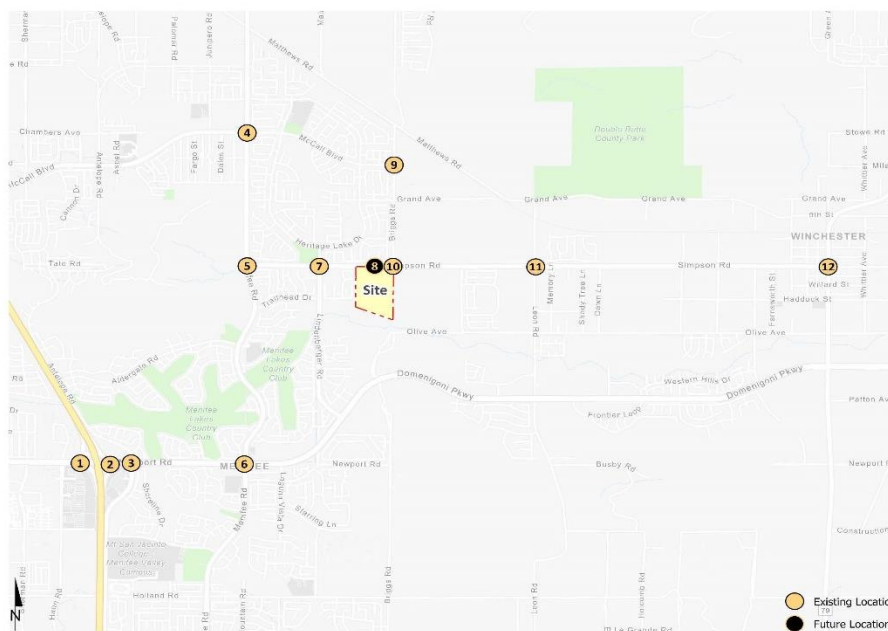
5.3 INTERSECTION OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under E+P traffic conditions with roadway and intersection geometrics consistent with Section 5.1 *Roadway Improvements*. As shown in Table 5-1, the study area intersections are anticipated to continue to operate at an acceptable LOS under E+P traffic conditions, consistent with Existing (2023) traffic conditions. The intersection operations analysis worksheets for E+P traffic conditions are included in Appendix 5.1 of this TA.

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 or planning level (ADT) volumes. There are no additional unsignalized study area intersections anticipated to meet a traffic signal warrant under E+P traffic conditions, in addition to the intersection identified under Existing (2023) traffic conditions. The E+P traffic conditions traffic signal warrant analysis worksheets are provided in Appendix 5.2.

EXHIBIT 5-1: E+P TRAFFIC VOLUMES



1	I-215 SB Ramps & Newport Rd.	2	I-215 NB Ramps & Newport Rd.	3	Antelope Rd. & Newport Rd.	4	Menifee Rd. & McCall Bl.	5	Menifee Rd. & Simpson Rd.
25,750 497(734) ↓ 332(559) ↓ 1325(2044) → 652(439) ↓ 72,050	71,850 ↑ 1043(598) ← 1676(2073) 6,000 1254(2123) → 403(480) ↓ 6,000	6,000 76,200 ↑ 484(439) ← 2362(2119) 357(552) ↑ 600(941) ↑ 26,500	18,750 304(370) ↓ 85(118) ↓ 94(133) ↓ 157(441) ↓ 1340(1994) → 271(422) ↓ 558(602) ↓ 62(160) ↑ 83(177) ↑ 21,850	56,400 ↑ 105(155) ← 1984(1586) ↑ 83(125) 114(195) ↓ 362(374) → 284(194) ↓ 308(159) ↓ 274(235) ↑ 39(49) ↑ 17,150	12,800 157(148) ↓ 279(216) ↓ 170(95) ↓ 114(195) ↓ 362(374) → 284(194) ↓ 308(159) ↓ 274(235) ↑ 39(49) ↑ 11,950	13,400 0(1) ↓ 336(316) ↓ 58(173) ↓ 93(130) ← 0(1) ← 354(193) ↑ 298(361) ↑ 294(231) ↑ 14,500	Nominal		
6	Menifee Rd. & Newport Rd.	7	Lindenburger Rd. & Simpson Rd.	8	Street A & Simpson Rd.	9	Briggs Rd. & McCall Bl.	10	Briggs Rd. & Simpson Rd.
19,550 489(355) ↓ 320(217) ↓ 119(94) ↓ 265(425) ↓ 1172(1501) ↓ 119(139) ↓ 51,000	44,300 ↑ 61(67) ← 1269(1155) ↑ 113(108) 164(196) ↑ 197(314) ↑ 113(117) ↑ 14,750	4,600 55(43) ↓ 190(86) ↓ 50(16) ↓ 52(49) ↓ 231(283) ↓ 29(33) ↓ 9,400	9,900 ↑ 48(31) ← 282(286) ↑ 95(55) 57(35) ↑ 111(114) ↑ 145(94) ↑ 5,700	9,700 ← 389(344) ↑ 6(20) 436(368) → 9(29) ↓ 26(17) ↓ 17(12) ↑ 800	6,650 255(114) ↓ 292(114) ↓ 274(150) → 106(105) → 102(78) ↑ 354(121) ↑ 5,800	5,250 125(85) ↓ 18(59) ↓ 108(74) ↓ 175(82) ↓ 261(240) ↓ 18(58) ↓ 51(34) ↓ 51(35) ↑ 26(17) ↑ 9,650	9,100 ↑ 69(81) ← 219(245) ↑ 9(29) 51(34) ↓ 51(35) ↑ 26(17) ↑ 2,350		
11	Leon Rd. & Simpson Rd.	12	Winchester Rd. (SR-79) & Simpson Rd.						
8,250 0(1) ↓ 259(295) ↑ 12(12) ↑ 340(295) ↓ 55(36) ↓ 1,650	17,350 160(79) ↓ 584(425) ↓ 16(31) ↓ 182(90) ↓ 164(178) ↓ 91(53) ↓ 8,000	7,750 ↑ 19(33) ← 204(120) ↑ 184(65) 40(81) ↓ 340(629) ↑ 44(148) ↑ 19,000							

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

Average Daily Trips

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

# Intersection	Traffic Control ¹	Existing (2023)				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 & Newport Rd.	TS	14.2	21.1	B	C	14.2	21.1	B	C
2 I-215 NB Ramps & Newport Rd.	TS	13.1	25.5	B	C	13.5	27.2	B	C
3 Antelope Rd. & Newport Rd.	TS	31.2	45.2	C	D	31.9	47.1	C	D
4 Meniffee Rd. & McCall Bl.	TS	29.4	21.8	C	C	29.6	22.0	C	C
5 Meniffee Rd. & Simpson Rd.	TS	12.4	12.9	B	B	13.9	13.6	B	B
6 Meniffee Rd. & Newport Rd.	TS	28.9	29.0	C	C	32.5	33.5	C	C
7 Lindenburger Rd. & Simpson Rd.	TS	19.0	17.1	B	B	19.1	17.8	B	B
8 Street A & Simpson Rd.	CSS	Future Intersection				11.5	11.0	B	B
9 Briggs Rd. & McCall Bl.	TS	11.9	11.3	B	B	12.4	11.7	B	B
10 Briggs Rd. & Simpson Rd.	AWS	12.1	11.3	B	B	16.0	16.3	C	B
11 Leon Rd. & Simpson Rd.	CSS	15.0	14.6	C	B	16.0	15.8	C	C
12 Winchester Rd. (SR-79) & Simpson Rd.	TS	21.9	19.6	C	B	22.1	19.9	C	B

¹ TS = Traffic Signal; AWS = All-way Stop; 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.

5.5 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for E+P traffic conditions are presented in Table 5-2. As shown in Table 5-2, the study area off-ramps are not anticipated to experience queuing issues during the peak hours under E+P traffic conditions, consistent with Existing (2023) traffic conditions. Worksheets for E+P traffic conditions queuing analysis are provided in Appendix 5.3.

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

Intersection	Movement	Available Stacking Distance (Feet)	Existing (2023)				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 & Newport Rd. (#1)	SBL	1,700	298	398	Yes	Yes	298	398	Yes	Yes
	SBL/R	840	258	358	Yes	Yes	258	358	Yes	Yes
	SBR	500	255	348	Yes	Yes	255	348	Yes	Yes
I-215 NB Ramps & Newport Rd. (#2)	NBL	1,350	294	434	Yes	Yes	290	434	Yes	Yes
	NBL/R	1,350	308	481	Yes	Yes	317	551 ²	Yes	Yes
	NBR	375	255	377	Yes	Yes	264	416 ³	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

5.6.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

As shown previously in Table 5-1, there are no study area intersections anticipated to experience queuing issues under E+P traffic conditions. As such, no improvements have been identified.

5.6.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES FOR OFF-RAMP QUEUES

As shown previously in Table 5-2, there are no study area off-ramps anticipated to experience queuing issues under E+P traffic conditions. As such, no improvements have been identified.

6 OPENING YEAR (2029) TRAFFIC CONDITIONS

This section discusses the methods used to develop Opening Year (2029) Without and With Project traffic forecasts, and the resulting intersection operations, traffic signal warrant, and freeway off-ramp queuing analyses.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Opening Year (2029) 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 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 conditions only.

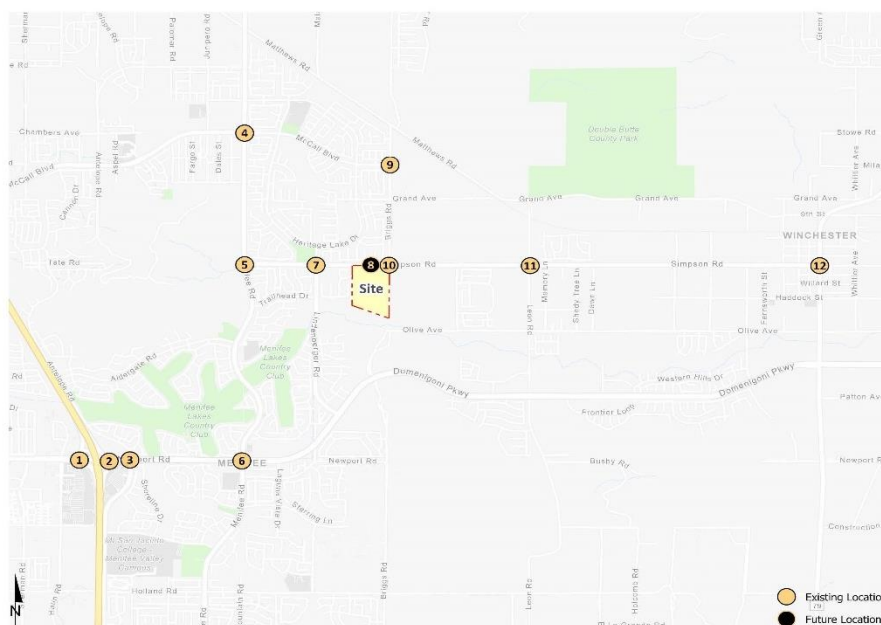
6.2 WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes, plus an ambient growth rate of 12.62%, 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 (2029) Without Project traffic conditions are shown on Exhibit 6-1.

6.3 WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Opening Year (2029) Without Project traffic in conjunction with the addition of Project (both net and full) traffic. The weekday ADT and weekday AM and PM peak hour volumes, in actual vehicles, which can be expected for Opening Year (2029) With Project traffic conditions are shown on Exhibit 6-2.

EXHIBIT 6-1: OPENING YEAR (2029) WITHOUT PROJECT TRAFFIC VOLUMES

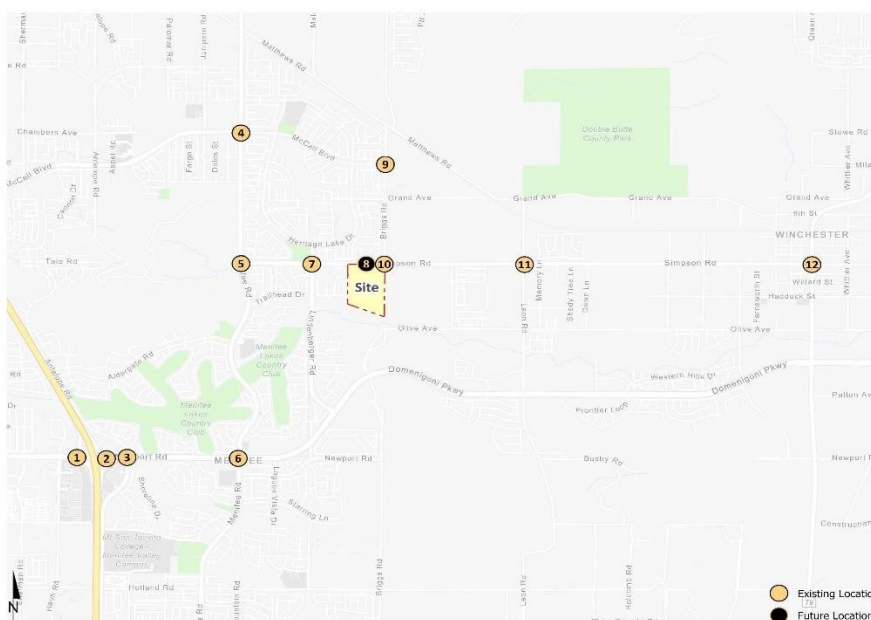


1	I-215 SB Ramps & Newport Rd.	2	I-215 NB Ramps & Newport Rd.	3	Antelope Rd. & Newport Rd.	4	Menifee Rd. & McCall Bl.	5	Menifee Rd. & Simpson Rd.
33,300 744(1049) 1851(3012) 842(614) 97,150	95,300 1189(697) 2303(2842) 8,000	10,000 1671(2989) 454(541) 95,300	98,600 662(595) 3049(2804) 32,150	21,800 363(439) 189(521) 1776(2863) 317(496) 95,450	75,700 120(184) 2699(2264) 95(150) 648(697) 70(180) 97(207) 25,250	24,200 177(167) 128(220) 580(809) 320(218) 26,900	28,100 561(357) 822(584) 51(28) 347(179) 360(379) 44(55) 15,700	17,300 0(1) 470(460) 86(242) 0(1) 312(159) 394(537) 301(161) 17,850	Nominal
6	Menifee Rd. & Newport Rd.	7	Lindenburger Rd. & Simpson Rd.	8	Street A & Simpson Rd.	9	Briggs Rd. & McCall Bl.	10	Briggs Rd. & Simpson Rd.
22,950 575(459) 341(231) 134(106) 333(532) 1511(2156) 185(271) 69,550	66,250 69(75) 1795(1646) 472(416) 263(313) 215(331) 301(535) 26,200	5,200 62(48) 214(97) 56(18) 59(55) 251(267) 33(37) 9,950	10,500 54(35) 272(298) 107(62) 64(39) 125(128) 163(106) 6,400	10,400 422(383) 492(396) 10,400	7,150 287(128) 322(106) 309(169) 170(458) 294(439) 21,650	17,600 262(396) 232(378) 527(269) 380(123) 150(406) 20,000	20,000 152(100) 530(824) 197(105) 295(292) 10,350	24,950 685(691) 269(283)	
11	Leon Rd. & Simpson Rd.	12	Winchester Rd. (SR-79) & Simpson Rd.						
1,700 96(71) 0(1) 591(879) 235(237) 24,950	25,100 797(682) 301(213) 157(292) 38(113) 139(327) 13,800	31,300 223(174) 1181(840) 25(51) 276(170) 200(232) 92(53) 10,850	8,850 33(49) 258(158) 207(73) 42(80) 585(1305) 50(167) 31,150						

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

Average Daily Trips

EXHIBIT 6-2: OPENING YEAR (2029) WITH PROJECT TRAFFIC VOLUMES



1 I-215 SB Ramps & Newport Rd. 33,850 744(1049) 426(780) 1249(737) 2303(2842) 1851(3012) 842(614) 97,150 8,000	2 I-215 NB Ramps & Newport Rd. 10,000 662(595) 3109(2844) 1671(2989) 454(541) 95,850 32,700	3 Antelope Rd. & Newport Rd. 21,800 363(439) 96(133) 110(158) 120(184) 2759(2304) 95(150) 189(521) 1797(2931) 317(496) 96,550 25,250	4 Menifee Rd. & McCall Bl. 24,500 177(167) 392(335) 371(518) 578(369) 848(601) 51(28) 128(220) 589(838) 320(218) 27,350 15,700	5 Menifee Rd. & Simpson Rd. 17,300 0(1) 470(460) 86(242) 146(180) 0(1) 389(211) 0(1) 394(537) 328(249) Nominal 19,250
6 Menifee Rd. & Newport Rd. 24,350 635(499) 358(243) 134(106) 69(75) 1795(1646) 472(416) 354(600) 1511(2156) 185(271) 70,650 26,500	7 Lindenburger Rd. & Simpson Rd. 5,200 62(48) 214(97) 56(18) 54(35) 349(350) 107(62) 59(55) 278(355) 33(37) 11,350 6,400	8 Street A & Simpson Rd. 11,650 473(417) 6(20) 510(454) 9(29) 11,800 800	9 Briggs Rd. & McCall Bl. 7,450 287(128) 328(126) 262(396) 232(378) 309(169) 170(458) 309(488) 22,450 21,100	10 Briggs Rd. & Simpson Rd. 21,100 155(110) 18(59) 530(824) 685(691) 272(293) 9(29) 206(111) 304(298) 18(58) 11,600 2,350
11 Leon Rd. & Simpson Rd. 1,700 96(71) 0(1) 806(711) 301(213) 617(896) 244(243) 25,600 14,000	12 Winchester Rd. (SR-79) & Simpson Rd. 31,450 226(184) 1181(840) 25(51) 33(49) 261(168) 207(73) 285(176) 209(238) 101(59) 11,300 31,300			

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

Average Daily Trips

6.4 INTERSECTION OPERATIONS ANALYSIS

6.4.1 OPENING YEAR (2029) WITHOUT PROJECT TRAFFIC CONDITIONS

LOS calculations were conducted for the study intersections to evaluate their operations under Opening Year (2029) Without Project conditions with roadway and intersection geometrics consistent with Section 6.1 *Roadway Improvements*. As shown in Table 6-1, the following study area intersections are anticipated to operate at an unacceptable LOS under Opening Year (2029) Without Project traffic conditions:

- Antelope Road & Newport Road (#3) – LOS E AM peak hour; LOS F PM peak hour
- Menifee Road & McCall Boulevard (#4) – LOS F AM and PM peak hours
- Menifee Road & Newport Road (#6) – LOS F AM and PM peak hours
- Briggs Road & Simpson Road (#10) – LOS F AM and PM peak hours
- Leon Road & Simpson Road (#11) – LOS F AM and PM peak hours

The intersection operations analysis worksheets for Opening Year (2029) Without Project traffic conditions are included in Appendix 6.1 of this TA.

6.4.2 OPENING YEAR (2029) WITH PROJECT TRAFFIC CONDITIONS

As shown in Table 6-1, there are no additional study area intersections anticipated to operate at an unacceptable LOS during the peak hours with the addition of Project traffic. The intersection operations analysis worksheets for Opening Year (2029) With Project traffic conditions are included in Appendix 6.1 of this TA.

6.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants have been performed for Opening Year (2029) traffic conditions based on peak hour intersection turning movements volumes or planning level (ADT) volumes. There are no study area intersections anticipated to meet a traffic signal warrant under Opening Year (2029) Without Project and With Project traffic conditions. The Opening Year (2029) Without Project and With Project traffic conditions traffic signal warrant analysis worksheets are provided in Appendices 6.3 and 6.4, respectively.

TABLE 6-1: INTERSECTION ANALYSIS FOR OPENING YEAR (2029) CONDITIONS

# Intersection	Traffic Control ¹	2029 Without Project				2029 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 & Newport Rd.	TS	20.0	39.0	C	D	20.0	39.0	C	D
2 I-215 NB Ramps & Newport Rd.	TS	16.2	30.7	B	C	16.7	36.8	B	D
3 Antelope Rd. & Newport Rd.	TS	72.6	153.4	E	F	77.7	161.8	E	F
4 Menifee Rd. & McCall Bl.	TS	102.9	110.5	F	F	110.2	119.5	F	F
5 Menifee Rd. & Simpson Rd.	TS	13.7	14.3	B	B	15.5	14.9	B	B
6 Menifee Rd. & Newport Rd.	TS	124.9	191.7	F	F	138.9	198.0	F	F
7 Lindenburger Rd. & Simpson Rd.	TS	20.0	18.0	B	B	20.3	18.7	C	B
8 Street A & Simpson Rd.	CSS	Future Intersection				12.2	11.6	B	B
9 Briggs Rd. & McCall Bl.	TS	23.3	13.4	C	B	29.7	13.6	C	B
10 Briggs Rd. & Simpson Rd.	AWS	>100.0	>100.0	F	F	>100.0	>100.0	F	F
11 Leon Rd. & Simpson Rd.	CSS	>100.0	>100.0	F	F	>100.0	>100.0	F	F
12 Winchester Rd. (SR-79) & Simpson Rd.	TS	44.4	31.6	D	C	46.3	33.1	D	C

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

¹ TS = Traffic Signal; AWS = All-way Stop; 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.

6.6 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for Opening Year (2029) Without Project are presented in Table 6-2. As shown in Table 6-2, the study area off-ramps are not anticipated to experience queuing issues during the peak hours under Opening Year (2029) Without and With Project traffic conditions. Worksheets for Opening Year (2029) Without Project and With Project traffic conditions queuing analysis are provided in Appendices 6.5 and 6.6, respectively.

TABLE 6-2: PEAK HOUR QUEUING SUMMARY FOR OPENING YEAR (2029) CONDITIONS

Intersection	Movement	Available Stacking Distance (Feet)	2029 Without Project				2029 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 & Newport Rd. (#1)	SBL	1,700	369	700 ²	Yes	Yes	369	700 ²	Yes	Yes
	SBL/R	840	358	605 ²	Yes	Yes	358	605 ²	Yes	Yes
	SBR	500	360	550 ³	Yes	Yes	360	550 ³	Yes	Yes
I-215 NB Ramps & Newport Rd. (#2)	NBL	1,350	357	747 ²	Yes	Yes	362	787 ²	Yes	Yes
	NBL/R	1,350	386	863 ²	Yes	Yes	395	905 ²	Yes	Yes
	NBR	375	307	625 ²	Yes	Yes	318	607 ^{2,3}	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 PROJECT DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

6.7.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

The effectiveness of the identified improvement strategies to address Opening Year (2029) traffic deficiencies are presented in Table 6-3. Worksheets for Opening Year (2029) Without and With Project conditions, with improvements, HCM calculation worksheets are provided in Appendices 6.7 and 6.8, respectively.

TABLE 6-3: INTERSECTION ANALYSIS FOR OPENING YEAR (2029) 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				
3 Antelope Rd. & Newport Rd.																	
- Without Improvements ⁴	TS	2	1	1	2	1	2>	2	3	<u>1</u>	2	3	0	50.0	73.2	D	E
- With Improvements ⁴	TS	2	1	1	2	1	2>	2	3	<u>1</u>	2	3	0	53.4	79.1	D	E
4 Menifee Rd. & McCall Bl.																	
- Without Improvements	TS	1	2	1	<u>2</u>	2	0	1	2	0	2	2	1	53.6	38.1	D	D
- With Improvements	TS	1	2	1	<u>2</u>	2	0	1	2	0	2	2	1	54.6	40.1	D	D
6 Menifee Rd. & Newport Rd.																	
- Without Improvements ⁵	TS	2	2	1>	1	2	1>	1	3	0	2	3	1	50.3	47.2	D	D
- With Improvements ⁵	TS	2	2	1>	1	2	1>	1	3	0	2	3	1	53.4	54.6	D	D
10 Briggs Rd. & Simpson Rd.																	
- Without Improvements	<u>TS</u>	0	0	0	<u>2</u>	0	1	1	1	0	0	1	<u>1</u>	15.4	16.6	B	B
- With Improvements	<u>TS</u>	<u>1</u>	<u>1</u>	0	<u>2</u>	<u>1</u>	<u>0</u>	1	1	<u>1</u>	<u>1</u>	1	<u>1</u>	30.5	35.0	C	D
11 Leon Rd. & Simpson Rd.																	
- Without Improvements	<u>TS</u>	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>2</u>	0	32.5	33.8	C	C
- With Improvements	<u>TS</u>	<u>1</u>	1	0	<u>1</u>	1	0	<u>1</u>	<u>2</u>	<u>0</u>	<u>1</u>	<u>2</u>	0	34.3	35.2	C	D

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; > = Right Turn Overlap; 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 TS = Traffic Signal; TS = Improvement

⁴ Per the City of Menifee traffic study guidelines, LOS E is acceptable for intersections located in close proximity to the I-215 Freeway.

⁵ Modify the traffic signal to implement lead-lag operations for the eastbound and westbound approaches.

6.7.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES FOR OFF-RAMP QUEUES

As shown previously in Table 6-2, there are no study area off-ramps anticipated to experience queuing issues under Opening Year (2029) traffic conditions. As such, no improvements have been identified.

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7 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements within the City of Menifee are funded through a combination of direct project mitigation, development impact fee programs or fair share contributions, such as the City of Menifee DIF program. Identification and timing of needed improvements is generally determined through local jurisdictions based upon a variety of factors.

7.1 RIVERSIDE COUNTY TRANSPORTATION UNIFORM MITIGATION FEE (TUMF)

The TUMF program is administered by the Western Riverside Council of Governments (WRCOG) based upon a regional Nexus Study most recently updated in 2016 to address major changes in right of way acquisition and improvement cost factors. (6) This regional program was put into place to ensure that development pays its fair share and that funding is in place for construction of facilities needed to maintain the requisite level of service and critical to mobility in the region. TUMF is a truly regional mitigation fee program and is imposed and implemented in every jurisdiction in Western Riverside County.

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 2020 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 ROAD AND BRIDGE BENEFIT DISTRICT (RBBD)

The City of Menifee is anticipated to experience substantial growth. Extensive improvements are necessitated by new development within the region. In particular, Riverside County recognized the effects of this growth on the vicinity of the study area when it formed the Southwest RBBD. The proposed Project lies within Zone D of the RBBD. Zone D is generally bounded by the I-215 Freeway to the west, Briggs Road to the east, La Piedra to the south and Simpson Road to the north. As discussed above, the facilities improvements that will be ultimately constructed as a result of the collection of these fees and assessments.

7.4 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. The Riverside County Transportation Commission (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.

7.5 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. Detailed fair share calculations, for each peak hour, have been provided in Table 7-1 for the applicable deficient study area intersection and for each applicable phase. These fees are collected with the proceeds solely used as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population increases.

TABLE 7-1: PROJECT FAIR SHARE CALCULATIONS

#	Intersection		Existing	Project Only	2029 With Project	Net New Traffic	Project % of New Traffic
3	Antelope Rd. & Newport Rd.						
		AM:	5,045	81	6,662	1,617	5.0%
		PM:	6,175	108	8,399	2,224	4.9%
4	Meniffee Rd. & McCall Bl.						
		AM:	2,603	58	4,203	1,600	3.6%
		PM:	1,935	78	3,907	1,972	4.0%
6	Meniffee Rd. & Newport Rd.						
		AM:	4,297	104	6,298	2,001	5.2%
		PM:	4,548	140	7,210	2,662	5.3%
10	Briggs Rd. & Simpson Rd.						
		AM:	933	197	2,264	1,331	14.8%
		PM:	775	264	2,559	1,784	14.8%
11	Leon Rd. & Simpson Rd.						
		AM:	674	47	2,356	1,682	2.8%
		PM:	653	62	2,876	2,223	2.8%

BOLD = Denotes highest fair share percentage.

8 REFERENCES

1. **City of Menifee.** *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled*. Menifee : s.n., October 2020.
2. **Institute of Transportation Engineers.** *Trip Generation Manual*. 11th Edition. 2021.
3. **Transportation Research Board.** *Highway Capacity Manual (HCM)*. 6th Edition. s.l. : National Academy of Sciences, 2016.
4. **Caltrans.** California Manual on Uniform Traffic Control Devices (MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CAMUTCD)*. 2017.
5. **City of Menifee Planning Department.** *Traffic Impact Analysis Guidelines*. Menifee : s.n., January 2019.
6. **Western Riverside Council of Governments.** *TUMF Nexus Study, 2016 Program Update*. July 2017.

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APPENDIX 1.1: TRAFFIC STUDY SCOPING AGREEMENT

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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:	Tentative Tract Map No. 38625
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	Salt Creek
Project Address:	SW corner of Briggs Rd. & Simpson Rd.
Project Opening Year:	2029
Project Description:	330 single family detached residential dwelling units

	Consultant:	Developer:
Name:	Charlene So, Urban Crossroads, Inc.	MLC Holdings, Inc. - Johanna Crooker
Address:	1133 Camelback St, #8329 Newport Beach, CA 92658	5 Peters Canyon Rd., Suite 310 Irvine, CA 92606
Telephone:	949-861-0177	949-299-3847
Fax/Email:	cso@urbanxroads.com	johanna.crooker@mlcholdings.net

Trip Generation Information:

Trip Generation Data Source: ITE Trip Generation Manual (11th Edition, 2021)

Current General Plan Land Use:
5.1-8 DU/AC Residential

Proposed General Plan Land Use:
5.1-8 DU/AC Residential

Current Zoning:
LMDR

Proposed Zoning:
LMDR

	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips				60	171	231
PM Trips				195	115	310

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): _____
Low VMT Area Screening: Per RIVCOM traffic model the Project is located within a
low VMT area.

VMT Analysis Scoping

For projects that are not screened, identify the following:

- Travel Demand Forecasting Model Used Not Applicable
- Attach WRCOG Screening VMT Assessment output or describe why it is not appropriate for use VMT memo completed in May 2023
- Attach proposed Model Land Use Inputs and Assumed Conversion Factors (attach)

Signatures

TIA Preparer: Charlene So City (Approved by): _____

Charlene So

DATE: September 7, 2023
TO: Christopher Heron, City of Menifee
FROM: Charlene So, Urban Crossroads
JOB NO: 15470-03 TA Scope

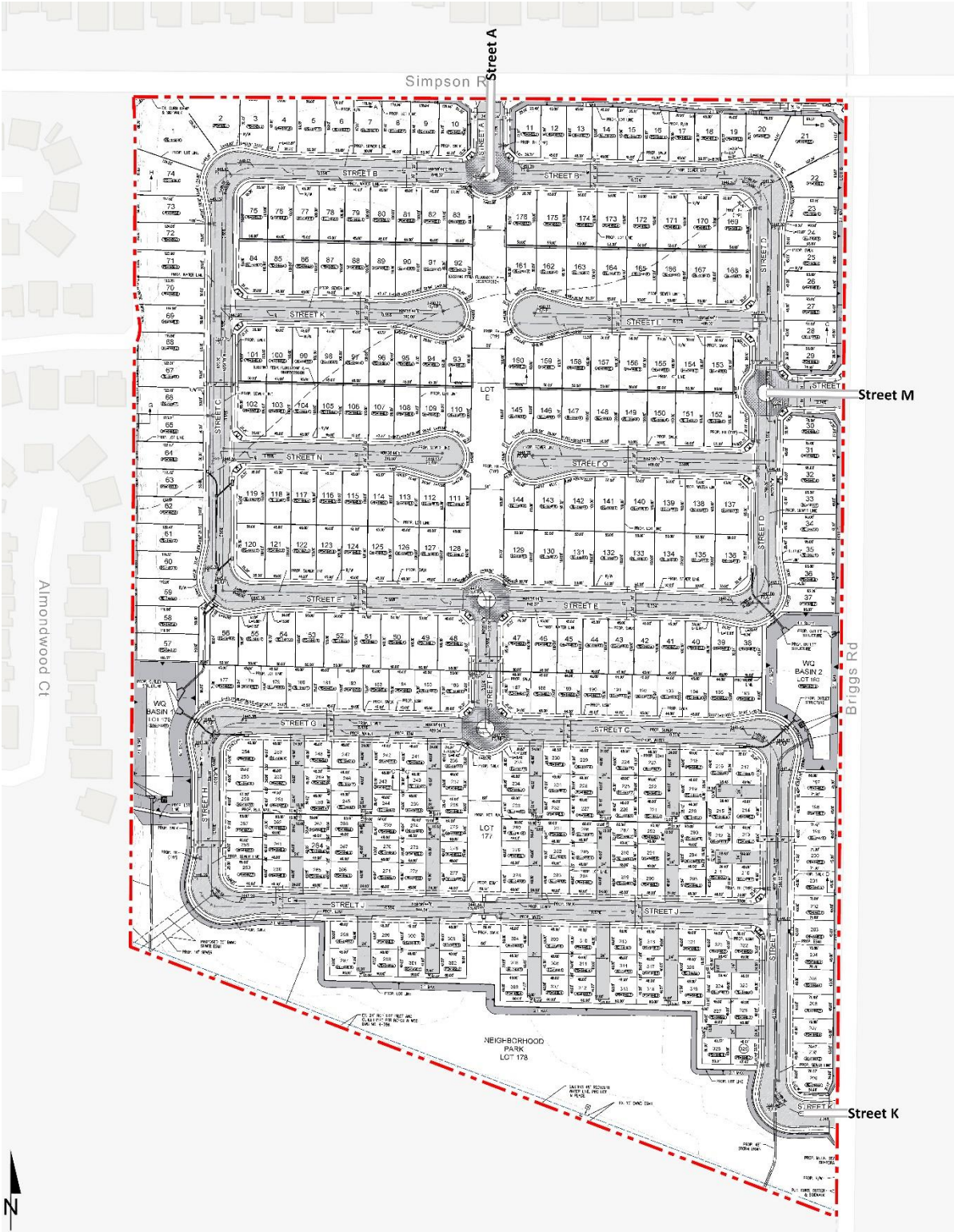
SALT CREEK (TENTATIVE TRACT MAP NO. 38625) (RTP23-039) TRAFFIC STUDY SCOPING AGREEMENT (REVISED)

Urban Crossroads, Inc. is pleased to submit the following Traffic Study Scoping Agreement for the proposed Salt Creek (TTM No. 38625) development (**Project**), which is located on the southwest corner of Briggs Road and Simpson Avenue and north of the Salt Creek Channel 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 PROJECT

The Project is proposed to consist of 330 single family detached residential dwelling units (see Exhibit 1). The proposed Project is anticipated to have an opening year of 2029. Access is proposed along Simpson Avenue via a single driveway (Street A) and two points of access on the future southern extension of Briggs Road (Street M and Street K). All driveways are assumed to allow for full access (no turn restrictions).

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 is calculated based on estimates provided in the Institute of Transportation Engineers (ITE) Trip Generation Manual using the single family detached residential rate. The trip generation rates are provided on Table 1. The Project trip generation summary is also shown on Table 1. The proposed Project is anticipated to generate a total of 3,112 two-way trips per day with 231 AM peak hour trips and 310 PM peak hour trips.

TABLE 1: PROJECT TRIP GENERATION SUMMARY

Land Use ¹	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single Family Detached Residential	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

² DU = Dwelling Units

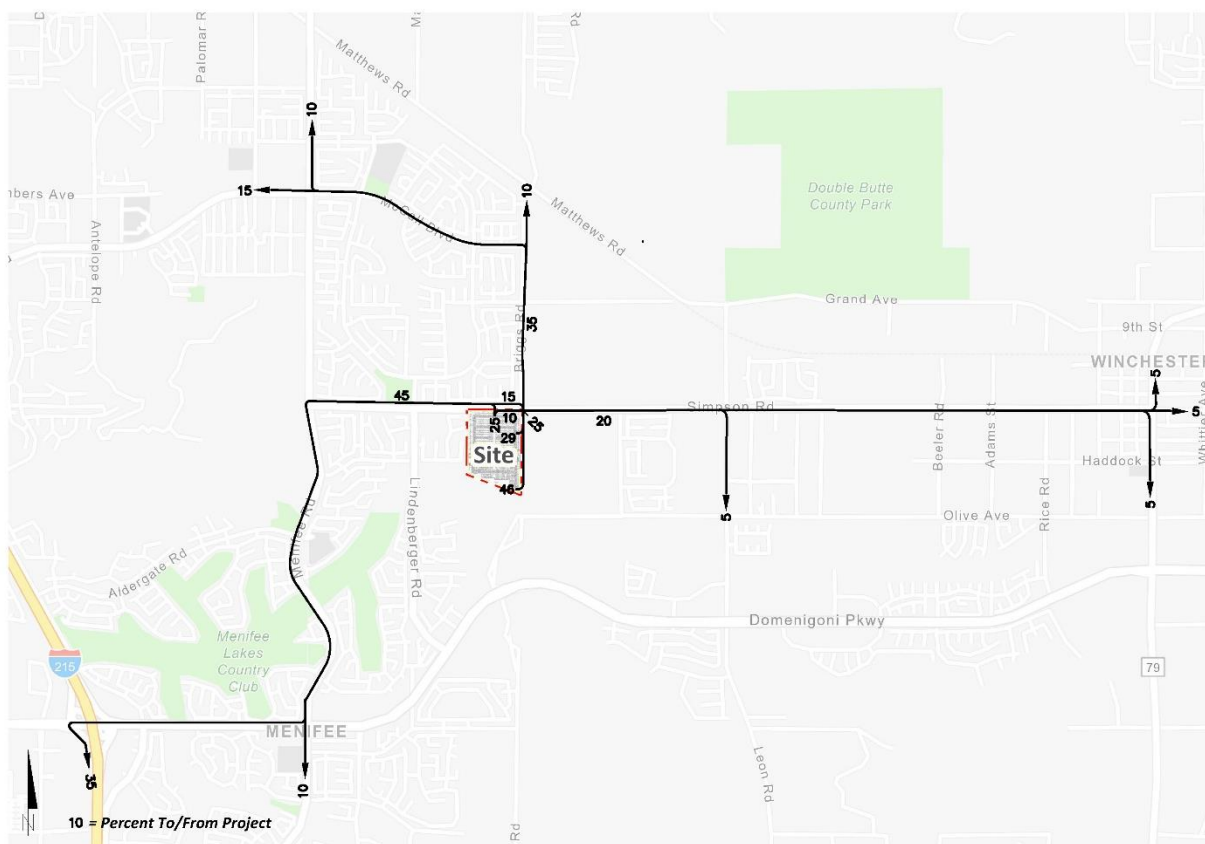
Project	Quantity Units ¹	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Single Family Detached Residential	330 DU	60	171	231	195	115	310	3,112

¹ DU = Dwelling Units

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 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 Project trip distribution patterns are graphically depicted on Exhibit 2.

EXHIBIT 2: PROJECT TRIP DISTRIBUTION



ANALYSIS SCENARIOS

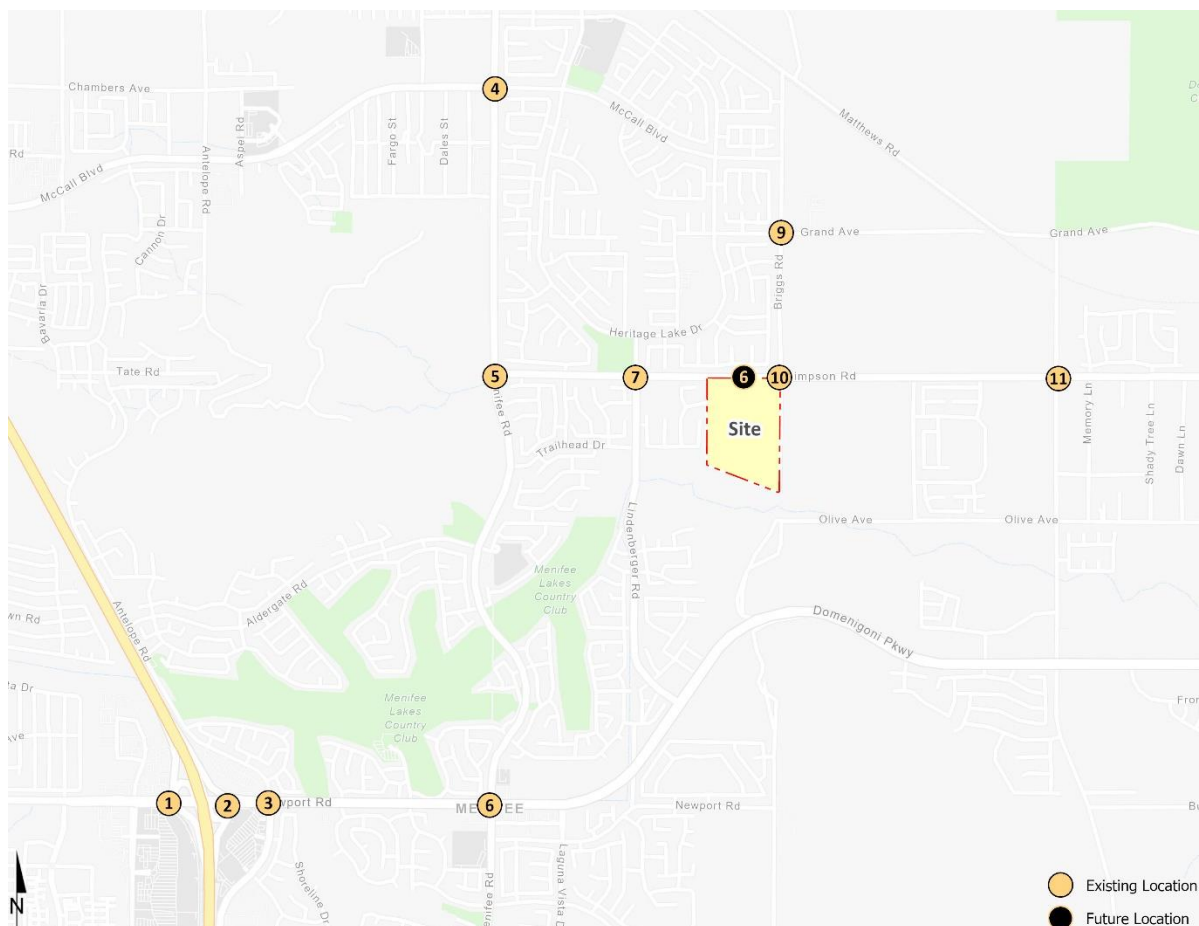
Consistent with the City's TIA Guidelines, intersection analysis will be provided for the following scenarios:

1. Existing (2023) Conditions
2. Existing plus Project
3. Opening Year Cumulative (2029) Without Project
4. Opening Year Cumulative (2029) 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 3 and listed below were selected for analysis:

EXHIBIT 3: STUDY AREA

ID	Intersection	Jursidiction	CMP?
1	I-215 SB Ramps & Newport Rd.	Caltrans, Menifee	No
2	I-215 NB Ramps & Newport Rd.	Caltrans, Menifee	No
3	Antelope Rd. & Newport Rd.	Menifee	No
4	Menifee Rd. & McCall Bl.	Menifee	No
5	Menifee Rd. & Simpson Rd.	Menifee	No
6	Menifee Rd. & Newport Rd.	Menifee	No
7	Lindenburger Rd. & Simpson Rd.	Menifee	No
8	Street A & Simpson Rd.	Menifee	No
9	Briggs Rd. & McCall Bl.	Menifee, Riverside County	No
10	Briggs Rd. & Simpson Rd.	Menifee, Riverside County	No
11	Leon Rd. & Simpson Rd.	Riverside County	No
12	Winchester Rd. (SR-79) & Simpson Rd.	Caltrans, Riverside County	No

EXISTING COUNT DATA

Traffic counts conducted in May 2023 (when local schools were in session and operating on normal bell schedules) will be used for the purposes of this analysis. No additional adjustments are proposed for the purpose of establishing the existing baseline conditions, with the exception of adjustments needed for volume balancing between closely spaced intersections.

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 should be recommended in the TIA report. Consideration should be made for existing right-of-way, availability of receiving lanes for additional through 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., $1.02^{6\text{years}} = 1.1262$ or 12.62% for 2029).

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.

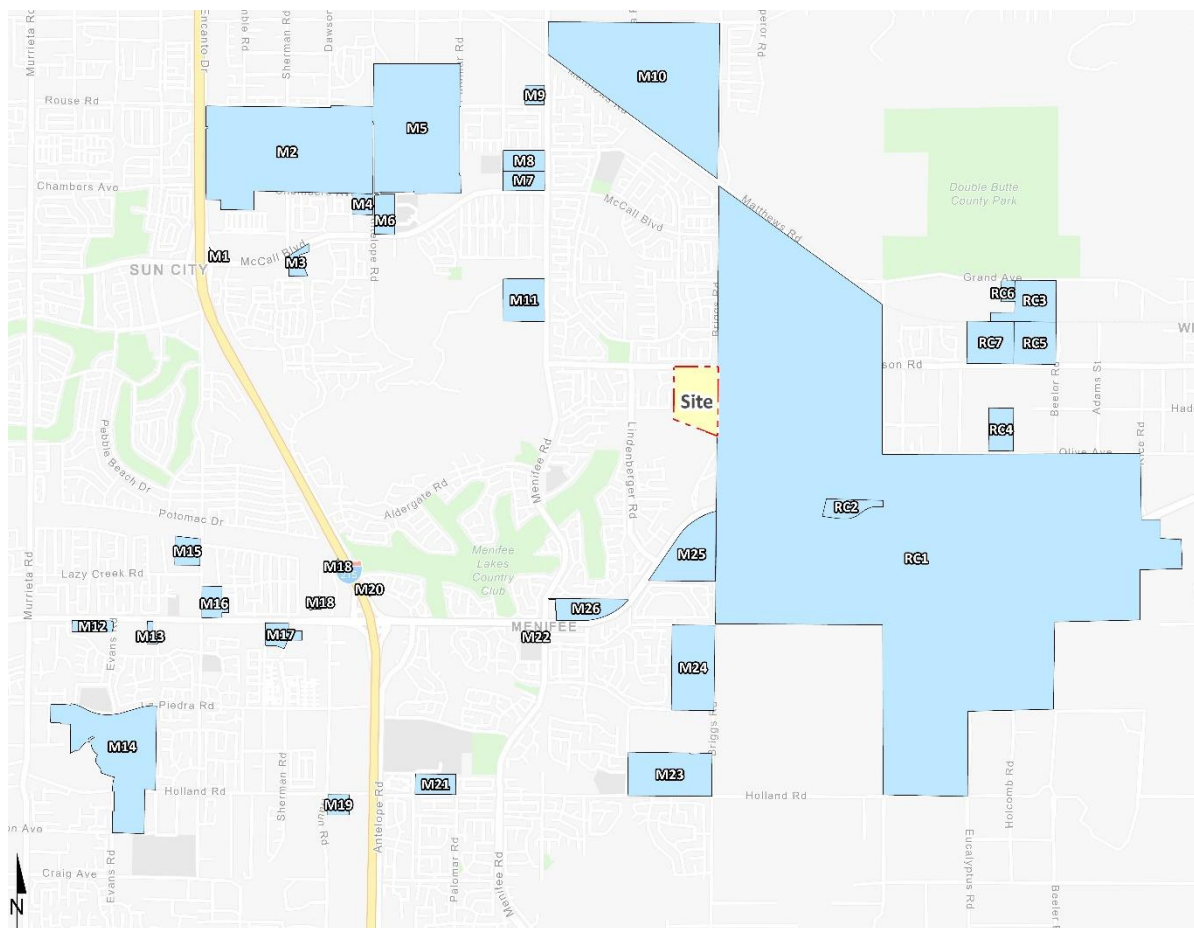
CUMULATIVE PROJECTS

It is requested that the City provide a list of cumulative development projects for inclusion in the traffic study. The list of cumulative projects within the City is currently based on the City's Land Development Project list/map which was last updated in May 2023. A preliminary list of cumulative projects is shown on Table 2 and locations are illustrated on Exhibit 4. A list of cumulative projects has already been obtained from the County of Riverside and are reflected on Table 2/Exhibit 4.

TABLE 2: SUMMARY OF CUMULATIVE DEVELOPMENT PROJECTS

No.	Project Name	Land Use	Quantity ¹
County of Riverside			
RC1	Winchester Hills Specific Plan No. 293	Specific Plan	
RC2	Winchester Hills TTM No. 38255	Single Family Residential	164 DU
RC3	TR31857	Single Family Residential	140 DU
RC4	TR32282	Single Family Residential	62 DU
RC5	TR32394	Single Family Residential	166 DU
RC6	TR33225	Single Family Residential	14 DU
RC7	TR33700	Single Family Residential	128 DU
City of Menifee:			
M1	McCall/Encanto Gas Station (PP PLN20-0003)	Gas Station	11.340 TSF
M2	Legado Specific Plan	Single Family Residential	1,061 DU
		Community Center	10 TSF
		Sports Park	11.23 TSF
		Shopping Center	225 TSF
M3	PP 2016-124	Fast-food w/ Drive-Thru	6.200 TSF
		Retail	1.000 TSF
		Gas Station & Market / Car Wash	12 VFP
M4	Cypress & Sands Apartments (DEV2022-020)	Apartments	136 DU
M5	TR 29835 TR 31098	Single Family Residential	543 DU
		Single Family Residential	264 DU
M6	Beyond Menifee (DEV2023-004)	Retail & Office	17.3 AC
		Residential	240 DU
M7	McCall Square (CUP 3549/2017-089)	Self-Storage Facility	152.893 TSF
		Grocery Store	45.000 TSF
		Pharmacy	14.600 TSF
		Shopping Center	11.500 TSF
		Restaurants	6.100 TSF
		Fast-food w/ Drive-Thru	3.500 TSF
		Gas Station & Market / Car Wash	16 VFP
M8	Village at Junipero (DEV2022-006, PLN22-0030)	Apartments	240 DU
M9	TTM 38346 (DEV2022-002)	Multifamily (Low-Rise) Residential	162 DU
M10	Menifee Valley Specific Plan (SP PLN21-0217)	Mixed Use, Residential	1,711 DU
M11	Menifee Coastline (PLN23-0063)	Single Family Residential	52 DU
M12	Newport Pointe (DEV 2019-053)	Gym	21.312 TSF
		Grocery Store	25.428 TSF
		Retail	8.000 TSF
		Fast-food	2.155 TSF
		Car Wash	2.700 TSF
		C-Store	3.000 TSF
		Oil/Lube	3.297 TSF
M13	Montessori School (PLN20-0023) Popeye's Restaurant (PLN20-0348)	Childcare Center	13.648 TSF
		Fast-food w/ Drive-Thru	2.364 TSF
M14	Estrella (TR 36803) Quartz Ranch (TR 28786, 28791-28794) Boulder View Estates (TR32934)	Single Family Residential	80 DU
		Single Family Residential	314 DU
		Single Family Residential	15 DU
M15	Riverwalk (PLN21-0238)	Single Family Residential	199 DU
M16	Menifee Crossroads	High Turnover (Sit-Down) Restaurant	4.500 TSF
		Fast-Food w/o Drive Thru	4.000 TSF
		Fast-Food w/ Drive Thru	2.000 TSF
		General Office	25.400 TSF
		Medical-Dental Office	18.400 TSF
		Commercial Retail	10.700 TSF
		Supermarket	37.400 TSF
		Self-Storage Facility Expansion	45.075 TSF
M17	Krikorian Theatre (CUP 2016-130) Menifee Medical Office Building	Shopping Center (w/ theater, food, bowling)	170.410 TSF
		Medical-Dental Office	33.800 TSF
M18	Chick-Fil-A (PLN21-0393) Washbank Express Carwash (DEV2022-024)	Fast-food w/ Drive-Thru	4.929 TSF
		Car Wash & Office	1.650 AC
M19	StaxUp Storage Facility Expansion (DEV2022-005)	Self-Storage Facility Expansion	19.975 TSF
M20	Hampton Inn (PLN22-0212)	Hotel	71 Rooms
M21	Del Oro North (PP 2015-164)	Senior Adult Attached Housing	100 DU
		Apartments	238 DU
M22	O'Reilly Auto Parts (PLN21-0254)	Auto Parts Store	7.228 TSF
M23	Nautical Cove Residential	Single Family Residential	239 DU
M24	Rockport Ranch (TR 2016-285, SP 2016-286)	Single Family Residential	305 DU
M25	Diamond Bros (TR 37671)	Single Family Residential	197 DU
M26	Newport and Menifee Commercial (PM 2018-118) Menifee Village (TR 37828)	Shopping Center	138.091 TSF
		Single Family Residential	91 DU

¹ TSF = Thousand Square Feet; DU = Dwelling Unit; AC = Acres; VFP = Vehicle Fueling Positions

EXHIBIT 4: CUMULATIVE DEVELOPMENT PROJECT LOCATION MAP**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 Project Driveway on Simpson Road (Street A) and the intersection of Briggs Road at Simpson Road.
- **Traffic Signal Warrant:** A traffic signal warrant analysis will be prepared for all analysis scenarios for the unsignalized, full access study area intersections. Peak hour volume-based traffic signal warrants will be run for existing intersections while planning level, ADT-based traffic signal warrants will be evaluated for future intersections. The posted speed limit will be used to determine whether the urban or rural warrants are utilized.
- **On-site Circulation:** A discussion on internal circulation and proposed on-site parking will also be included in the report. Project vehicular access points and restrictions will also be identified. It is our understanding that any proposed roundabouts will require conceptual striping plans for review prior to site plan approval.

- **Safety and Operational Improvements:** The traffic study will evaluate all existing roadway conditions to determine if safety and operational improvements are necessary due to an increase in traffic associated with the proposed Project or cumulative projects. The types of improvements to be identified may include, but are not limited to:
 - Traffic Signal Improvements
 - Additional thru and/or turning (right/left) lanes
 - Signing and Striping
 - Bus Turnouts
 - Stopping/Corner sight distance studies
 - Parking restrictions
 - Measures to reduce cut-through Project traffic in adjacent residential areas
 - Potential impacts to adjacent schools
 - Right turn overlaps
 - Signal Coordinating
 - Protected/Permissive Phasing Improvements
 - Queue length/turn pocket length and impacts to adjacent intersections
- **Vehicle Miles Traveled:** VMT will be addressed under separate cover. A VMT memo will be prepared summarizing the screening assessment.

If you have any questions or comments, I can be reached at cs@urbanxroads.com.

APPENDIX 1.2: SITE ADJACENT QUEUES

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Intersection: 8: Street A & Simpson Rd.

Movement	EB	WB	NB
Directions Served	T	L	LR
Maximum Queue (ft)	6	28	64
Average Queue (ft)	0	1	24
95th Queue (ft)	4	10	50
Link Distance (ft)	981		534
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		100	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Briggs Rd. & Simpson Rd.

Movement	EB	EB	EB	B1	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	T	L	T	R	L	TR	L	L	TR
Maximum Queue (ft)	247	274	31	13	73	291	523	95	123	199	367	140
Average Queue (ft)	121	116	5	0	8	126	239	41	47	146	185	48
95th Queue (ft)	194	215	24	6	43	224	437	79	95	218	283	101
Link Distance (ft)		272		219		2500	2500		796		1974	1974
Upstream Blk Time (%)	0	0										
Queuing Penalty (veh)	0	2										
Storage Bay Dist (ft)	200		100		100			100		100		
Storage Blk Time (%)	1	10				16		1	1	18	47	
Queuing Penalty (veh)	3	23				1		0	1	47	124	

Network Summary

Network wide Queuing Penalty: 201

Intersection: 8: Street A & Simpson Rd.

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (ft)	31	48
Average Queue (ft)	5	20
95th Queue (ft)	24	46
Link Distance (ft)		534
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Briggs Rd. & Simpson Rd.

Movement	EB	EB	EB	B1	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	R	T	L	T	R	L	TR	L	L	TR
Maximum Queue (ft)	182	267	150	17	71	263	425	81	101	200	544	152
Average Queue (ft)	85	128	34	1	25	138	199	27	33	188	294	53
95th Queue (ft)	154	222	107	11	59	226	357	69	75	222	477	110
Link Distance (ft)		272		219		2500	2500		796		1974	1974
Upstream Blk Time (%)	0	0										
Queuing Penalty (veh)	0	2										
Storage Bay Dist (ft)	200		100		100			100		100		
Storage Blk Time (%)		16			0	22		0	0	30	52	
Queuing Penalty (veh)		28			0	6		0	0	124	214	

Network Summary

Network wide Queuing Penalty: 374

APPENDIX 3.1: TRAFFIC COUNTS

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City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

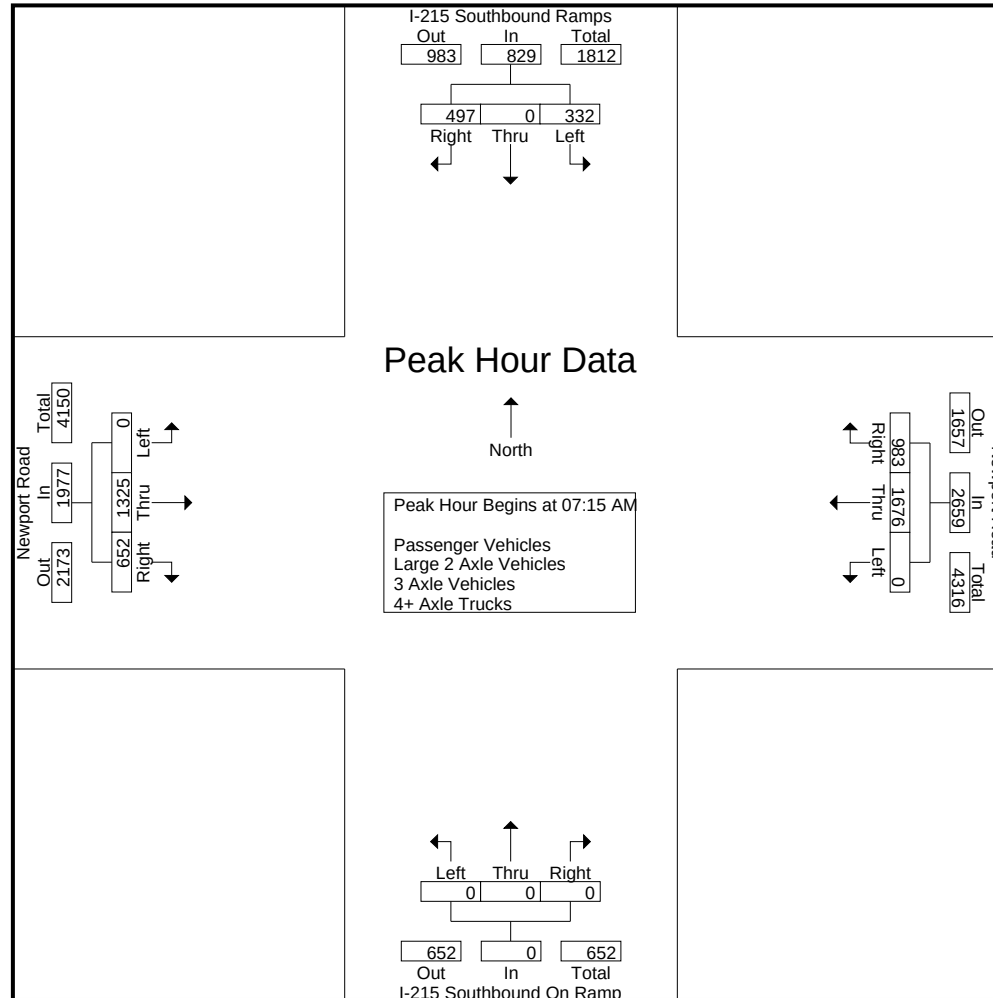
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	I-215 Southbound Ramps Southbound					Newport Road Westbound					I-215 Southbound On Ramp Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	92	0	82	28	174	0	298	238	0	536	0	0	0	0	0	0	299	130	0	429	28	1139	1167
07:15 AM	80	0	88	37	168	0	347	275	0	622	0	0	0	0	0	0	364	167	0	531	37	1321	1358
07:30 AM	90	0	148	35	238	0	407	277	0	684	0	0	0	0	0	0	278	167	0	445	35	1367	1402
07:45 AM	82	0	147	31	229	0	495	201	0	696	0	0	0	0	0	0	350	175	0	525	31	1450	1481
Total	344	0	465	131	809	0	1547	991	0	2538	0	0	0	0	0	0	1291	639	0	1930	131	5277	5408
08:00 AM	80	0	114	41	194	0	427	230	0	657	0	0	0	0	0	0	333	143	0	476	41	1327	1368
08:15 AM	86	0	125	38	211	0	417	178	0	595	0	0	0	0	0	0	360	115	0	475	38	1281	1319
08:30 AM	57	0	121	42	178	0	420	192	2	612	0	0	0	0	0	0	355	108	0	463	44	1253	1297
08:45 AM	82	0	114	47	196	0	381	168	0	549	0	0	0	0	0	0	258	91	0	349	47	1094	1141
Total	305	0	474	168	779	0	1645	768	2	2413	0	0	0	0	0	0	1306	457	0	1763	170	4955	5125
Grand Total	649	0	939	299	1588	0	3192	1759	2	4951	0	0	0	0	0	0	2597	1096	0	3693	301	10232	10533
Apprch %	40.9	0	59.1			0	64.5	35.5			0	0	0			0	70.3	29.7					
Total %	6.3	0	9.2		15.5	0	31.2	17.2		48.4	0	0	0		0	0	25.4	10.7		36.1	2.9	97.1	
Passenger Vehicles	595	0	880		1761	0	3104	1733		4839	0	0	0		0	0	2482	1068		3550	0	0	10150
% Passenger Vehicles	91.7	0	93.7	95.7	93.3	0	97.2	98.5	100	97.7	0	0	0	0	0	0	95.6	97.4	0	96.1	0	0	96.4
Large 2 Axle Vehicles	32	0	39		81	0	31	19		50	0	0	0		0	0	54	21		75	0	0	206
% Large 2 Axle Vehicles	4.9	0	4.2	3.3	4.3	0	1	1.1	0	1	0	0	0	0	0	0	2.1	1.9	0	2	0	0	2
3 Axle Vehicles	12	0	10		23	0	42	2		44	0	0	0		0	0	43	2		45	0	0	112
% 3 Axle Vehicles	1.8	0	1.1	0.3	1.2	0	1.3	0.1	0	0.9	0	0	0	0	0	0	1.7	0.2	0	1.2	0	0	1.1
4+ Axle Trucks	10	0	10		22	0	15	5		20	0	0	0		0	0	18	5		23	0	0	65
% 4+ Axle Trucks	1.5	0	1.1	0.7	1.2	0	0.5	0.3	0	0.4	0	0	0	0	0	0	0.7	0.5	0	0.6	0	0	0.6

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				Int. Total
Start Time	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	80	0	88	168	0	347	275	622	0	0	0	0	0	364	167	531	1321
07:30 AM	90	0	148	238	0	407	277	684	0	0	0	0	0	278	167	445	1367
07:45 AM	82	0	147	229	0	495	201	696	0	0	0	0	0	350	175	525	1450
08:00 AM	80	0	114	194	0	427	230	657	0	0	0	0	0	333	143	476	1327
Total Volume	332	0	497	829	0	1676	983	2659	0	0	0	0	0	1325	652	1977	5465
% App. Total	40	0	60		0	63	37		0	0	0		0	67	33		
PHF	.922	.000	.840	.871	.000	.846	.887	.955	.000	.000	.000	.000	.000	.910	.931	.931	.942

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 01_MEN_215S_New AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
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File Name : 01_MEN_215S_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:15 AM				07:00 AM				07:15 AM				
+0 mins.	90	0	148	238	0	347	275	622	0	0	0	0	0	364	167	531	
+15 mins.	82	0	147	229	0	407	277	684	0	0	0	0	0	278	167	445	
+30 mins.	80	0	114	194	0	495	201	696	0	0	0	0	0	350	175	525	
+45 mins.	86	0	125	211	0	427	230	657	0	0	0	0	0	333	143	476	
Total Volume	338	0	534	872	0	1676	983	2659	0	0	0	0	0	1325	652	1977	
% App. Total	38.8	0	61.2		0	63	37		0	0	0		0	67	33		
PHF	.939	.000	.902	.916	.000	.846	.887	.955	.000	.000	.000	.000	.000	.910	.931	.931	

City of Menifee
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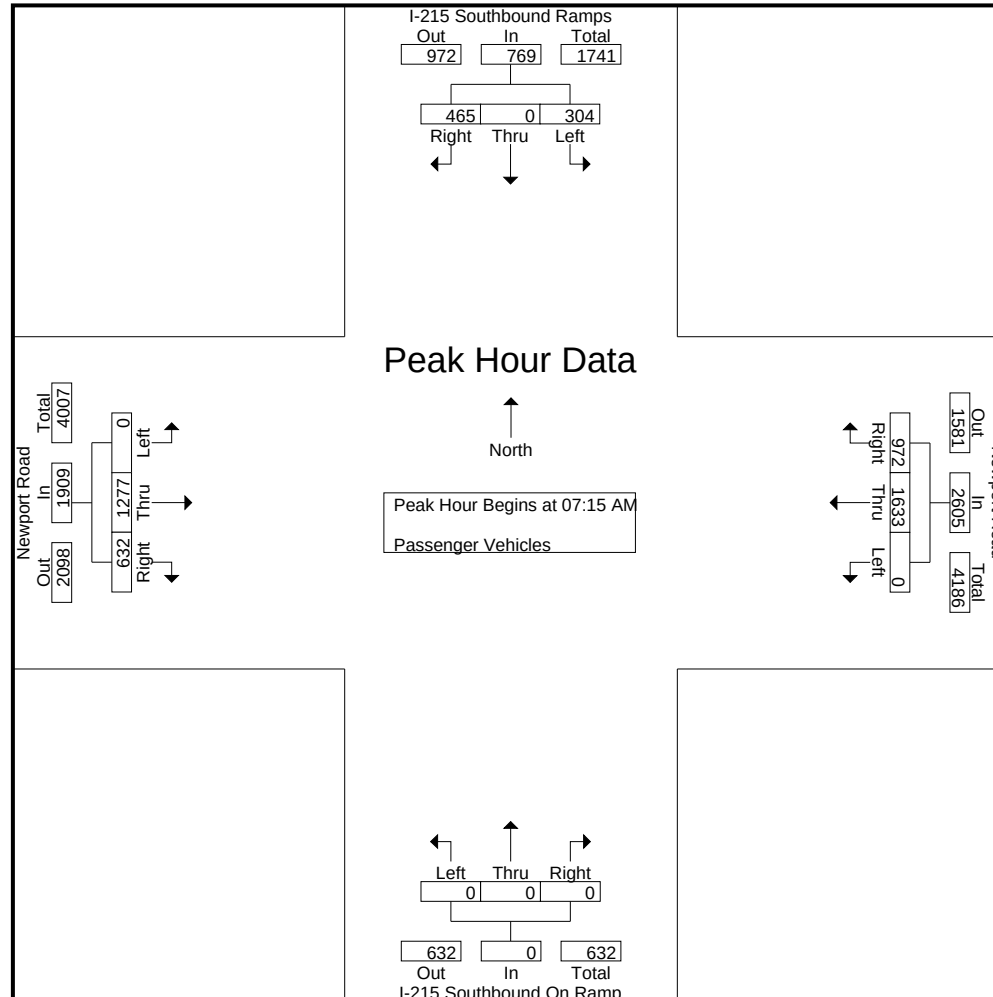
Groups Printed- Passenger Vehicles

	I-215 Southbound Ramps Southbound					Newport Road Westbound					I-215 Southbound On Ramp Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	80	0	68	25	148	0	285	236	0	521	0	0	0	0	0	0	289	129	0	418	25	1087	1112
07:15 AM	72	0	80	32	152	0	339	274	0	613	0	0	0	0	0	0	347	163	0	510	32	1275	1307
07:30 AM	82	0	133	33	215	0	397	273	0	670	0	0	0	0	0	0	270	161	0	431	33	1316	1349
07:45 AM	75	0	139	31	214	0	480	197	0	677	0	0	0	0	0	0	342	169	0	511	31	1402	1433
Total	309	0	420	121	729	0	1501	980	0	2481	0	0	0	0	0	0	1248	622	0	1870	121	5080	5201
08:00 AM	75	0	113	41	188	0	417	228	0	645	0	0	0	0	0	0	318	139	0	457	41	1290	1331
08:15 AM	77	0	118	37	195	0	409	174	0	583	0	0	0	0	0	0	341	110	0	451	37	1229	1266
08:30 AM	55	0	119	42	174	0	405	190	2	595	0	0	0	0	0	0	329	108	0	437	44	1206	1250
08:45 AM	79	0	110	45	189	0	372	161	0	533	0	0	0	0	0	0	246	89	0	335	45	1057	1102
Total	286	0	460	165	746	0	1603	753	2	2356	0	0	0	0	0	0	1234	446	0	1680	167	4782	4949
Grand Total	595	0	880	286	1475	0	3104	1733	2	4837	0	0	0	0	0	0	2482	1068	0	3550	288	9862	10150
Apprch %	40.3	0	59.7			0	64.2	35.8			0	0	0			0	69.9	30.1					
Total %	6	0	8.9		15	0	31.5	17.6		49	0	0	0		0	0	25.2	10.8		36	2.8	97.2	

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				Int. Total
Start Time	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	72	0	80	152	0	339	274	613	0	0	0	0	0	347	163	510	1275
07:30 AM	82	0	133	215	0	397	273	670	0	0	0	0	0	270	161	431	1316
07:45 AM	75	0	139	214	0	480	197	677	0	0	0	0	0	342	169	511	1402
08:00 AM	75	0	113	188	0	417	228	645	0	0	0	0	0	318	139	457	1290
Total Volume	304	0	465	769	0	1633	972	2605	0	0	0	0	0	1277	632	1909	5283
% App. Total	39.5	0	60.5		0	62.7	37.3		0	0	0		0	66.9	33.1		
PHF	.927	.000	.836	.894	.000	.851	.887	.962	.000	.000	.000	.000	.000	.920	.935	.934	.942

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 01_MEN_215S_New AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 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.	72	0	80	152	0	339	274	613	0	0	0	0	0	347	163	510	
+15 mins.	82	0	133	215	0	397	273	670	0	0	0	0	0	270	161	431	
+30 mins.	75	0	139	214	0	480	197	677	0	0	0	0	0	342	169	511	
+45 mins.	75	0	113	188	0	417	228	645	0	0	0	0	0	318	139	457	
Total Volume	304	0	465	769	0	1633	972	2605	0	0	0	0	0	1277	632	1909	
% App. Total	39.5	0	60.5		0	62.7	37.3		0	0	0		0	66.9	33.1		
PHF	.927	.000	.836	.894	.000	.851	.887	.962	.000	.000	.000	.000	.000	.920	.935	.934	

City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

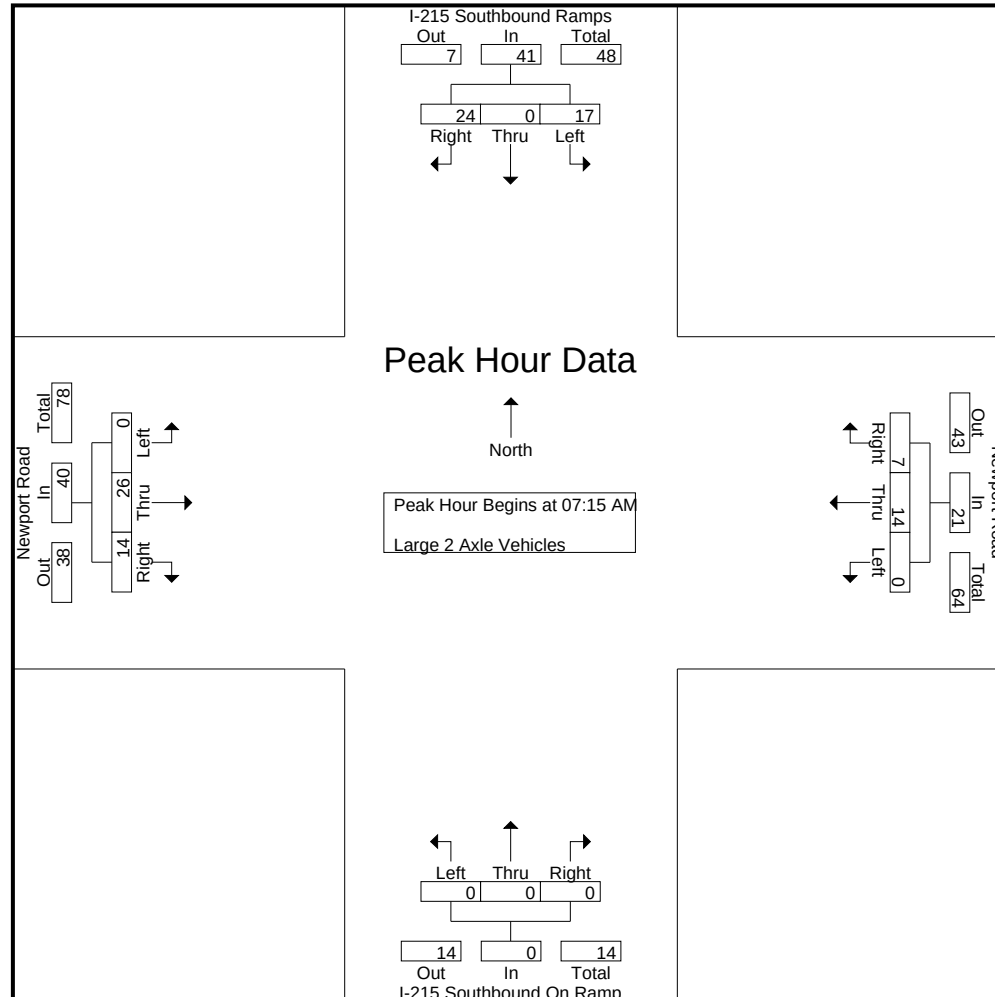
Groups Printed- Large 2 Axle Vehicles

	I-215 Southbound Ramps Southbound					Newport Road Westbound					I-215 Southbound On Ramp Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	7	0	8	1	15	0	4	2	0	6	0	0	0	0	0	0	3	1	0	4	1	25	26
07:15 AM	5	0	7	5	12	0	2	0	0	2	0	0	0	0	0	0	11	2	0	13	5	27	32
07:30 AM	4	0	11	2	15	0	2	4	0	6	0	0	0	0	0	0	0	4	0	4	2	25	27
07:45 AM	4	0	6	0	10	0	4	2	0	6	0	0	0	0	0	0	6	4	0	10	0	26	26
Total	20	0	32	8	52	0	12	8	0	20	0	0	0	0	0	0	20	11	0	31	8	103	111
08:00 AM	4	0	0	0	4	0	6	1	0	7	0	0	0	0	0	0	9	4	0	13	0	24	24
08:15 AM	5	0	5	1	10	0	4	3	0	7	0	0	0	0	0	0	7	4	0	11	1	28	29
08:30 AM	0	0	0	0	0	0	7	1	0	8	0	0	0	0	0	0	13	0	0	13	0	21	21
08:45 AM	3	0	2	1	5	0	2	6	0	8	0	0	0	0	0	0	5	2	0	7	1	20	21
Total	12	0	7	2	19	0	19	11	0	30	0	0	0	0	0	0	34	10	0	44	2	93	95
Grand Total	32	0	39	10	71	0	31	19	0	50	0	0	0	0	0	0	54	21	0	75	10	196	206
Apprch %	45.1	0	54.9			0	62	38			0	0	0			0	72	28					
Total %	16.3	0	19.9		36.2	0	15.8	9.7		25.5	0	0	0		0	0	27.6	10.7		38.3	4.9	95.1	

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				Int. Total
Start Time	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	5	0	7	12	0	2	0	2	0	0	0	0	0	11	2	13	27
07:30 AM	4	0	11	15	0	2	4	6	0	0	0	0	0	0	4	4	25
07:45 AM	4	0	6	10	0	4	2	6	0	0	0	0	0	6	4	10	26
08:00 AM	4	0	0	4	0	6	1	7	0	0	0	0	0	9	4	13	24
Total Volume	17	0	24	41	0	14	7	21	0	0	0	0	0	26	14	40	102
% App. Total	41.5	0	58.5		0	66.7	33.3		0	0	0		0	65	35		
PHF	.850	.000	.545	.683	.000	.583	.438	.750	.000	.000	.000	.000	.000	.591	.875	.769	.944

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 01_MEN_215S_New AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 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.	5	0	7	12	0	2	0	2	0	0	0	0	0	11	2	13	
+15 mins.	4	0	11	15	0	2	4	6	0	0	0	0	0	0	4	4	
+30 mins.	4	0	6	10	0	4	2	6	0	0	0	0	0	6	4	10	
+45 mins.	4	0	0	4	0	6	1	7	0	0	0	0	0	9	4	13	
Total Volume	17	0	24	41	0	14	7	21	0	0	0	0	0	26	14	40	
% App. Total	41.5	0	58.5		0	66.7	33.3		0	0	0		0	65	35		
PHF	.850	.000	.545	.683	.000	.583	.438	.750	.000	.000	.000	.000	.000	.591	.875	.769	

City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

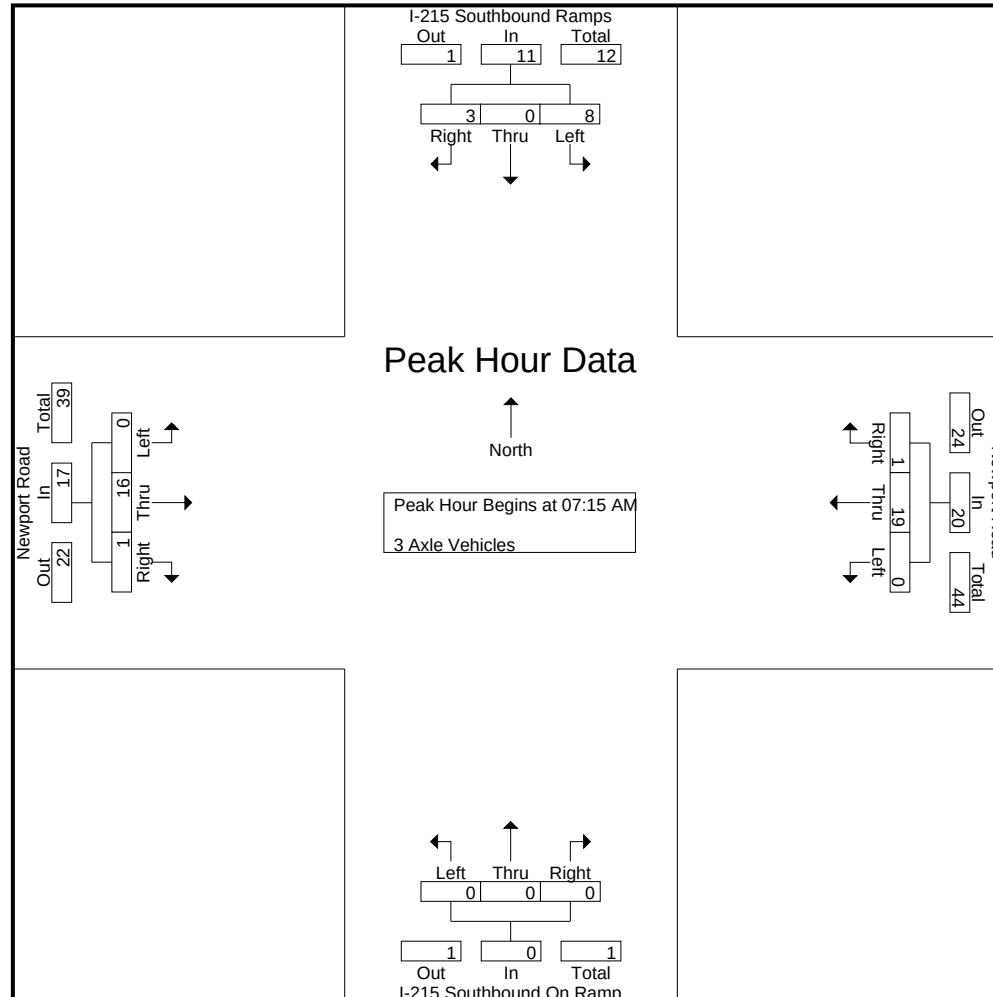
Groups Printed- 3 Axle Vehicles

	I-215 Southbound Ramps Southbound					Newport Road Westbound					I-215 Southbound On Ramp Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	9	0	0	9	0	0	0	0	0	0	5	0	0	5	0	15	15
07:15 AM	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	0	6	1	0	7	0	14	14
07:30 AM	4	0	2	0	6	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	0	15	15
07:45 AM	2	0	1	0	3	0	7	0	0	7	0	0	0	0	0	0	1	0	0	1	0	11	11
Total	7	0	4	0	11	0	25	0	0	25	0	0	0	0	0	0	18	1	0	19	0	55	55
08:00 AM	1	0	0	0	1	0	3	1	0	4	0	0	0	0	0	0	3	0	0	3	0	8	8
08:15 AM	3	0	2	0	5	0	2	0	0	2	0	0	0	0	0	0	10	1	0	11	0	18	18
08:30 AM	1	0	2	0	3	0	6	0	0	6	0	0	0	0	0	0	9	0	0	9	0	18	18
08:45 AM	0	0	2	1	2	0	6	1	0	7	0	0	0	0	0	0	3	0	0	3	1	12	13
Total	5	0	6	1	11	0	17	2	0	19	0	0	0	0	0	0	25	1	0	26	1	56	57
Grand Total	12	0	10	1	22	0	42	2	0	44	0	0	0	0	0	0	43	2	0	45	1	111	112
Apprch %	54.5	0	45.5			0	95.5	4.5			0	0	0			0	95.6	4.4					
Total %	10.8	0	9		19.8	0	37.8	1.8		39.6	0	0	0		0	0	38.7	1.8		40.5	0.9	99.1	

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	0	0	1	0	6	0	6	0	0	0	0	0	6	1	7	14
07:30 AM	4	0	2	6	0	3	0	3	0	0	0	0	0	6	0	6	15
07:45 AM	2	0	1	3	0	7	0	7	0	0	0	0	0	1	0	1	11
08:00 AM	1	0	0	1	0	3	1	4	0	0	0	0	0	3	0	3	8
Total Volume	8	0	3	11	0	19	1	20	0	0	0	0	0	16	1	17	48
% App. Total	72.7	0	27.3		0	95	5		0	0	0		0	94.1	5.9		
PHF	.500	.000	.375	.458	.000	.679	.250	.714	.000	.000	.000	.000	.000	.667	.250	.607	.800

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 01_MEN_215S_New AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 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	0	1	0	6	0	6	0	0	0	0	0	6	1	7	
+15 mins.	4	0	2	6	0	3	0	3	0	0	0	0	0	6	0	6	
+30 mins.	2	0	1	3	0	7	0	7	0	0	0	0	0	1	0	1	
+45 mins.	1	0	0	1	0	3	1	4	0	0	0	0	0	3	0	3	
Total Volume	8	0	3	11	0	19	1	20	0	0	0	0	0	16	1	17	
% App. Total	72.7	0	27.3		0	95	5		0	0	0		0	94.1	5.9		
PHF	.500	.000	.375	.458	.000	.679	.250	.714	.000	.000	.000	.000	.000	.667	.250	.607	

City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

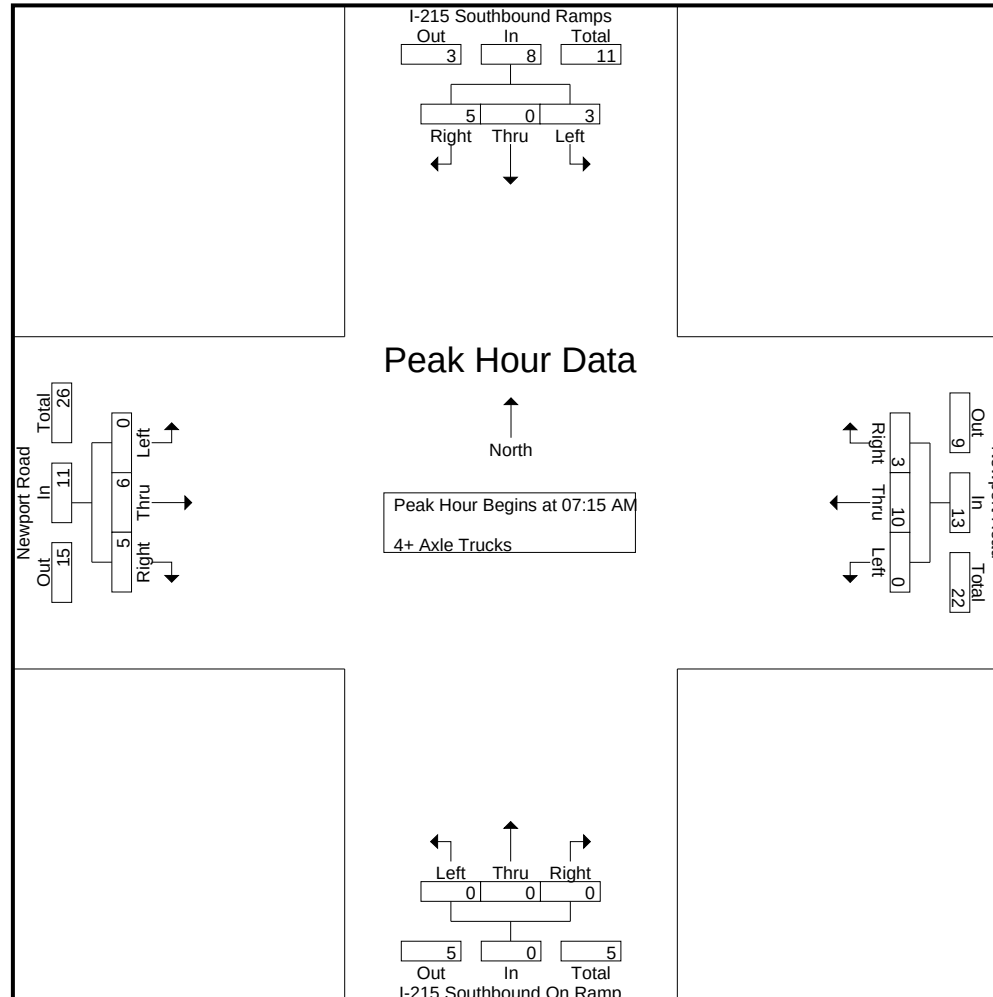
Groups Printed- 4+ Axle Trucks

	I-215 Southbound Ramps Southbound					Newport Road Westbound					I-215 Southbound On Ramp Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	5	0	5	2	10	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	12	14
07:15 AM	2	0	1	0	3	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	5	5
07:30 AM	0	0	2	0	2	0	5	0	0	5	0	0	0	0	0	0	2	2	0	4	0	11	11
07:45 AM	1	0	1	0	2	0	4	2	0	6	0	0	0	0	0	0	1	2	0	3	0	11	11
Total	8	0	9	2	17	0	9	3	0	12	0	0	0	0	0	0	5	5	0	10	2	39	41
08:00 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	5	5
08:15 AM	1	0	0	0	1	0	2	1	0	3	0	0	0	0	0	0	2	0	0	2	0	6	6
08:30 AM	1	0	0	0	1	0	2	1	0	3	0	0	0	0	0	0	4	0	0	4	0	8	8
08:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	5	5
Total	2	0	1	0	3	0	6	2	0	8	0	0	0	0	0	0	13	0	0	13	0	24	24
Grand Total	10	0	10	2	20	0	15	5	0	20	0	0	0	0	0	0	18	5	0	23	2	63	65
Apprch %	50	0	50			0	75	25			0	0	0			0	78.3	21.7					
Total %	15.9	0	15.9		31.7	0	23.8	7.9		31.7	0	0	0		0	0	28.6	7.9		36.5	3.1	96.9	

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				Int. Total
Start Time	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	2	0	1	3	0	0	1	1	0	0	0	0	0	0	1	1	5
07:30 AM	0	0	2	2	0	5	0	5	0	0	0	0	0	2	2	4	11
07:45 AM	1	0	1	2	0	4	2	6	0	0	0	0	0	1	2	3	11
08:00 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	3	0	3	5
Total Volume	3	0	5	8	0	10	3	13	0	0	0	0	0	6	5	11	32
% App. Total	37.5	0	62.5		0	76.9	23.1		0	0	0		0	54.5	45.5		
PHF	.375	.000	.625	.667	.000	.500	.375	.542	.000	.000	.000	.000	.000	.500	.625	.688	.727

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 01_MEN_215S_New AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 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.	2	0	1	3	0	0	1	1	0	0	0	0	0	0	1	1	
+15 mins.	0	0	2	2	0	5	0	5	0	0	0	0	0	2	2	4	
+30 mins.	1	0	1	2	0	4	2	6	0	0	0	0	0	1	2	3	
+45 mins.	0	0	1	1	0	1	0	1	0	0	0	0	0	3	0	3	
Total Volume	3	0	5	8	0	10	3	13	0	0	0	0	0	6	5	11	
% App. Total	37.5	0	62.5		0	76.9	23.1		0	0	0		0	54.5	45.5		
PHF	.375	.000	.625	.667	.000	.500	.375	.542	.000	.000	.000	.000	.000	.500	.625	.688	

City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

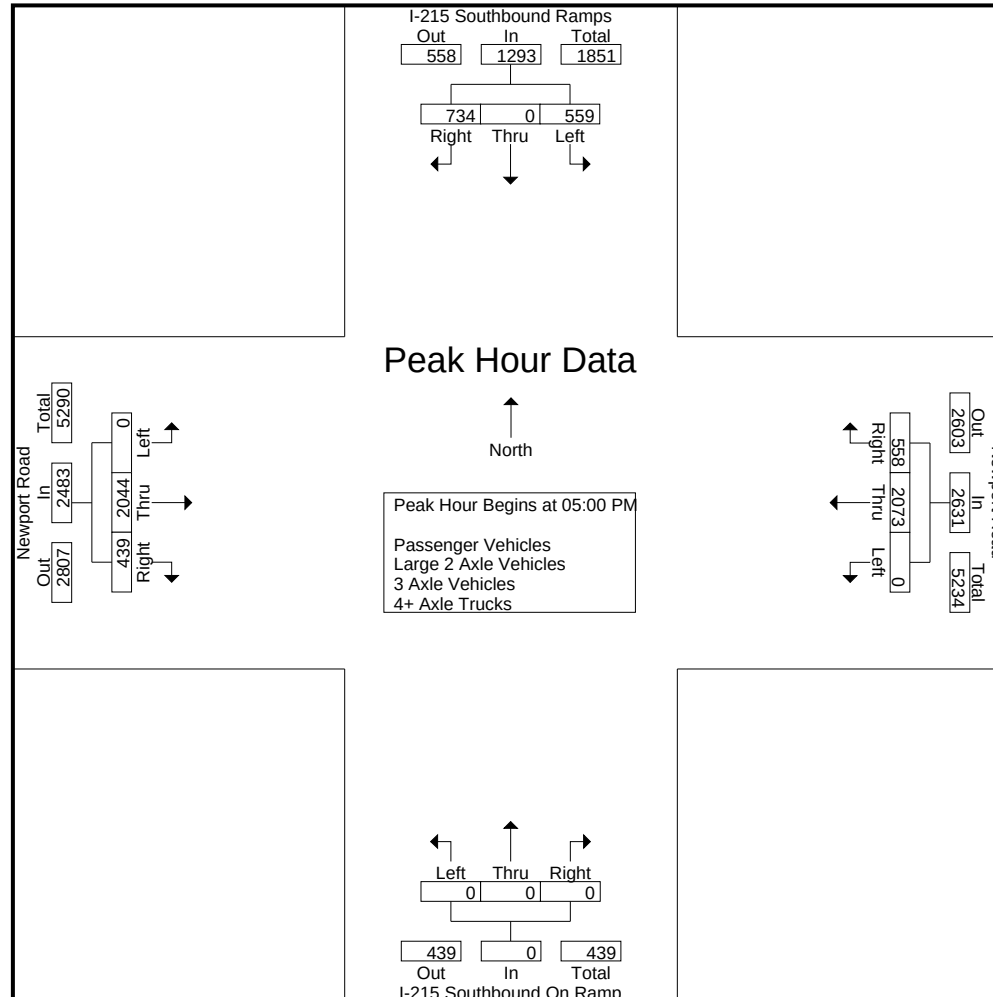
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	I-215 Southbound Ramps Southbound					Newport Road Westbound					I-215 Southbound On Ramp Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	131	0	174	32	305	0	467	194	0	661	0	0	0	0	0	0	570	124	1	694	33	1660	1693
04:15 PM	147	0	165	22	312	0	457	182	0	639	0	0	0	0	0	0	477	110	0	587	22	1538	1560
04:30 PM	156	0	149	23	305	0	483	147	0	630	0	0	0	0	0	0	485	124	0	609	23	1544	1567
04:45 PM	157	0	155	22	312	0	466	164	0	630	0	0	0	0	0	0	477	125	0	602	22	1544	1566
Total	591	0	643	99	1234	0	1873	687	0	2560	0	0	0	0	0	0	2009	483	1	2492	100	6286	6386
05:00 PM	173	0	182	16	355	0	476	158	0	634	0	0	0	0	0	0	509	109	0	618	16	1607	1623
05:15 PM	119	0	182	16	301	0	521	137	0	658	0	0	0	0	0	0	555	121	0	676	16	1635	1651
05:30 PM	150	0	198	9	348	0	535	144	0	679	0	0	0	0	0	0	482	91	0	573	9	1600	1609
05:45 PM	117	0	172	15	289	0	541	119	0	660	0	0	0	0	0	0	498	118	0	616	15	1565	1580
Total	559	0	734	56	1293	0	2073	558	0	2631	0	0	0	0	0	0	2044	439	0	2483	56	6407	6463
Grand Total	1150	0	1377	155	2527	0	3946	1245	0	5191	0	0	0	0	0	0	4053	922	1	4975	156	12693	12849
Apprch %	45.5	0	54.5			0	76	24			0	0	0			0	81.5	18.5					
Total %	9.1	0	10.8		19.9	0	31.1	9.8		40.9	0	0	0		0	0	31.9	7.3		39.2	1.2	98.8	
Passenger Vehicles	1139	0	1360		2650	0	3914	1230		5144	0	0	0		0	0	4019	918		4938	0	0	12732
% Passenger Vehicles	99	0	98.8	97.4	98.8	0	99.2	98.8	0	99.1	0	0	0	0	0	0	99.2	99.6	100	99.2	0	0	99.1
Large 2 Axle Vehicles	10	0	11		23	0	25	12		37	0	0	0		0	0	22	3		25	0	0	85
% Large 2 Axle Vehicles	0.9	0	0.8	1.3	0.9	0	0.6	1	0	0.7	0	0	0	0	0	0	0.5	0.3	0	0.5	0	0	0.7
3 Axle Vehicles	0	0	2		3	0	2	0		2	0	0	0		0	0	9	0		9	0	0	14
% 3 Axle Vehicles	0	0	0.1	0.6	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0.2	0	0	0.2	0	0	0.1
4+ Axle Trucks	1	0	4		6	0	5	3		8	0	0	0		0	0	3	1		4	0	0	18
% 4+ Axle Trucks	0.1	0	0.3	0.6	0.2	0	0.1	0.2	0	0.2	0	0	0	0	0	0	0.1	0.1	0	0.1	0	0	0.1

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	173	0	182	355	0	476	158	634	0	0	0	0	0	509	109	618	1607
05:15 PM	119	0	182	301	0	521	137	658	0	0	0	0	0	555	121	676	1635
05:30 PM	150	0	198	348	0	535	144	679	0	0	0	0	0	482	91	573	1600
05:45 PM	117	0	172	289	0	541	119	660	0	0	0	0	0	498	118	616	1565
Total Volume	559	0	734	1293	0	2073	558	2631	0	0	0	0	0	2044	439	2483	6407
% App. Total	43.2	0	56.8		0	78.8	21.2		0	0	0		0	82.3	17.7		
PHF	.808	.000	.927	.911	.000	.958	.883	.969	.000	.000	.000	.000	.000	.921	.907	.918	.980

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 01_MEN_215S_New PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				05:00 PM				04:00 PM				04:30 PM				
+0 mins.	157	0	155	312	0	476	158	634	0	0	0	0	0	485	124		609
+15 mins.	173	0	182	355	0	521	137	658	0	0	0	0	0	477	125		602
+30 mins.	119	0	182	301	0	535	144	679	0	0	0	0	0	509	109		618
+45 mins.	150	0	198	348	0	541	119	660	0	0	0	0	0	555	121		676
Total Volume	599	0	717	1316	0	2073	558	2631	0	0	0	0	0	2026	479		2505
% App. Total	45.5	0	54.5		0	78.8	21.2		0	0	0		0	80.9	19.1		
PHF	.866	.000	.905	.927	.000	.958	.883	.969	.000	.000	.000	.000	.000	.913	.958		.926

City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

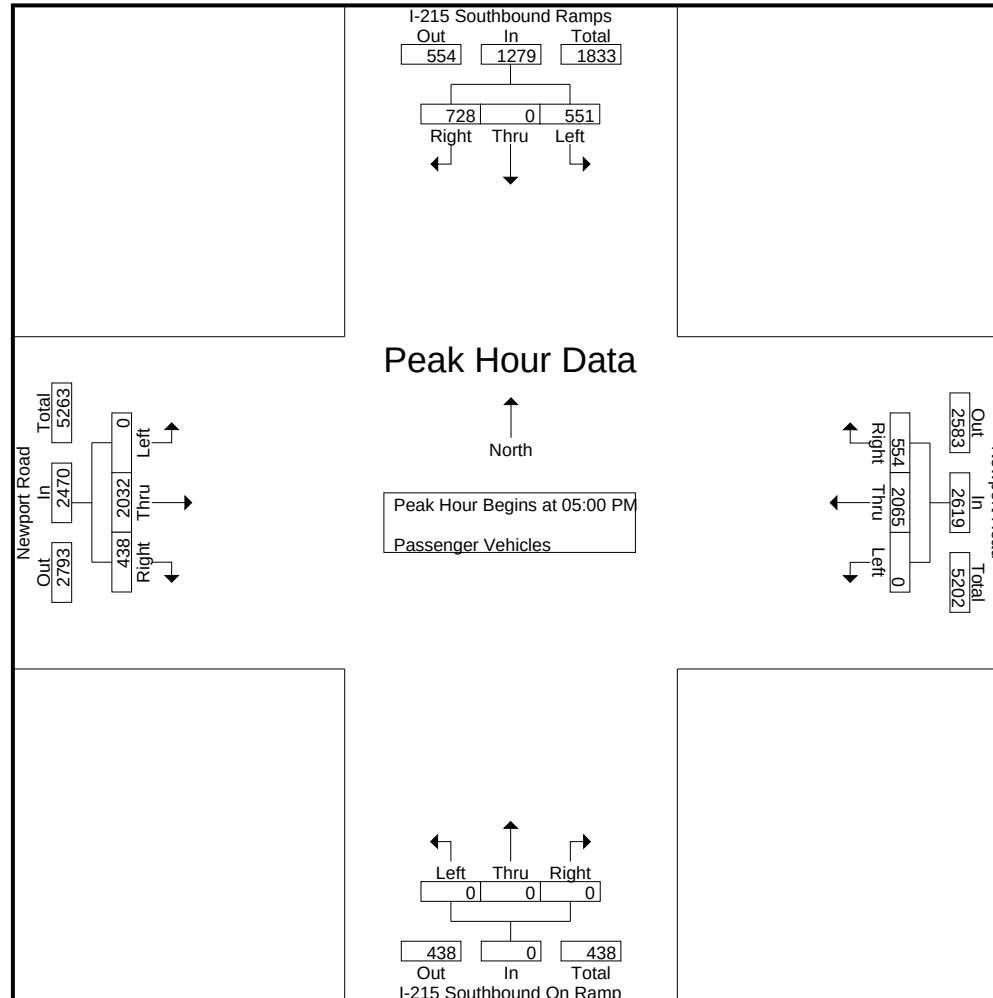
Groups Printed- Passenger Vehicles

	I-215 Southbound Ramps Southbound					Newport Road Westbound					I-215 Southbound On Ramp Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	130	0	172	32	302	0	463	191	0	654	0	0	0	0	0	0	564	124	1	688	33	1644	1677
04:15 PM	146	0	163	20	309	0	447	180	0	627	0	0	0	0	0	0	470	109	0	579	20	1515	1535
04:30 PM	155	0	145	22	300	0	476	143	0	619	0	0	0	0	0	0	482	122	0	604	22	1523	1545
04:45 PM	157	0	152	22	309	0	463	162	0	625	0	0	0	0	0	0	471	125	0	596	22	1530	1552
Total	588	0	632	96	1220	0	1849	676	0	2525	0	0	0	0	0	0	1987	480	1	2467	97	6212	6309
05:00 PM	170	0	181	16	351	0	472	155	0	627	0	0	0	0	0	0	504	109	0	613	16	1591	1607
05:15 PM	117	0	180	16	297	0	519	137	0	656	0	0	0	0	0	0	552	120	0	672	16	1625	1641
05:30 PM	147	0	198	9	345	0	533	144	0	677	0	0	0	0	0	0	481	91	0	572	9	1594	1603
05:45 PM	117	0	169	14	286	0	541	118	0	659	0	0	0	0	0	0	495	118	0	613	14	1558	1572
Total	551	0	728	55	1279	0	2065	554	0	2619	0	0	0	0	0	0	2032	438	0	2470	55	6368	6423
Grand Total	1139	0	1360	151	2499	0	3914	1230	0	5144	0	0	0	0	0	0	4019	918	1	4937	152	12580	12732
Apprch %	45.6	0	54.4			0	76.1	23.9			0	0	0			0	81.4	18.6					
Total %	9.1	0	10.8		19.9	0	31.1	9.8		40.9	0	0	0		0	0	31.9	7.3		39.2	1.2	98.8	

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	170	0	181	351	0	472	155	627	0	0	0	0	0	504	109	613	1591
05:15 PM	117	0	180	297	0	519	137	656	0	0	0	0	0	552	120	672	1625
05:30 PM	147	0	198	345	0	533	144	677	0	0	0	0	0	481	91	572	1594
05:45 PM	117	0	169	286	0	541	118	659	0	0	0	0	0	495	118	613	1558
Total Volume	551	0	728	1279	0	2065	554	2619	0	0	0	0	0	2032	438	2470	6368
% App. Total	43.1	0	56.9		0	78.8	21.2		0	0	0		0	82.3	17.7		
PHF	.810	.000	.919	.911	.000	.954	.894	.967	.000	.000	.000	.000	.000	.920	.913	.919	.980

City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 2



City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	170	0	181	351	0	472	155	627	0	0	0	0	0	504	109	613	
+15 mins.	117	0	180	297	0	519	137	656	0	0	0	0	0	552	120	672	
+30 mins.	147	0	198	345	0	533	144	677	0	0	0	0	0	481	91	572	
+45 mins.	117	0	169	286	0	541	118	659	0	0	0	0	0	495	118	613	
Total Volume	551	0	728	1279	0	2065	554	2619	0	0	0	0	0	2032	438	2470	
% App. Total	43.1	0	56.9		0	78.8	21.2		0	0	0		0	82.3	17.7		
PHF	.810	.000	.919	.911	.000	.954	.894	.967	.000	.000	.000	.000	.000	.920	.913	.919	

City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

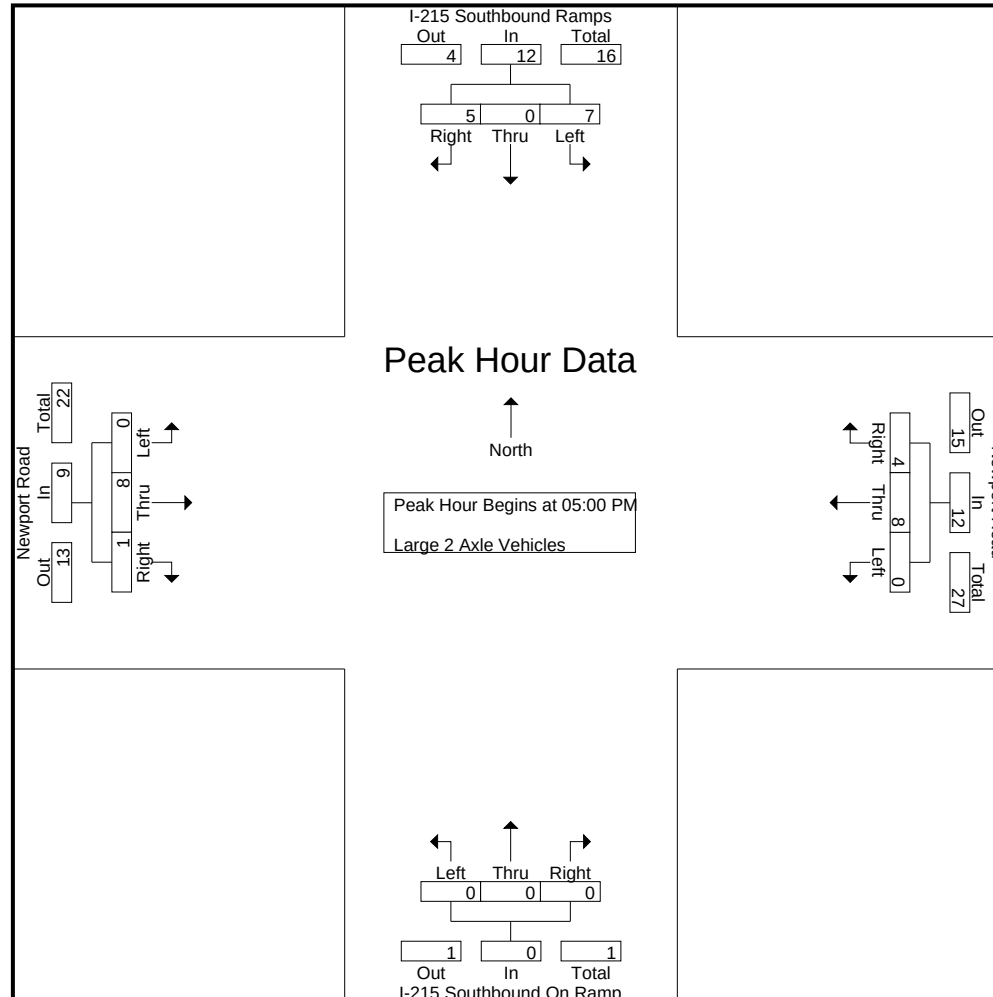
Groups Printed- Large 2 Axle Vehicles

	I-215 Southbound Ramps Southbound					Newport Road Westbound					I-215 Southbound On Ramp Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	1	0	1	0	2	0	3	2	0	5	0	0	0	0	0	0	6	0	0	6	0	13	13
04:15 PM	1	0	1	1	2	0	8	2	0	10	0	0	0	0	0	0	4	1	0	5	1	17	18
04:30 PM	1	0	1	0	2	0	3	3	0	6	0	0	0	0	0	0	2	1	0	3	0	11	11
04:45 PM	0	0	3	0	3	0	3	1	0	4	0	0	0	0	0	0	2	0	0	2	0	9	9
Total	3	0	6	1	9	0	17	8	0	25	0	0	0	0	0	0	14	2	0	16	1	50	51
05:00 PM	3	0	1	0	4	0	4	3	0	7	0	0	0	0	0	0	4	0	0	4	0	15	15
05:15 PM	2	0	1	0	3	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	0	7	7
05:30 PM	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	5	5
05:45 PM	0	0	3	1	3	0	0	1	0	1	0	0	0	0	0	0	2	0	0	2	1	6	7
Total	7	0	5	1	12	0	8	4	0	12	0	0	0	0	0	0	8	1	0	9	1	33	34
Grand Total	10	0	11	2	21	0	25	12	0	37	0	0	0	0	0	0	22	3	0	25	2	83	85
Apprch %	47.6	0	52.4			0	67.6	32.4			0	0	0			0	88	12					
Total %	12	0	13.3		25.3	0	30.1	14.5		44.6	0	0	0		0	0	26.5	3.6		30.1	2.4	97.6	

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	3	0	1	4	0	4	3	7	0	0	0	0	0	4	0	4	15
05:15 PM	2	0	1	3	0	2	0	2	0	0	0	0	0	1	1	2	7
05:30 PM	2	0	0	2	0	2	0	2	0	0	0	0	0	1	0	1	5
05:45 PM	0	0	3	3	0	0	1	1	0	0	0	0	0	2	0	2	6
Total Volume	7	0	5	12	0	8	4	12	0	0	0	0	0	8	1	9	33
% App. Total	58.3	0	41.7		0	66.7	33.3		0	0	0		0	88.9	11.1		
PHF	.583	.000	.417	.750	.000	.500	.333	.429	.000	.000	.000	.000	.000	.500	.250	.563	.550

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 01_MEN_215S_New PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	3	0	1	4	0	4	3	7	0	0	0	0	0	4	0	4	
+15 mins.	2	0	1	3	0	2	0	2	0	0	0	0	0	1	1	2	
+30 mins.	2	0	0	2	0	2	0	2	0	0	0	0	0	1	0	1	
+45 mins.	0	0	3	3	0	0	1	1	0	0	0	0	0	2	0	2	
Total Volume	7	0	5	12	0	8	4	12	0	0	0	0	0	8	1	9	
% App. Total	58.3	0	41.7		0	66.7	33.3		0	0	0		0	88.9	11.1		
PHF	.583	.000	.417	.750	.000	.500	.333	.429	.000	.000	.000	.000	.000	.500	.250	.563	

City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

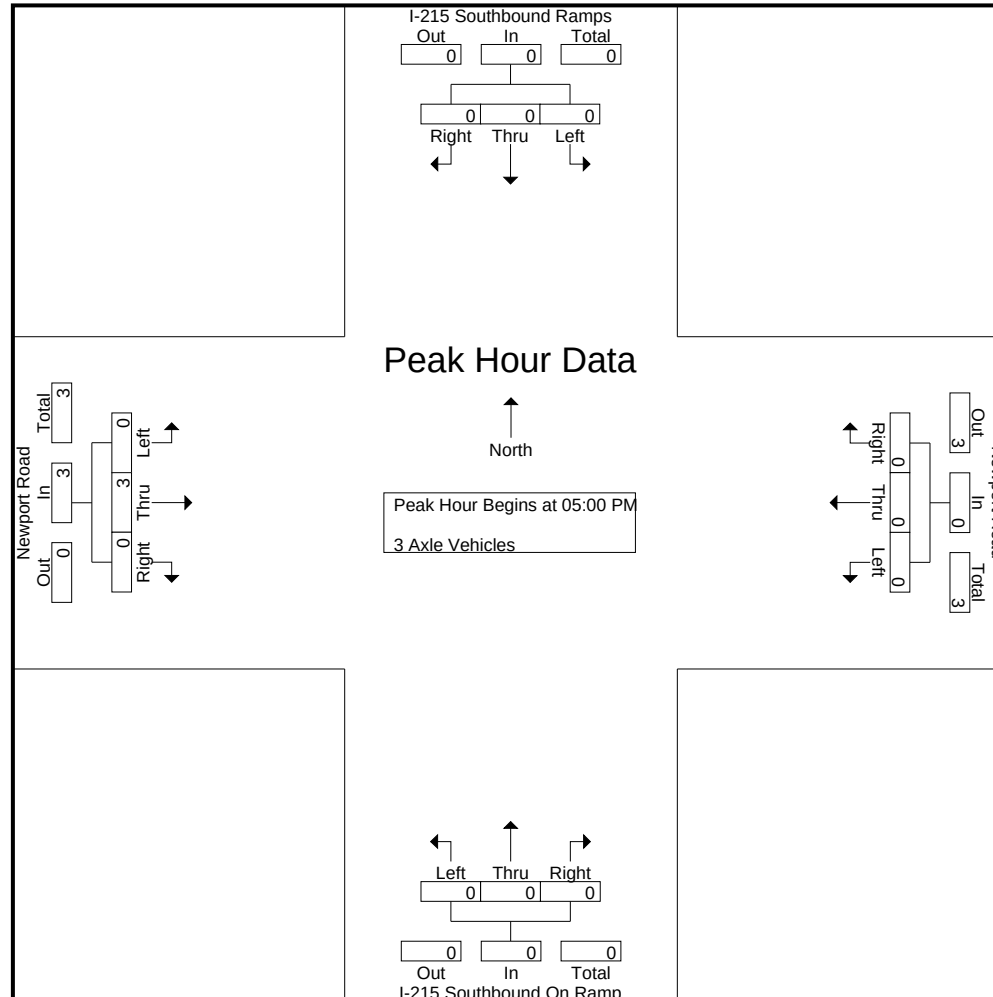
Groups Printed- 3 Axle Vehicles

	I-215 Southbound Ramps Southbound					Newport Road Westbound					I-215 Southbound On Ramp Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	3	3
04:30 PM	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	3	4
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	3	3
Total	0	0	2	1	2	0	2	0	0	2	0	0	0	0	0	0	6	0	0	6	1	10	11
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2
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
05:45 PM	0	0	0	0	0	0	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	3	0	0	3	0	3	3
Grand Total	0	0	2	1	2	0	2	0	0	2	0	0	0	0	0	0	9	0	0	9	1	13	14
Apprch %	0	0	100			0	100	0			0	0	0			0	100	0					
Total %	0	0	15.4		15.4	0	15.4	0		15.4	0	0	0		0	0	69.2	0		69.2	7.1	92.9	

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
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	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 Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
% App. Total	0	0	0		0	0	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.375	.000	.375	.375

City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 2



City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
+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	3	0	3	
% App. Total	0	0	0		0	0	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.375	.000	.375	

City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

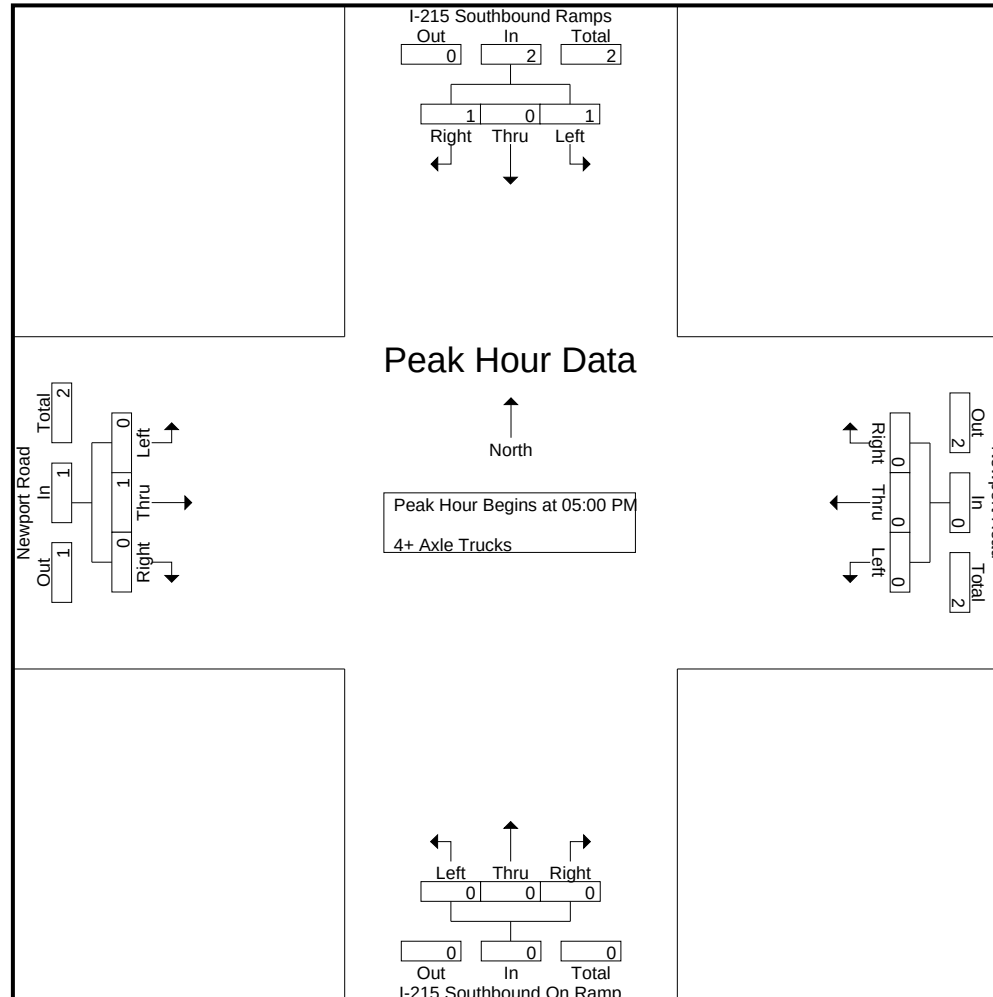
Groups Printed- 4+ Axle Trucks

	I-215 Southbound Ramps Southbound					Newport Road Westbound					I-215 Southbound On Ramp Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
04:15 PM	0	0	1	1	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	3	4
04:30 PM	0	0	1	0	1	0	4	1	0	5	0	0	0	0	0	0	0	1	0	1	0	7	7
04:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
Total	0	0	3	1	3	0	5	3	0	8	0	0	0	0	0	0	2	1	0	3	1	14	15
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
Total	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3	3
Grand Total	1	0	4	1	5	0	5	3	0	8	0	0	0	0	0	0	3	1	0	4	1	17	18
Apprch %	20	0	80			0	62.5	37.5			0	0	0			0	75	25					
Total %	5.9	0	23.5		29.4	0	29.4	17.6		47.1	0	0	0		0	0	17.6	5.9		23.5	5.6	94.4	

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	1	0	1	2	0	0	0	0	0	0	0	0	0	1	0	1	3
% App. Total	50	0	50		0	0	0		0	0	0		0	100	0		
PHF	.250	.000	.250	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.750

City of Menifee
 N/S: I-215 Southbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 01_MEN_215S_New PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Southbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 01_MEN_215S_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Southbound Ramps Southbound				Newport Road Westbound				I-215 Southbound On Ramp Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	1	0	0	1	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	1	0	1	1
Total Volume	1	0	1	2	0	0	0	0	0	0	0	0	0	1	0	1	1
% App. Total	50	0	50		0	0	0		0	0	0		0	100	0		
PHF	.250	.000	.250	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	

Location: Menifee
 N/S: I-215 SB Ramps
 E/W: Newport Road



Date: 5/25/2023
 Day: Thursday

PEDESTRIANS

	North Leg I-215 SB Ramps	East Leg Newport Road	South Leg I-215 SB Ramps	West Leg Newport Road	
	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 I-215 SB Ramps	East Leg Newport Road	South Leg I-215 SB Ramps	West Leg Newport Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	2	0	0	0	2
4:30 PM	4	0	0	0	4
4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	1	0	0	0	1
5:30 PM	0	0	0	0	0
5:45 PM	1	0	0	0	1
TOTAL VOLUMES:	9	0	0	0	9

Location: Menifee
 N/S: I-215 SB Ramps
 E/W: Newport Road



Date: 5/25/2023
 Day: Thursday

BICYCLES

		Southbound I-215 SB Ramps			Westbound Newport Road			Northbound I-215 SB Ramps			Eastbound Newport 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 I-215 SB Ramps			Westbound Newport Road			Northbound I-215 SB Ramps			Eastbound Newport 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	2	0	0	0	0	0	0	0	2
	5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
TOTAL VOLUMES:		0	0	0	0	4	0	0	0	0	0	0	0	4

City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

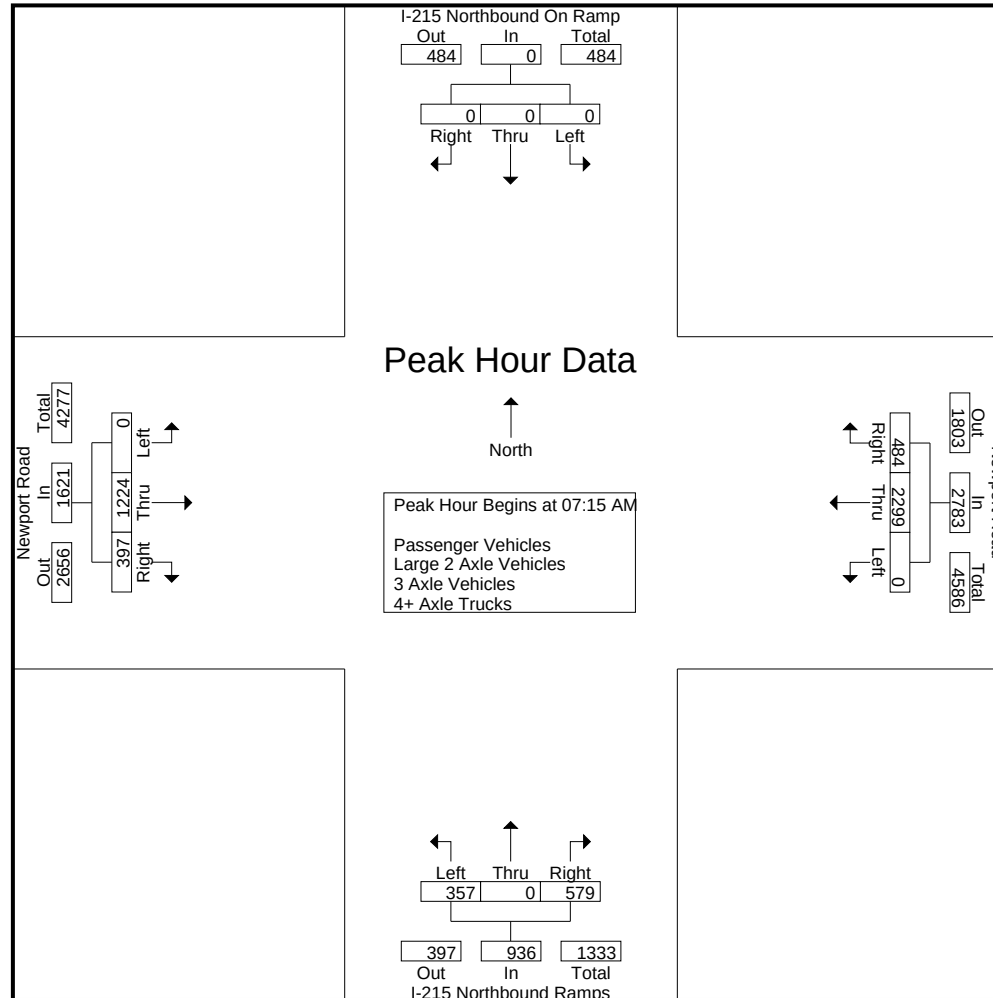
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	I-215 Northbound On Ramp Southbound					Newport Road Westbound					I-215 Northbound Ramps Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	462	156	0	618	62	0	145	72	207	0	270	114	0	384	72	1209	1281
07:15 AM	0	0	0	0	0	0	585	128	0	713	63	0	139	73	202	0	324	111	0	435	73	1350	1423
07:30 AM	0	0	0	0	0	0	568	118	0	686	98	0	177	70	275	0	263	92	0	355	70	1316	1386
07:45 AM	0	0	0	0	0	0	609	134	0	743	96	0	116	58	212	0	316	109	0	425	58	1380	1438
Total	0	0	0	0	0	0	2224	536	0	2760	319	0	577	273	896	0	1173	426	0	1599	273	5255	5528
08:00 AM	0	0	0	0	0	0	537	104	0	641	100	0	147	42	247	0	321	85	0	406	42	1294	1336
08:15 AM	0	0	0	0	0	0	522	118	0	640	93	0	160	39	253	0	327	89	0	416	39	1309	1348
08:30 AM	0	0	0	0	0	0	481	110	0	591	90	0	145	44	235	0	306	122	0	428	44	1254	1298
08:45 AM	0	0	0	0	0	0	475	102	0	577	110	0	153	67	263	0	258	79	0	337	67	1177	1244
Total	0	0	0	0	0	0	2015	434	0	2449	393	0	605	192	998	0	1212	375	0	1587	192	5034	5226
Grand Total	0	0	0	0	0	0	4239	970	0	5209	712	0	1182	465	1894	0	2385	801	0	3186	465	10289	10754
Apprch %	0	0	0			0	81.4	18.6			37.6	0	62.4			0	74.9	25.1					
Total %	0	0	0			0	41.2	9.4		50.6	6.9	0	11.5		18.4	0	23.2	7.8		31	4.3	95.7	
Passenger Vehicles	0	0	0			0	4136	934		5070	690	0	1135		2278	0	2236	763		2999	0	0	10347
% Passenger Vehicles	0	0	0	0	0	0	97.6	96.3	0	97.3	96.9	0	96	97.4	96.6	0	93.8	95.3	0	94.1	0	0	96.2
Large 2 Axle Vehicles	0	0	0			0	43	14		57	14	0	30		55	0	76	21		97	0	0	209
% Large 2 Axle Vehicles	0	0	0	0	0	0	1	1.4	0	1.1	2	0	2.5	2.4	2.3	0	3.2	2.6	0	3	0	0	1.9
3 Axle Vehicles	0	0	0			0	42	9		51	1	0	6		7	0	46	8		54	0	0	112
% 3 Axle Vehicles	0	0	0	0	0	0	1	0.9	0	1	0.1	0	0.5	0	0.3	0	1.9	1	0	1.7	0	0	1
4+ Axle Trucks	0	0	0			0	18	13		31	7	0	11		19	0	27	9		36	0	0	86
% 4+ Axle Trucks	0	0	0	0	0	0	0.4	1.3	0	0.6	1	0	0.9	0.2	0.8	0	1.1	1.1	0	1.1	0	0	0.8

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				Int. Total
Start Time	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	0	0	0	0	0	585	128	713	63	0	139	202	0	324	111	435	1350
07:30 AM	0	0	0	0	0	568	118	686	98	0	177	275	0	263	92	355	1316
07:45 AM	0	0	0	0	0	609	134	743	96	0	116	212	0	316	109	425	1380
08:00 AM	0	0	0	0	0	537	104	641	100	0	147	247	0	321	85	406	1294
Total Volume	0	0	0	0	0	2299	484	2783	357	0	579	936	0	1224	397	1621	5340
% App. Total	0	0	0		0	82.6	17.4		38.1	0	61.9		0	75.5	24.5		
PHF	.000	.000	.000	.000	.000	.944	.903	.936	.893	.000	.818	.851	.000	.944	.894	.932	.967

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 02_MEN_215N_New AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:15 AM				08:00 AM				07:45 AM				
+0 mins.	0	0	0	0	0	585	128	713	100	0	147	247	0	316	109	425	
+15 mins.	0	0	0	0	0	568	118	686	93	0	160	253	0	321	85	406	
+30 mins.	0	0	0	0	0	609	134	743	90	0	145	235	0	327	89	416	
+45 mins.	0	0	0	0	0	537	104	641	110	0	153	263	0	306	122	428	
Total Volume	0	0	0	0	0	2299	484	2783	393	0	605	998	0	1270	405	1675	
% App. Total	0	0	0		0	82.6	17.4		39.4	0	60.6		0	75.8	24.2		
PHF	.000	.000	.000	.000	.000	.944	.903	.936	.893	.000	.945	.949	.000	.971	.830	.978	

City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

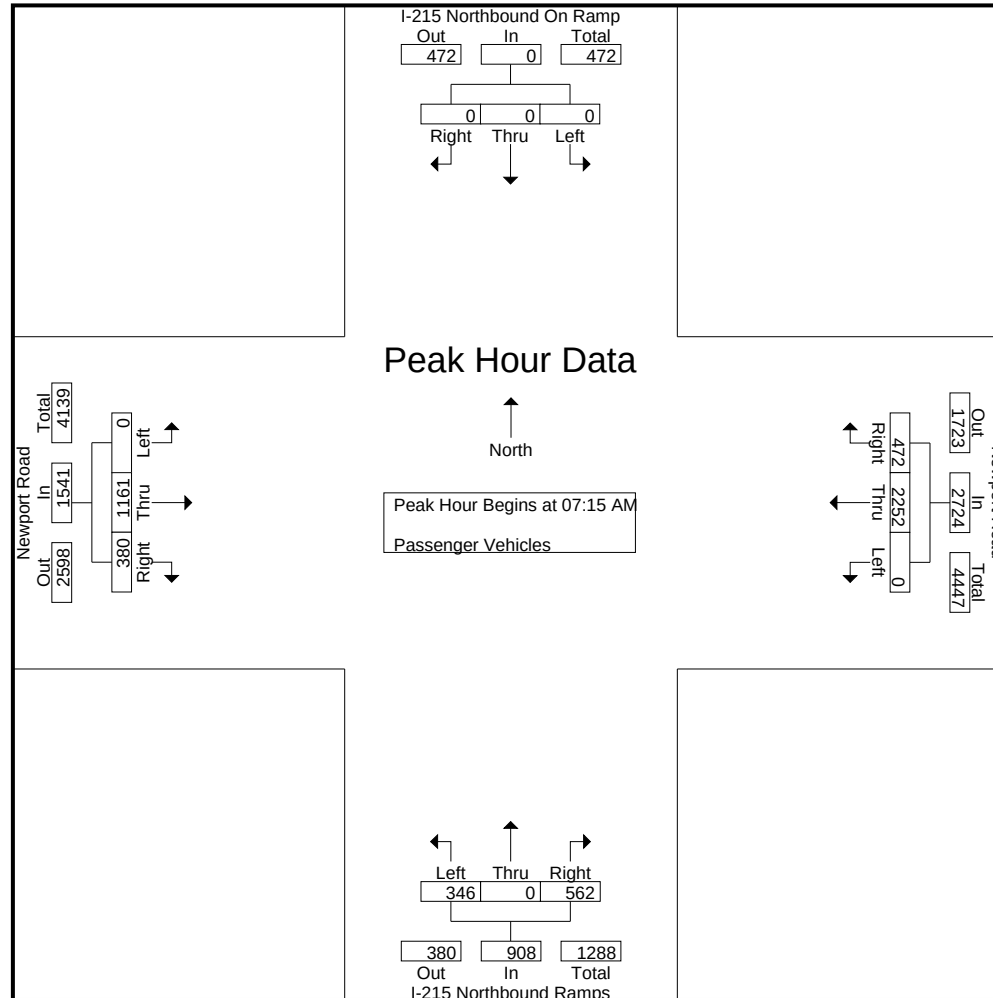
Groups Printed- Passenger Vehicles

	I-215 Northbound On Ramp Southbound					Newport Road Westbound					I-215 Northbound Ramps Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	445	154	0	599	60	0	137	70	197	0	248	111	0	359	70	1155	1225
07:15 AM	0	0	0	0	0	0	575	124	0	699	62	0	137	73	199	0	301	108	0	409	73	1307	1380
07:30 AM	0	0	0	0	0	0	555	114	0	669	94	0	169	67	263	0	250	89	0	339	67	1271	1338
07:45 AM	0	0	0	0	0	0	593	130	0	723	92	0	113	57	205	0	305	104	0	409	57	1337	1394
Total	0	0	0	0	0	0	2168	522	0	2690	308	0	556	267	864	0	1104	412	0	1516	267	5070	5337
08:00 AM	0	0	0	0	0	0	529	104	0	633	98	0	143	41	241	0	305	79	0	384	41	1258	1299
08:15 AM	0	0	0	0	0	0	510	112	0	622	89	0	153	38	242	0	300	83	0	383	38	1247	1285
08:30 AM	0	0	0	0	0	0	465	104	0	569	88	0	139	42	227	0	282	116	0	398	42	1194	1236
08:45 AM	0	0	0	0	0	0	464	92	0	556	107	0	144	65	251	0	245	73	0	318	65	1125	1190
Total	0	0	0	0	0	0	1968	412	0	2380	382	0	579	186	961	0	1132	351	0	1483	186	4824	5010
Grand Total	0	0	0	0	0	0	4136	934	0	5070	690	0	1135	453	1825	0	2236	763	0	2999	453	9894	10347
Apprch %	0	0	0			0	81.6	18.4			37.8	0	62.2			0	74.6	25.4					
Total %	0	0	0			0	41.8	9.4		51.2	7	0	11.5		18.4	0	22.6	7.7		30.3	4.4	95.6	

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				Int. Total
Start Time	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	575	124	699	62	0	137	199	0	301	108	409	1307
07:30 AM	0	0	0	0	0	555	114	669	94	0	169	263	0	250	89	339	1271
07:45 AM	0	0	0	0	0	593	130	723	92	0	113	205	0	305	104	409	1337
08:00 AM	0	0	0	0	0	529	104	633	98	0	143	241	0	305	79	384	1258
Total Volume	0	0	0	0	0	2252	472	2724	346	0	562	908	0	1161	380	1541	5173
% App. Total	0	0	0		0	82.7	17.3		38.1	0	61.9		0	75.3	24.7		
PHF	.000	.000	.000	.000	.000	.949	.908	.942	.883	.000	.831	.863	.000	.952	.880	.942	.967

City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 2



City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 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	575	124	699	62	0	137	199	0	301	108	409	
+15 mins.	0	0	0	0	0	555	114	669	94	0	169	263	0	250	89	339	
+30 mins.	0	0	0	0	0	593	130	723	92	0	113	205	0	305	104	409	
+45 mins.	0	0	0	0	0	529	104	633	98	0	143	241	0	305	79	384	
Total Volume	0	0	0	0	0	2252	472	2724	346	0	562	908	0	1161	380	1541	
% App. Total	0	0	0		0	82.7	17.3		38.1	0	61.9		0	75.3	24.7		
PHF	.000	.000	.000	.000	.000	.949	.908	.942	.883	.000	.831	.863	.000	.952	.880	.942	

City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

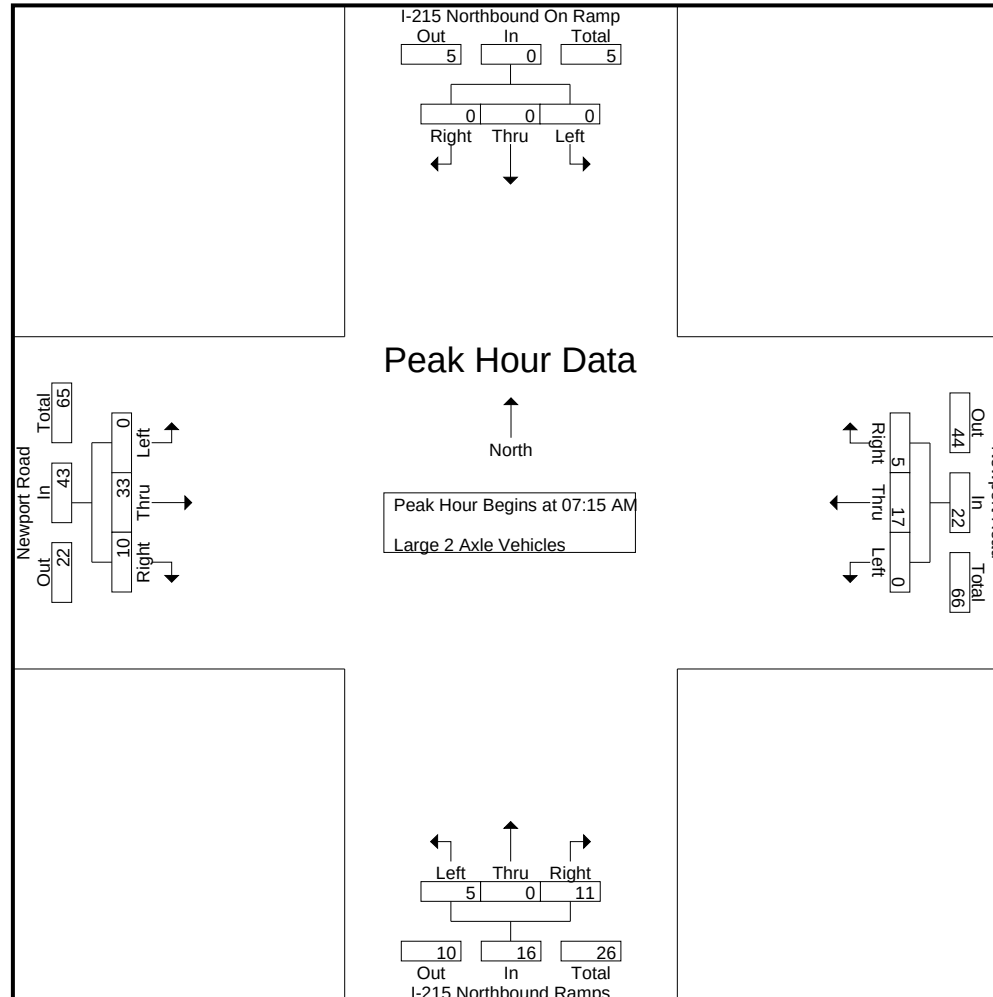
Groups Printed- Large 2 Axle Vehicles

	I-215 Northbound On Ramp Southbound					Newport Road Westbound					I-215 Northbound Ramps Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	8	1	0	9	2	0	5	2	7	0	11	1	0	12	2	28	30
07:15 AM	0	0	0	0	0	0	3	2	0	5	0	0	2	0	2	0	12	3	0	15	0	22	22
07:30 AM	0	0	0	0	0	0	6	2	0	8	1	0	4	3	5	0	3	0	0	3	3	16	19
07:45 AM	0	0	0	0	0	0	5	1	0	6	2	0	1	1	3	0	8	3	0	11	1	20	21
Total	0	0	0	0	0	0	22	6	0	28	5	0	12	6	17	0	34	7	0	41	6	86	92
08:00 AM	0	0	0	0	0	0	3	0	0	3	2	0	4	1	6	0	10	4	0	14	1	23	24
08:15 AM	0	0	0	0	0	0	7	1	0	8	3	0	6	1	9	0	13	2	0	15	1	32	33
08:30 AM	0	0	0	0	0	0	7	2	0	9	2	0	2	1	4	0	12	3	0	15	1	28	29
08:45 AM	0	0	0	0	0	0	4	5	0	9	2	0	6	2	8	0	7	5	0	12	2	29	31
Total	0	0	0	0	0	0	21	8	0	29	9	0	18	5	27	0	42	14	0	56	5	112	117
Grand Total	0	0	0	0	0	0	43	14	0	57	14	0	30	11	44	0	76	21	0	97	11	198	209
Apprch %	0	0	0			0	75.4	24.6			31.8	0	68.2			0	78.4	21.6			11	94.7	
Total %	0	0	0			0	21.7	7.1		28.8	7.1	0	15.2		22.2	0	38.4	10.6		49	5.3	94.7	

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				Int. Total
Start Time	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	3	2	5	0	0	2	2	0	12	3	15	22
07:30 AM	0	0	0	0	0	6	2	8	1	0	4	5	0	3	0	3	16
07:45 AM	0	0	0	0	0	5	1	6	2	0	1	3	0	8	3	11	20
08:00 AM	0	0	0	0	0	3	0	3	2	0	4	6	0	10	4	14	23
Total Volume	0	0	0	0	0	17	5	22	5	0	11	16	0	33	10	43	81
% App. Total	0	0	0		0	77.3	22.7		31.2	0	68.8		0	76.7	23.3		
PHF	.000	.000	.000	.000	.000	.708	.625	.688	.625	.000	.688	.667	.000	.688	.625	.717	.880

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 02_MEN_215N_New AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 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	3	2	5	0	0	2	2	0	12	3	15	
+15 mins.	0	0	0	0	0	6	2	8	1	0	4	5	0	3	0	3	
+30 mins.	0	0	0	0	0	5	1	6	2	0	1	3	0	8	3	11	
+45 mins.	0	0	0	0	0	3	0	3	2	0	4	6	0	10	4	14	
Total Volume	0	0	0	0	0	17	5	22	5	0	11	16	0	33	10	43	
% App. Total	0	0	0		0	77.3	22.7		31.2	0	68.8		0	76.7	23.3		
PHF	.000	.000	.000	.000	.000	.708	.625	.688	.625	.000	.688	.667	.000	.688	.625	.717	

City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

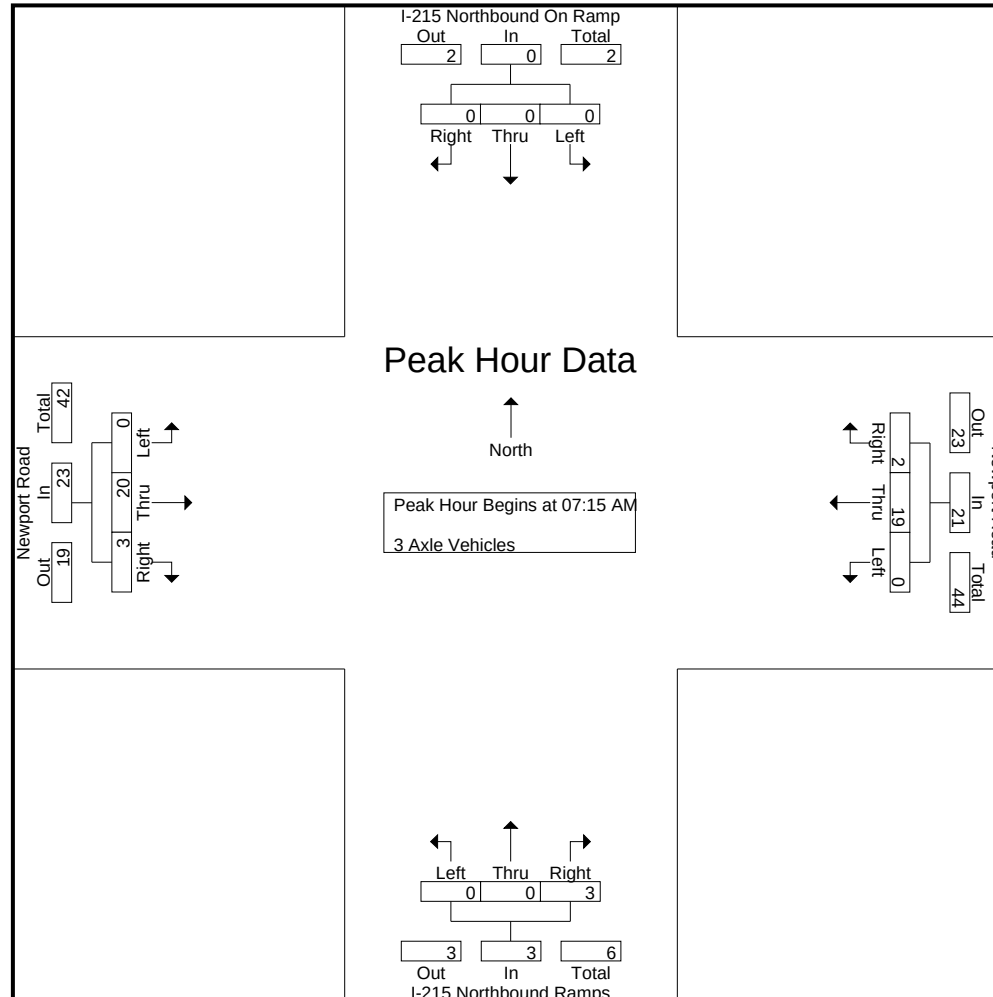
Groups Printed- 3 Axle Vehicles

	I-215 Northbound On Ramp Southbound					Newport Road Westbound					I-215 Northbound Ramps Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	9	1	0	10	0	0	1	0	1	0	5	0	0	5	0	16	16
07:15 AM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	6	0	0	6	0	12	12
07:30 AM	0	0	0	0	0	0	3	1	0	4	0	0	2	0	2	0	8	2	0	10	0	16	16
07:45 AM	0	0	0	0	0	0	6	1	0	7	0	0	1	0	1	0	2	1	0	3	0	11	11
Total	0	0	0	0	0	0	24	3	0	27	0	0	4	0	4	0	21	3	0	24	0	55	55
08:00 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	8	8
08:15 AM	0	0	0	0	0	0	2	2	0	4	0	0	0	0	0	0	9	3	0	12	0	16	16
08:30 AM	0	0	0	0	0	0	6	2	0	8	0	0	1	0	1	0	9	2	0	11	0	20	20
08:45 AM	0	0	0	0	0	0	6	2	0	8	1	0	1	0	2	0	3	0	0	3	0	13	13
Total	0	0	0	0	0	0	18	6	0	24	1	0	2	0	3	0	25	5	0	30	0	57	57
Grand Total	0	0	0	0	0	0	42	9	0	51	1	0	6	0	7	0	46	8	0	54	0	112	112
Apprch %	0	0	0			0	82.4	17.6			14.3	0	85.7			0	85.2	14.8			0	112	112
Total %	0	0	0			0	37.5	8		45.5	0.9	0	5.4		6.2	0	41.1	7.1		48.2	0	100	

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				Int. Total
Start Time	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	6	0	6	0	0	0	0	0	6	0	6	12
07:30 AM	0	0	0	0	0	3	1	4	0	0	2	2	0	8	2	10	16
07:45 AM	0	0	0	0	0	6	1	7	0	0	1	1	0	2	1	3	11
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	8
Total Volume	0	0	0	0	0	19	2	21	0	0	3	3	0	20	3	23	47
% App. Total	0	0	0		0	90.5	9.5		0	0	100		0	87	13		
PHF	.000	.000	.000	.000	.000	.792	.500	.750	.000	.000	.375	.375	.000	.625	.375	.575	.734

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 02_MEN_215N_New AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 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	6	0	6	0	0	0	0	0	6	0	0	6
+15 mins.	0	0	0	0	0	3	1	4	0	0	2	2	0	8	2	10	
+30 mins.	0	0	0	0	0	6	1	7	0	0	1	1	0	2	1	3	
+45 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	
Total Volume	0	0	0	0	0	19	2	21	0	0	3	3	0	20	3	23	
% App. Total	0	0	0		0	90.5	9.5		0	0	100		0	87	13		
PHF	.000	.000	.000	.000	.000	.792	.500	.750	.000	.000	.375	.375	.000	.625	.375	.575	

City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

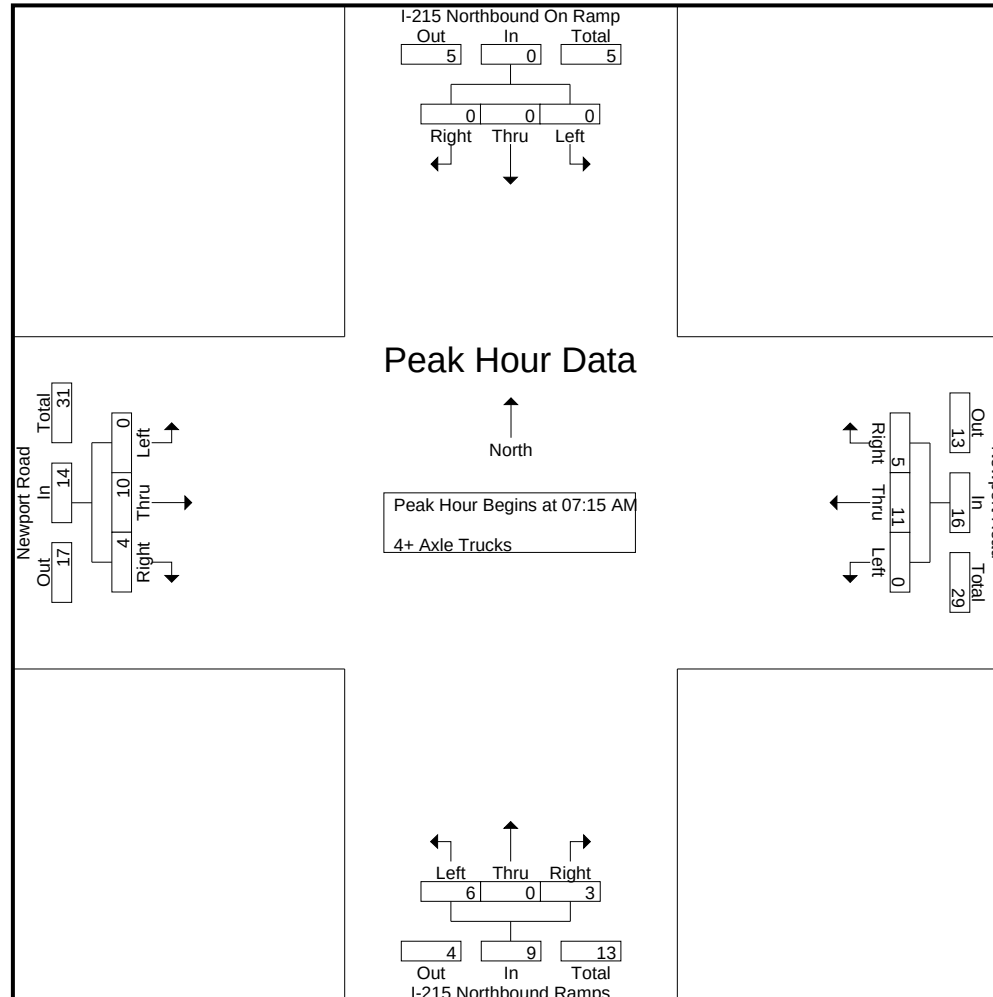
Groups Printed- 4+ Axle Trucks

	I-215 Northbound On Ramp Southbound					Newport Road Westbound					I-215 Northbound Ramps Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	0	0	0	0	0	0	2	0	2	0	6	2	0	8	0	10	10
07:15 AM	0	0	0	0	0	0	1	2	0	3	1	0	0	0	1	0	5	0	0	5	0	9	9
07:30 AM	0	0	0	0	0	0	4	1	0	5	3	0	2	0	5	0	2	1	0	3	0	13	13
07:45 AM	0	0	0	0	0	0	5	2	0	7	2	0	1	0	3	0	1	1	0	2	0	12	12
Total	0	0	0	0	0	0	10	5	0	15	6	0	5	0	11	0	14	4	0	18	0	44	44
08:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2	0	4	0	5	5
08:15 AM	0	0	0	0	0	0	3	3	0	6	1	0	1	0	2	0	5	1	0	6	0	14	14
08:30 AM	0	0	0	0	0	0	3	2	0	5	0	0	3	1	3	0	3	1	0	4	1	12	13
08:45 AM	0	0	0	0	0	0	1	3	0	4	0	0	2	0	2	0	3	1	0	4	0	10	10
Total	0	0	0	0	0	0	8	8	0	16	1	0	6	1	7	0	13	5	0	18	1	41	42
Grand Total	0	0	0	0	0	0	18	13	0	31	7	0	11	1	18	0	27	9	0	36	1	85	86
Apprch %	0	0	0			0	58.1	41.9			38.9	0	61.1			0	75	25			1.2	98.8	
Total %	0	0	0			0	21.2	15.3		36.5	8.2	0	12.9		21.2	0	31.8	10.6		42.4	1.2	98.8	

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				Int. Total
Start Time	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	2	3	1	0	0	1	0	5	0	5	9
07:30 AM	0	0	0	0	0	4	1	5	3	0	2	5	0	2	1	3	13
07:45 AM	0	0	0	0	0	5	2	7	2	0	1	3	0	1	1	2	12
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	2	4	5
Total Volume	0	0	0	0	0	11	5	16	6	0	3	9	0	10	4	14	39
% App. Total	0	0	0		0	68.8	31.2		66.7	0	33.3		0	71.4	28.6		
PHF	.000	.000	.000	.000	.000	.550	.625	.571	.500	.000	.375	.450	.000	.500	.500	.700	.750

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 02_MEN_215N_New AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 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	2	3	1	0	0	1	0	5	0	5	
+15 mins.	0	0	0	0	0	4	1	5	3	0	2	5	0	2	1	3	
+30 mins.	0	0	0	0	0	5	2	7	2	0	1	3	0	1	1	2	
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	2	4	
Total Volume	0	0	0	0	0	11	5	16	6	0	3	9	0	10	4	14	
% App. Total	0	0	0		0	68.8	31.2		66.7	0	33.3		0	71.4	28.6		
PHF	.000	.000	.000	.000	.000	.550	.625	.571	.500	.000	.375	.450	.000	.500	.500	.700	

City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

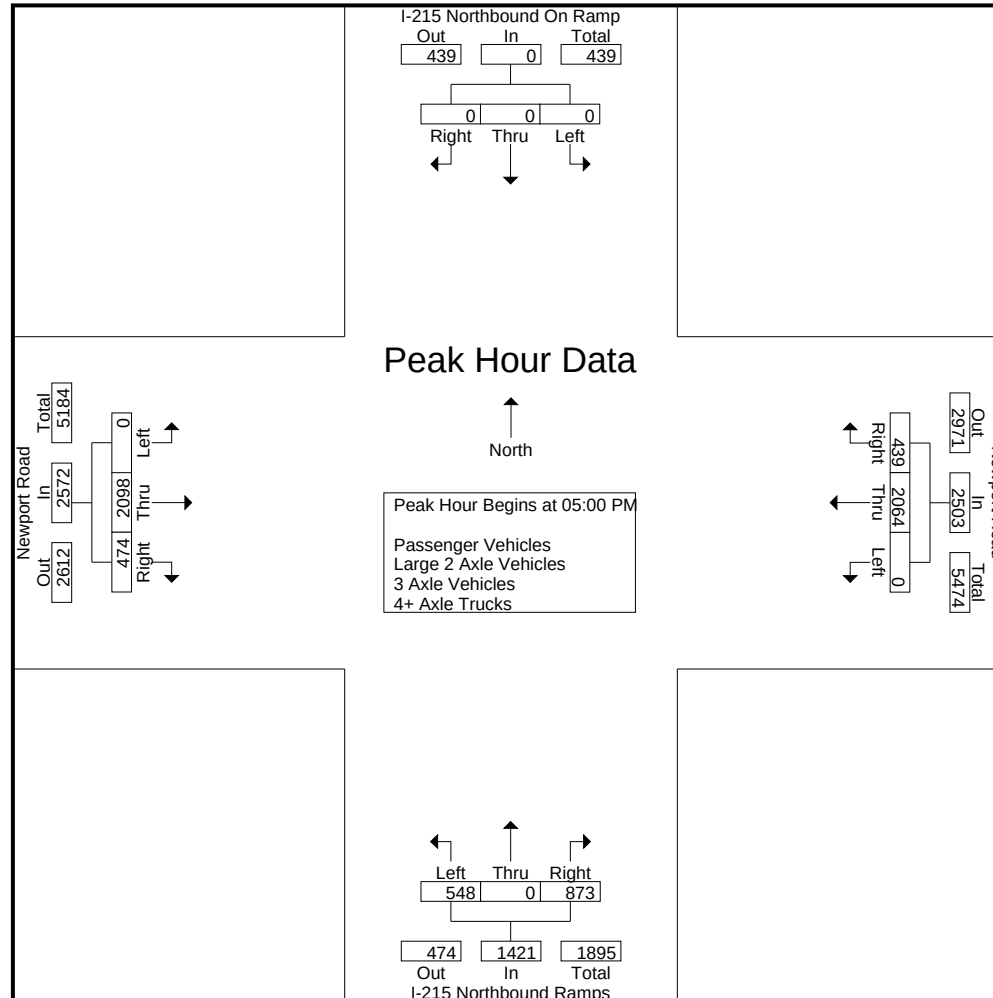
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	I-215 Northbound On Ramp Southbound					Newport Road Westbound					I-215 Northbound Ramps Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	545	104	0	649	99	0	184	17	283	0	568	134	0	702	17	1634	1651
04:15 PM	0	0	0	0	0	0	533	112	0	645	111	0	239	18	350	1	503	102	0	606	18	1601	1619
04:30 PM	0	0	0	0	0	0	525	128	0	653	119	0	202	7	321	0	525	111	0	636	7	1610	1617
04:45 PM	0	0	0	0	0	0	488	100	0	588	106	0	192	10	298	1	509	124	0	634	10	1520	1530
Total	0	0	0	0	0	0	2091	444	0	2535	435	0	817	52	1252	2	2105	471	0	2578	52	6365	6417
05:00 PM	0	0	0	0	0	0	511	129	0	640	136	0	234	5	370	0	528	130	0	658	5	1668	1673
05:15 PM	0	0	0	0	0	0	545	102	0	647	133	0	205	4	338	0	577	129	0	706	4	1691	1695
05:30 PM	0	0	0	0	0	0	499	101	0	600	163	0	236	7	399	0	502	108	0	610	7	1609	1616
05:45 PM	0	0	0	0	0	0	509	107	0	616	116	0	198	9	314	0	491	107	0	598	9	1528	1537
Total	0	0	0	0	0	0	2064	439	0	2503	548	0	873	25	1421	0	2098	474	0	2572	25	6496	6521
Grand Total	0	0	0	0	0	0	4155	883	0	5038	983	0	1690	77	2673	2	4203	945	0	5150	77	12861	12938
Apprch %	0	0	0			0	82.5	17.5			36.8	0	63.2			0	81.6	18.3					
Total %	0	0	0			0	32.3	6.9		39.2	7.6	0	13.1		20.8	0	32.7	7.3		40	0.6	99.4	
Passenger Vehicles	0	0	0			0	4111	835		4946	976	0	1669		2721	2	4159	924		5085	0	0	12752
% Passenger Vehicles	0	0	0	0	0	0	98.9	94.6	0	98.2	99.3	0	98.8	98.7	98.9	100	99	97.8	0	98.7	0	0	98.6
Large 2 Axle Vehicles	0	0	0			0	28	29		57	7	0	17		25	0	35	12		47	0	0	129
% Large 2 Axle Vehicles	0	0	0	0	0	0	0.7	3.3	0	1.1	0.7	0	1	1.3	0.9	0	0.8	1.3	0	0.9	0	0	1
3 Axle Vehicles	0	0	0			0	2	2		4	0	0	2		2	0	3	6		9	0	0	15
% 3 Axle Vehicles	0	0	0	0	0	0	0	0.2	0	0.1	0	0	0.1	0	0.1	0	0.1	0.6	0	0.2	0	0	0.1
4+ Axle Trucks	0	0	0			0	14	17		31	0	0	2		2	0	6	3		9	0	0	42
% 4+ Axle Trucks	0	0	0	0	0	0	0.3	1.9	0	0.6	0	0	0.1	0	0.1	0	0.1	0.3	0	0.2	0	0	0.3

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				Int. Total
Start Time	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 05:00 PM																	
05:00 PM	0	0	0	0	0	511	129	640	136	0	234	370	0	528	130	658	1668
05:15 PM	0	0	0	0	0	545	102	647	133	0	205	338	0	577	129	706	1691
05:30 PM	0	0	0	0	0	499	101	600	163	0	236	399	0	502	108	610	1609
05:45 PM	0	0	0	0	0	509	107	616	116	0	198	314	0	491	107	598	1528
Total Volume	0	0	0	0	0	2064	439	2503	548	0	873	1421	0	2098	474	2572	6496
% App. Total	0	0	0		0	82.5	17.5		38.6	0	61.4		0	81.6	18.4		
PHF	.000	.000	.000	.000	.000	.947	.851	.967	.840	.000	.925	.890	.000	.909	.912	.911	.960

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 02_MEN_215N_New PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				05:00 PM				04:30 PM				
+0 mins.	0	0	0	0	0	545	104	649	136	0	234	370	0	525	111	636	
+15 mins.	0	0	0	0	0	533	112	645	133	0	205	338	1	509	124	634	
+30 mins.	0	0	0	0	0	525	128	653	163	0	236	399	0	528	130	658	
+45 mins.	0	0	0	0	0	488	100	588	116	0	198	314	0	577	129	706	
Total Volume	0	0	0	0	0	2091	444	2535	548	0	873	1421	1	2139	494	2634	
% App. Total	0	0	0		0	82.5	17.5		38.6	0	61.4		0	81.2	18.8		
PHF	.000	.000	.000	.000	.000	.959	.867	.971	.840	.000	.925	.890	.250	.927	.950	.933	

City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

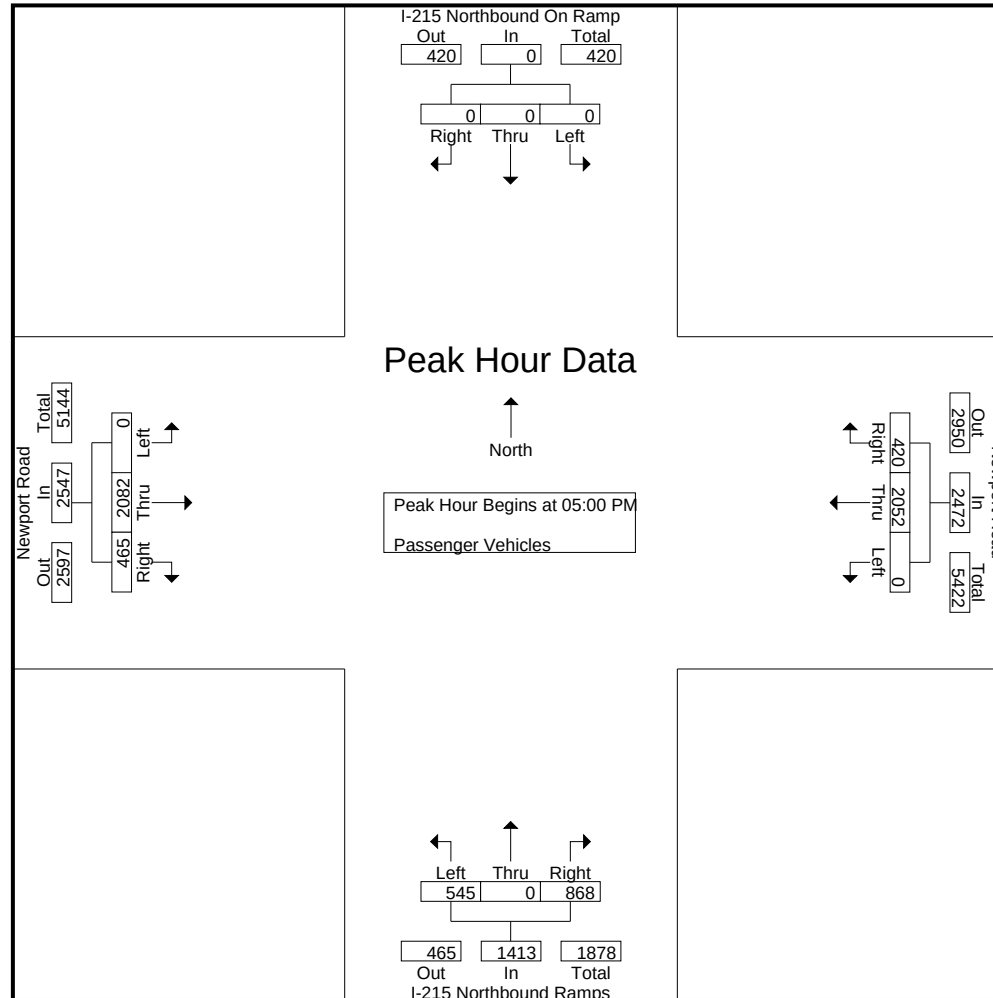
Groups Printed- Passenger Vehicles

	I-215 Northbound On Ramp Southbound					Newport Road Westbound					I-215 Northbound Ramps Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	536	97	0	633	98	0	182	17	280	0	559	130	0	689	17	1602	1619
04:15 PM	0	0	0	0	0	0	524	109	0	633	109	0	234	17	343	1	497	99	0	597	17	1573	1590
04:30 PM	0	0	0	0	0	0	515	115	0	630	119	0	195	7	314	0	523	109	0	632	7	1576	1583
04:45 PM	0	0	0	0	0	0	484	94	0	578	105	0	190	10	295	1	498	121	0	620	10	1493	1503
Total	0	0	0	0	0	0	2059	415	0	2474	431	0	801	51	1232	2	2077	459	0	2538	51	6244	6295
05:00 PM	0	0	0	0	0	0	505	126	0	631	134	0	233	5	367	0	521	125	0	646	5	1644	1649
05:15 PM	0	0	0	0	0	0	542	97	0	639	132	0	204	4	336	0	574	127	0	701	4	1676	1680
05:30 PM	0	0	0	0	0	0	498	99	0	597	163	0	235	7	398	0	498	108	0	606	7	1601	1608
05:45 PM	0	0	0	0	0	0	507	98	0	605	116	0	196	9	312	0	489	105	0	594	9	1511	1520
Total	0	0	0	0	0	0	2052	420	0	2472	545	0	868	25	1413	0	2082	465	0	2547	25	6432	6457
Grand Total	0	0	0	0	0	0	4111	835	0	4946	976	0	1669	76	2645	2	4159	924	0	5085	76	12676	12752
Apprch %	0	0	0			0	83.1	16.9			36.9	0	63.1			0	81.8	18.2					
Total %	0	0	0			0	32.4	6.6		39	7.7	0	13.2		20.9	0	32.8	7.3		40.1	0.6	99.4	

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	505	126	631	134	0	233	367	0	521	125	646	1644
05:15 PM	0	0	0	0	0	542	97	639	132	0	204	336	0	574	127	701	1676
05:30 PM	0	0	0	0	0	498	99	597	163	0	235	398	0	498	108	606	1601
05:45 PM	0	0	0	0	0	507	98	605	116	0	196	312	0	489	105	594	1511
Total Volume	0	0	0	0	0	2052	420	2472	545	0	868	1413	0	2082	465	2547	6432
% App. Total	0	0	0	0	0	83	17		38.6	0	61.4		0	81.7	18.3		
PHF	.000	.000	.000	.000	.000	.946	.833	.967	.836	.000	.923	.888	.000	.907	.915	.908	.959

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 02_MEN_215N_New PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	505	126	631	134	0	233	367	0	521	125	646	
+15 mins.	0	0	0	0	0	542	97	639	132	0	204	336	0	574	127	701	
+30 mins.	0	0	0	0	0	498	99	597	163	0	235	398	0	498	108	606	
+45 mins.	0	0	0	0	0	507	98	605	116	0	196	312	0	489	105	594	
Total Volume	0	0	0	0	0	2052	420	2472	545	0	868	1413	0	2082	465	2547	
% App. Total	0	0	0		0	83	17		38.6	0	61.4		0	81.7	18.3		
PHF	.000	.000	.000	.000	.000	.946	.833	.967	.836	.000	.923	.888	.000	.907	.915	.908	

City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

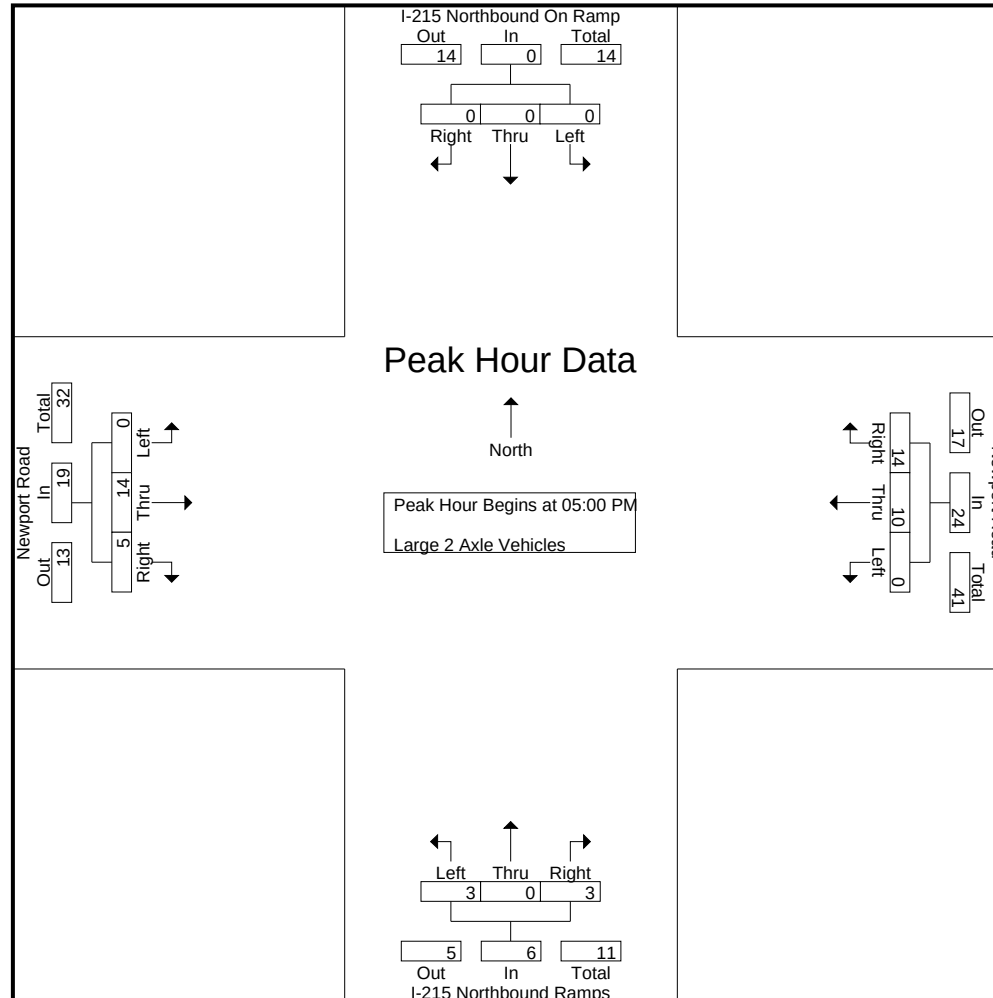
Groups Printed- Large 2 Axle Vehicles

	I-215 Northbound On Ramp Southbound					Newport Road Westbound					I-215 Northbound Ramps Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	7	4	0	11	1	0	2	0	3	0	8	3	0	11	0	25	25
04:15 PM	0	0	0	0	0	0	5	2	0	7	2	0	4	1	6	0	4	2	0	6	1	19	20
04:30 PM	0	0	0	0	0	0	5	6	0	11	0	0	7	0	7	0	2	1	0	3	0	21	21
04:45 PM	0	0	0	0	0	0	1	3	0	4	1	0	1	0	2	0	7	1	0	8	0	14	14
Total	0	0	0	0	0	0	18	15	0	33	4	0	14	1	18	0	21	7	0	28	1	79	80
05:00 PM	0	0	0	0	0	0	6	0	0	6	2	0	0	0	2	0	7	3	0	10	0	18	18
05:15 PM	0	0	0	0	0	0	2	4	0	6	1	0	0	0	1	0	2	1	0	3	0	10	10
05:30 PM	0	0	0	0	0	0	1	2	0	3	0	0	1	0	1	0	3	0	0	3	0	7	7
05:45 PM	0	0	0	0	0	0	1	8	0	9	0	0	2	0	2	0	2	1	0	3	0	14	14
Total	0	0	0	0	0	0	10	14	0	24	3	0	3	0	6	0	14	5	0	19	0	49	49
Grand Total	0	0	0	0	0	0	28	29	0	57	7	0	17	1	24	0	35	12	0	47	1	128	129
Apprch %	0	0	0			0	49.1	50.9			29.2	0	70.8			0	74.5	25.5					
Total %	0	0	0			0	21.9	22.7		44.5	5.5	0	13.3		18.8	0	27.3	9.4		36.7	0.8	99.2	

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	6	0	6	2	0	0	2	0	7	3	10	18
05:15 PM	0	0	0	0	0	2	4	6	1	0	0	1	0	2	1	3	10
05:30 PM	0	0	0	0	0	1	2	3	0	0	1	1	0	3	0	3	7
05:45 PM	0	0	0	0	0	1	8	9	0	0	2	2	0	2	1	3	14
Total Volume	0	0	0	0	0	10	14	24	3	0	3	6	0	14	5	19	49
% App. Total	0	0	0		0	41.7	58.3		50	0	50		0	73.7	26.3		
PHF	.000	.000	.000	.000	.000	.417	.438	.667	.375	.000	.375	.750	.000	.500	.417	.475	.681

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 02_MEN_215N_New PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	6	0	6	2	0	0	2	0	7	3	10	
+15 mins.	0	0	0	0	0	2	4	6	1	0	0	1	0	2	1	3	
+30 mins.	0	0	0	0	0	1	2	3	0	0	1	1	0	3	0	3	
+45 mins.	0	0	0	0	0	1	8	9	0	0	2	2	0	2	1	3	
Total Volume	0	0	0	0	0	10	14	24	3	0	3	6	0	14	5	19	
% App. Total	0	0	0		0	41.7	58.3		50	0	50		0	73.7	26.3		
PHF	.000	.000	.000	.000	.000	.417	.438	.667	.375	.000	.375	.750	.000	.500	.417	.475	

City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

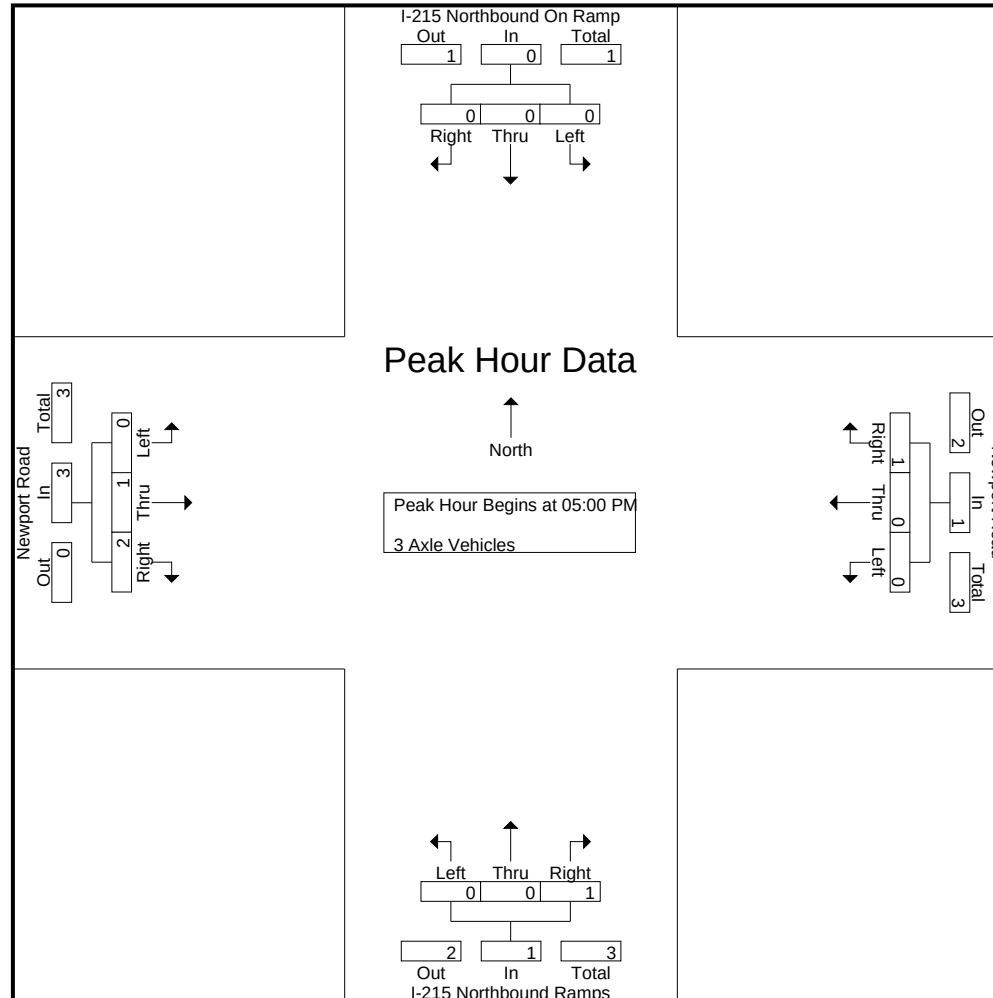
Groups Printed- 3 Axle Vehicles

	I-215 Northbound On Ramp Southbound					Newport Road Westbound					I-215 Northbound Ramps Northbound					Newport Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	1	1	0	2	0	4	4
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	2	0	3	0	4	4
Total	0	0	0	0	0	0	2	1	0	3	0	0	1	0	1	0	2	4	0	6	0	10	10
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	1	1	0	2	0	4	4
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
05:45 PM	0	0	0	0	0	0	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	1	0	1	0	0	1	0	1	0	1	2	0	3	0	5	5
Grand Total	0	0	0	0	0	0	2	2	0	4	0	0	2	0	2	0	3	6	0	9	0	15	15
Apprch %	0	0	0			0	50	50			0	0	100			0	33.3	66.7			0		
Total %	0	0	0		0	0	13.3	13.3		26.7	0	0	13.3		13.3	0	20	40		60	0	100	

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	0	0	1	1	0	0	1	1	0	1	1	2	4
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 Volume	0	0	0	0	0	0	1	1	0	0	1	1	0	1	2	3	5
% App. Total	0	0	0		0	0	100		0	0	100		0	33.3	66.7		
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.250	.250	.000	.250	.500	.375	.313

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 02_MEN_215N_New PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
+15 mins.	0	0	0	0	0	0	1	1	0	0	1	1	0	1	1	2	
+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	1	1	0	0	1	1	0	1	2	3	
% App. Total	0	0	0		0	0	100		0	0	100		0	33.3	66.7		
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.250	.250	.000	.250	.500	.375	

City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

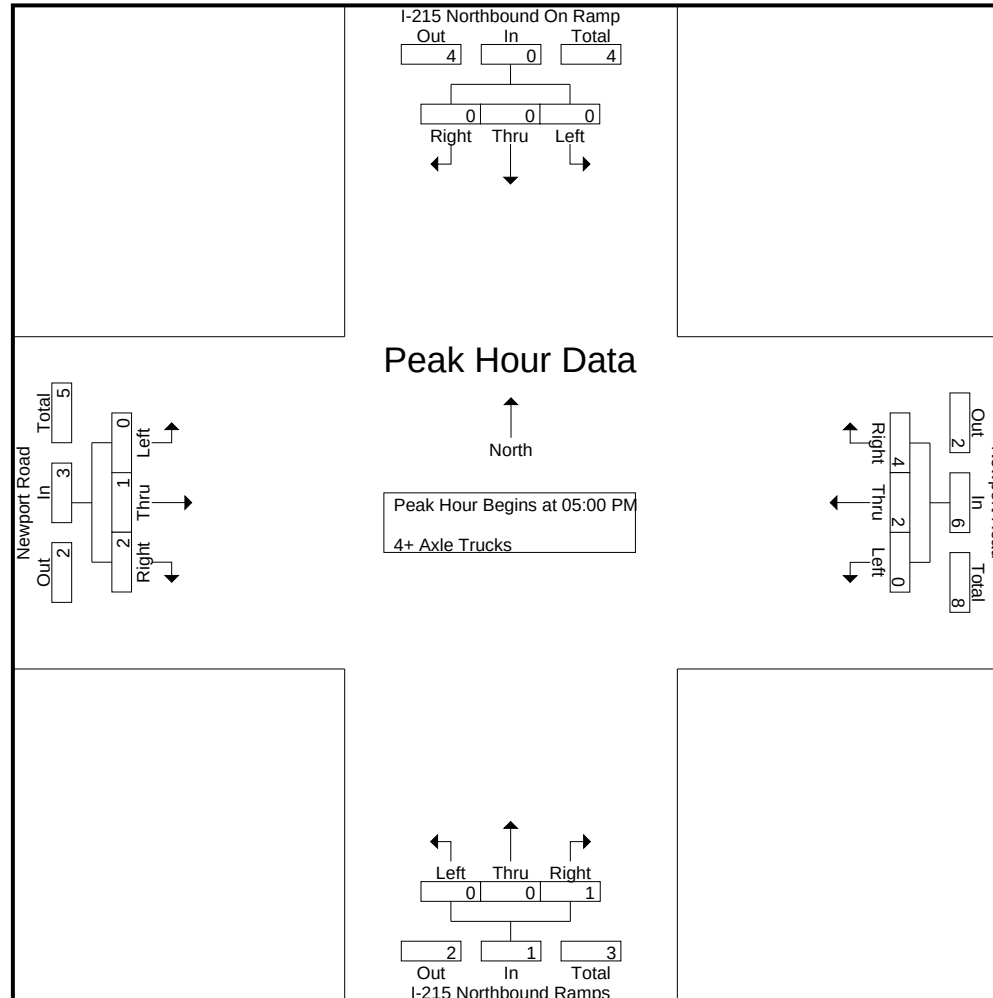
Groups Printed- 4+ Axle Trucks

	I-215 Northbound On Ramp Southbound					Newport Road Westbound					I-215 Northbound Ramps Northbound					Newport Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	1	3	0	4	0	0	0	0	0	0	1	1	0	2	0	6	6
04:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	0	1	0	0	1	0	5	5
04:30 PM	0	0	0	0	0	0	5	7	0	12	0	0	0	0	0	0	0	0	0	0	0	12	12
04:45 PM	0	0	0	0	0	0	3	3	0	6	0	0	0	0	0	0	3	0	0	3	0	9	9
Total	0	0	0	0	0	0	12	13	0	25	0	0	1	0	1	0	5	1	0	6	0	32	32
05:00 PM	0	0	0	0	0	0	0	3	0	3	0	0	1	0	1	0	0	1	0	1	0	5	5
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	1	0	1	0	3	3
Total	0	0	0	0	0	0	2	4	0	6	0	0	1	0	1	0	1	2	0	3	0	10	10
Grand Total	0	0	0	0	0	0	14	17	0	31	0	0	2	0	2	0	6	3	0	9	0	42	42
Apprch %	0	0	0			0	45.2	54.8			0	0	100			0	66.7	33.3			0		
Total %	0	0	0			0	33.3	40.5		73.8	0	0	4.8		4.8	0	14.3	7.1		21.4	0	100	

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	3	3	0	0	1	1	0	0	1	1	5
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	1	1	2	0	0	0	0	0	0	1	1	3
Total Volume	0	0	0	0	0	2	4	6	0	0	1	1	0	1	2	3	10
% App. Total	0	0	0		0	33.3	66.7		0	0	100		0	33.3	66.7		
PHF	.000	.000	.000	.000	.000	.500	.333	.500	.000	.000	.250	.250	.000	.250	.500	.750	.500

City of Menifee
 N/S: I-215 Northbound Ramps
 E/W: Newport Road
 Weather: Clear

File Name : 02_MEN_215N_New PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: I-215 Northbound Ramps
E/W: Newport Road
Weather: Clear

File Name : 02_MEN_215N_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	I-215 Northbound On Ramp Southbound				Newport Road Westbound				I-215 Northbound Ramps Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:																	
	05:00 PM				05:00 PM				05:00 PM				05:00 PM				
+0 mins.	0	0	0	0	0	0	3	3	0	0	1	1	0	0	1	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	0	0	0	0	0	0	0	0	1	0	1	
+45 mins.	0	0	0	0	0	1	1	2	0	0	0	0	0	0	1	1	
Total Volume	0	0	0	0	0	2	4	6	0	0	1	1	0	1	2	3	
% App. Total	0	0	0		0	33.3	66.7		0	0	100		0	33.3	66.7		
PHF	.000	.000	.000	.000	.000	.500	.333	.500	.000	.000	.250	.250	.000	.250	.500	.750	

Location: Menifee
 N/S: I-215 NB Ramps
 E/W: Newport Road



Date: 5/25/2023
 Day: Thursday

PEDESTRIANS

	North Leg I-215 NB Ramps	East Leg Newport Road	South Leg I-215 NB Ramps	West Leg Newport Road	
	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	1	1
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	1	1

	North Leg I-215 NB Ramps	East Leg Newport Road	South Leg I-215 NB Ramps	West Leg Newport Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	1	1
4:30 PM	0	0	0	3	3
4:45 PM	0	0	0	1	1
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	1	1
TOTAL VOLUMES:	0	0	0	6	6

Location: Menifee
 N/S: I-215 NB Ramps
 E/W: Newport Road



Date: 5/25/2023
 Day: Thursday

BICYCLES

		Southbound I-215 NB Ramps			Westbound Newport Road			Northbound I-215 NB Ramps			Eastbound Newport 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 I-215 NB Ramps			Westbound Newport Road			Northbound I-215 NB Ramps			Eastbound Newport 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	1	0	0	1
	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	3	0	0	0	0	0	0	0	0	0	3
	5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:		0	0	4	0	0	0	0	0	0	1	0	0	5

City of Menifee
N/S: Antelope Road
E/W: Newport Road
Weather: Clear

File Name : 03_MEN_Ant_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

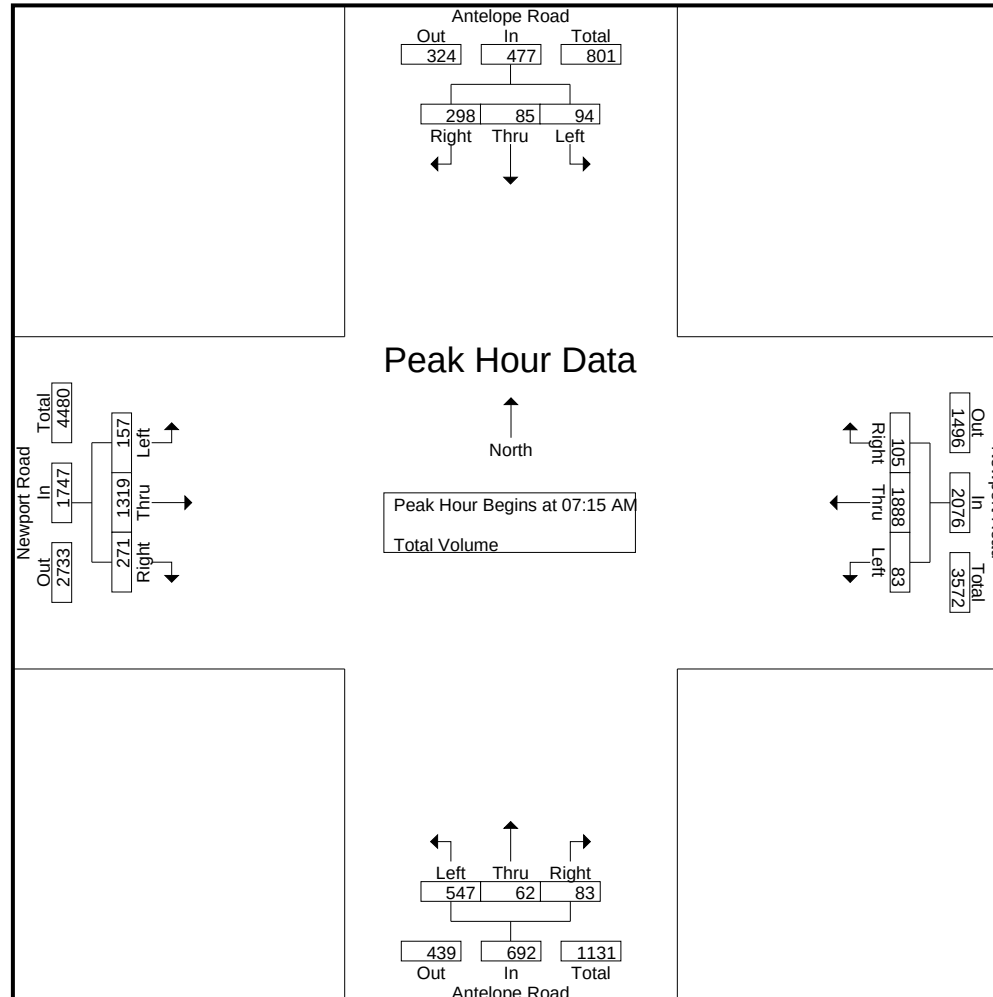
Groups Printed- Total Volume

	Antelope Road Southbound					Newport Road Westbound					Antelope Road Northbound					Newport Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	15	19	50	43	84	10	402	14	0	426	132	5	12	7	149	27	311	45	10	383	60	1042	1102
07:15 AM	36	12	63	53	111	9	545	19	0	573	94	7	21	17	122	28	383	44	6	455	76	1261	1337
07:30 AM	31	27	87	73	145	21	426	20	0	467	167	13	28	22	208	40	359	45	5	444	100	1264	1364
07:45 AM	8	17	72	65	97	31	484	32	1	547	166	22	15	11	203	44	267	86	9	397	86	1244	1330
Total	90	75	272	234	437	71	1857	85	1	2013	559	47	76	57	682	139	1320	220	30	1679	322	4811	5133
08:00 AM	19	29	76	63	124	22	433	34	3	489	120	20	19	10	159	45	310	96	19	451	95	1223	1318
08:15 AM	10	23	71	66	104	28	395	18	1	441	151	32	12	8	195	66	306	74	15	446	90	1186	1276
08:30 AM	15	19	68	65	102	29	396	19	2	444	114	27	18	13	159	66	346	46	7	458	87	1163	1250
08:45 AM	21	17	63	55	101	31	348	28	1	407	131	17	17	9	165	53	248	43	5	344	70	1017	1087
Total	65	88	278	249	431	110	1572	99	7	1781	516	96	66	40	678	230	1210	259	46	1699	342	4589	4931
Grand Total	155	163	550	483	868	181	3429	184	8	3794	1075	143	142	97	1360	369	2530	479	76	3378	664	9400	10064
Apprch %	17.9	18.8	63.4			4.8	90.4	4.8			79	10.5	10.4			10.9	74.9	14.2					
Total %	1.6	1.7	5.9		9.2	1.9	36.5	2		40.4	11.4	1.5	1.5		14.5	3.9	26.9	5.1		35.9	6.6	93.4	

	Antelope Road Southbound				Newport Road Westbound				Antelope Road Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	36	12	63	111	9	545	19	573	94	7	21	122	28	383	44	455	1261
07:30 AM	31	27	87	145	21	426	20	467	167	13	28	208	40	359	45	444	1264
07:45 AM	8	17	72	97	31	484	32	547	166	22	15	203	44	267	86	397	1244
08:00 AM	19	29	76	124	22	433	34	489	120	20	19	159	45	310	96	451	1223
Total Volume	94	85	298	477	83	1888	105	2076	547	62	83	692	157	1319	271	1747	4992
% App. Total	19.7	17.8	62.5		4	90.9	5.1		79	9	12		9	75.5	15.5		
PHF	.653	.733	.856	.822	.669	.866	.772	.906	.819	.705	.741	.832	.872	.861	.706	.960	.987

City of Menifee
 N/S: Antelope Road
 E/W: Newport Road
 Weather: Clear

File Name : 03_MEN_Ant_New AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: Antelope Road
E/W: Newport Road
Weather: Clear

File Name : 03_MEN_Ant_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Antelope Road Southbound				Newport Road Westbound				Antelope Road Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:30 AM				07:45 AM				
+0 mins.	36	12	63	111	9	545	19	573	167	13	28	208	44	267	86	397	
+15 mins.	31	27	87	145	21	426	20	467	166	22	15	203	45	310	96	451	
+30 mins.	8	17	72	97	31	484	32	547	120	20	19	159	66	306	74	446	
+45 mins.	19	29	76	124	22	433	34	489	151	32	12	195	66	346	46	458	
Total Volume	94	85	298	477	83	1888	105	2076	604	87	74	765	221	1229	302	1752	
% App. Total	19.7	17.8	62.5		4	90.9	5.1		79	11.4	9.7		12.6	70.1	17.2		
PHF	.653	.733	.856	.822	.669	.866	.772	.906	.904	.680	.661	.919	.837	.888	.786	.956	

City of Menifee
N/S: Antelope Road
E/W: Newport Road
Weather: Clear

File Name : 03_MEN_Ant_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

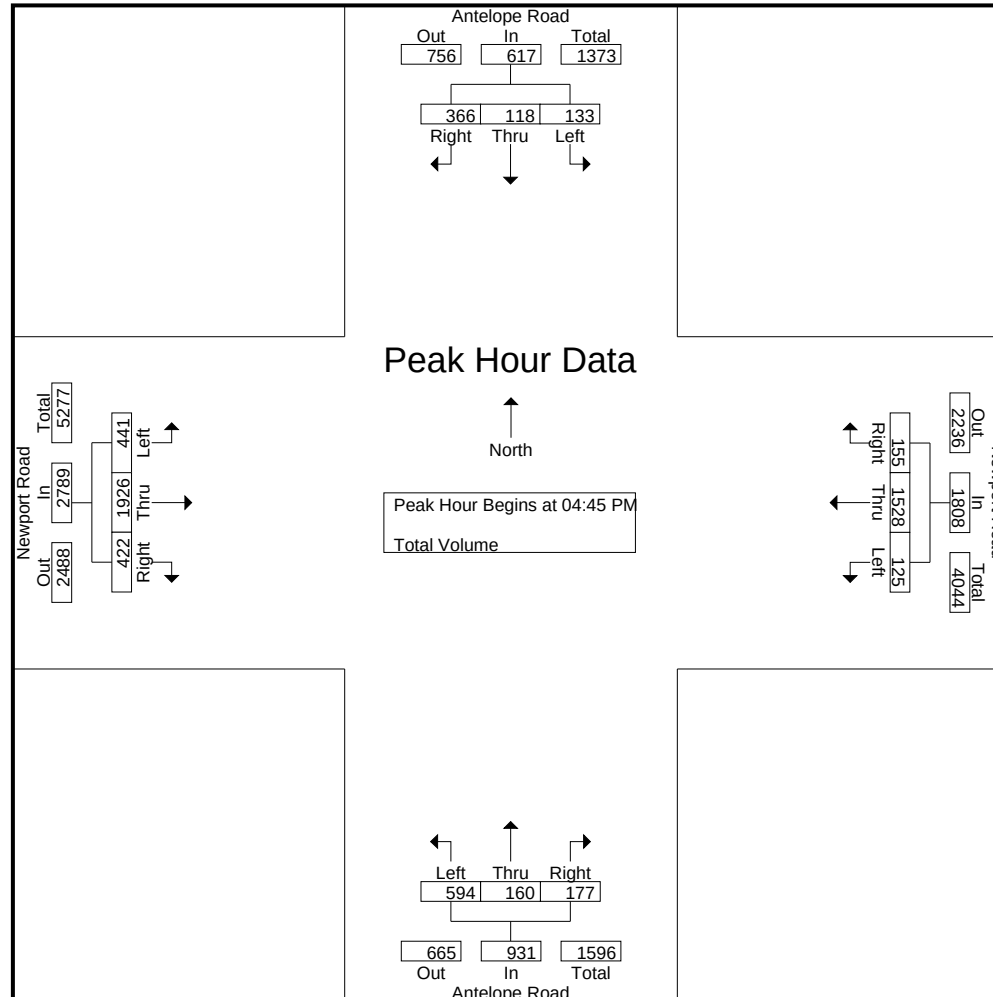
Groups Printed- Total Volume

	Antelope Road Southbound					Newport Road Westbound					Antelope Road Northbound					Newport Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	42	28	84	76	154	25	410	49	1	484	117	41	50	12	208	103	496	115	23	714	112	1560	1672
04:15 PM	44	37	110	93	191	29	388	30	1	447	166	50	35	17	251	115	449	89	25	653	136	1542	1678
04:30 PM	32	30	87	75	149	38	404	29	2	471	141	44	35	11	220	108	437	100	25	645	113	1485	1598
04:45 PM	37	36	104	90	177	30	365	44	0	439	113	36	63	20	212	110	460	120	29	690	139	1518	1657
Total	155	131	385	334	671	122	1567	152	4	1841	537	171	183	60	891	436	1842	424	102	2702	500	6105	6605
05:00 PM	28	32	84	77	144	36	406	34	1	476	170	49	44	24	263	100	467	99	39	666	141	1549	1690
05:15 PM	28	22	96	85	146	26	389	36	1	451	153	28	28	17	209	122	521	121	30	764	133	1570	1703
05:30 PM	40	28	82	76	150	33	368	41	1	442	158	47	42	16	247	109	478	82	22	669	115	1508	1623
05:45 PM	27	25	86	79	138	37	422	27	1	486	111	39	28	15	178	87	473	93	13	653	108	1455	1563
Total	123	107	348	317	578	132	1585	138	4	1855	592	163	142	72	897	418	1939	395	104	2752	497	6082	6579
Grand Total	278	238	733	651	1249	254	3152	290	8	3696	1129	334	325	132	1788	854	3781	819	206	5454	997	12187	13184
Apprch %	22.3	19.1	58.7			6.9	85.3	7.8			63.1	18.7	18.2			15.7	69.3	15					
Total %	2.3	2	6		10.2	2.1	25.9	2.4		30.3	9.3	2.7	2.7		14.7	7	31	6.7		44.8	7.6	92.4	

	Antelope Road Southbound				Newport Road Westbound				Antelope Road Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	37	36	104	177	30	365	44	439	113	36	63	212	110	460	120	690	1518
05:00 PM	28	32	84	144	36	406	34	476	170	49	44	263	100	467	99	666	1549
05:15 PM	28	22	96	146	26	389	36	451	153	28	28	209	122	521	121	764	1570
05:30 PM	40	28	82	150	33	368	41	442	158	47	42	247	109	478	82	669	1508
Total Volume	133	118	366	617	125	1528	155	1808	594	160	177	931	441	1926	422	2789	6145
% App. Total	21.6	19.1	59.3		6.9	84.5	8.6		63.8	17.2	19		15.8	69.1	15.1		
PHF	.831	.819	.880	.871	.868	.941	.881	.950	.874	.816	.702	.885	.904	.924	.872	.913	.979

City of Menifee
 N/S: Antelope Road
 E/W: Newport Road
 Weather: Clear

File Name : 03_MEN_Ant_New PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: Antelope Road
E/W: Newport Road
Weather: Clear

File Name : 03_MEN_Ant_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Antelope Road Southbound				Newport Road Westbound				Antelope Road Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				05:00 PM				04:15 PM				04:45 PM				
+0 mins.	42	28	84	154	36	406	34	476	166	50	35	251	110	460	120	690	
+15 mins.	44	37	110	191	26	389	36	451	141	44	35	220	100	467	99	666	
+30 mins.	32	30	87	149	33	368	41	442	113	36	63	212	122	521	121	764	
+45 mins.	37	36	104	177	37	422	27	486	170	49	44	263	109	478	82	669	
Total Volume	155	131	385	671	132	1585	138	1855	590	179	177	946	441	1926	422	2789	
% App. Total	23.1	19.5	57.4		7.1	85.4	7.4		62.4	18.9	18.7		15.8	69.1	15.1		
PHF	.881	.885	.875	.878	.892	.939	.841	.954	.868	.895	.702	.899	.904	.924	.872	.913	

Location: Menifee
 N/S: Antelope Road
 E/W: Newport Road



Date: 5/25/2023
 Day: Thursday

PEDESTRIANS

		North Leg Antelope Road	East Leg Newport Road	South Leg Antelope Road	West Leg Newport Road	
		Pedestrians	Pedestrians	Pedestrians	Pedestrians	
	7:00 AM	0	0	0	0	0
	7:15 AM	0	0	0	0	0
	7:30 AM	2	1	0	0	3
	7:45 AM	0	0	0	0	0
	8:00 AM	0	0	0	0	0
	8:15 AM	1	1	1	0	3
	8:30 AM	0	0	1	0	1
	8:45 AM	0	0	0	0	0
	TOTAL VOLUMES:	3	2	2	0	7

		North Leg Antelope Road	East Leg Newport Road	South Leg Antelope Road	West Leg Newport Road	
		Pedestrians	Pedestrians	Pedestrians	Pedestrians	
	4:00 PM	0	2	1	0	3
	4:15 PM	3	4	4	1	12
	4:30 PM	3	2	2	0	7
	4:45 PM	1	4	3	0	8
	5:00 PM	0	3	0	0	3
	5:15 PM	0	0	0	0	0
	5:30 PM	0	0	1	0	1
	5:45 PM	0	1	0	0	1
	TOTAL VOLUMES:	7	16	11	1	35

Location: Menifee
 N/S: Antelope Road
 E/W: Newport Road



Date: 5/25/2023
 Day: Thursday

BICYCLES

		Southbound Antelope Road			Westbound Newport Road			Northbound Antelope Road			Eastbound Newport 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	1	0	1
	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	1	0	1

		Southbound Antelope Road			Westbound Newport Road			Northbound Antelope Road			Eastbound Newport 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	2	0	2
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
	5:30 PM	0	0	0	0	2	0	0	0	0	0	1	0	3
	5:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:		2	0	0	0	2	0	0	0	0	0	3	0	7

City of Menifee
N/S: Menifee Road
E/W: McCall Boulevard
Weather: Clear

File Name : 04_MEN_Meni_McC AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

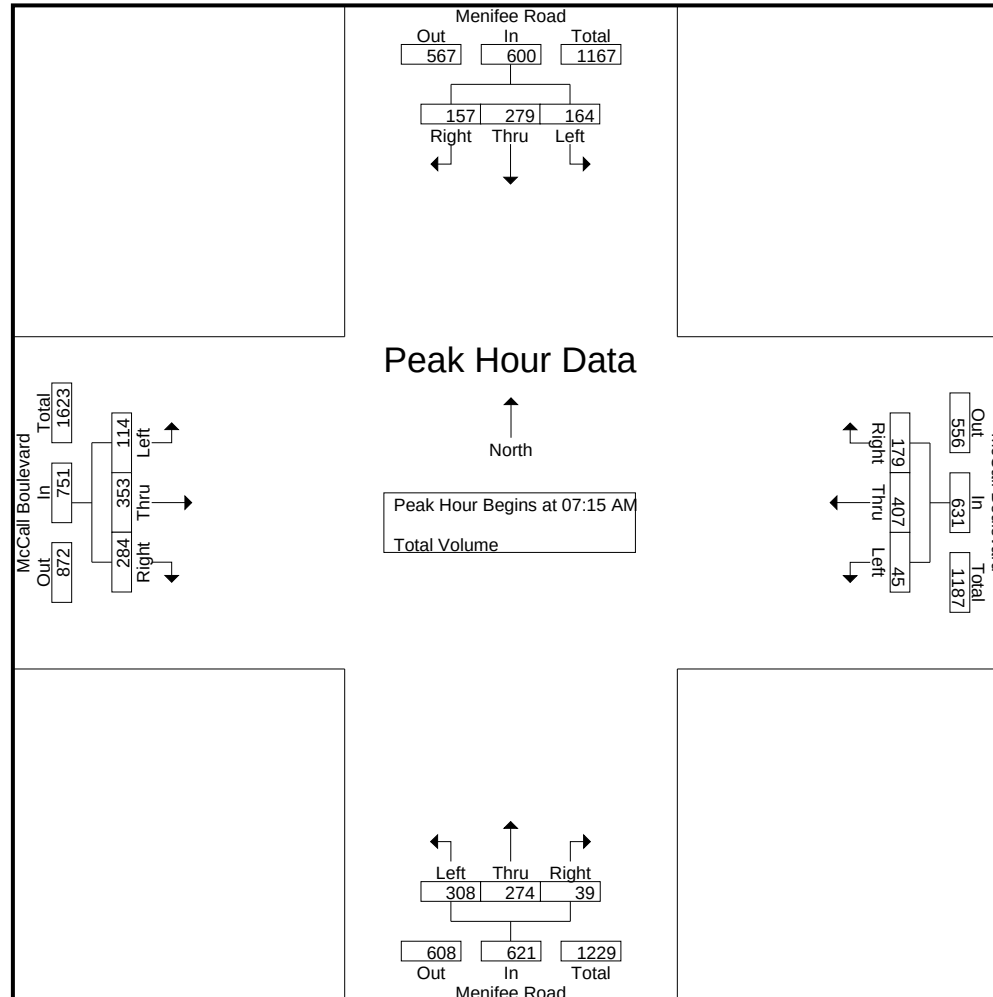
Groups Printed- Total Volume

	Menifee Road Southbound					McCall Boulevard Westbound					Menifee Road Northbound					McCall Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	8	49	40	34	97	2	67	15	10	84	37	26	4	4	67	21	27	55	31	103	79	351	430
07:15 AM	17	67	36	24	120	5	77	25	10	107	52	38	11	11	101	28	48	72	19	148	64	476	540
07:30 AM	56	72	40	19	168	8	103	38	25	149	108	75	18	9	201	21	97	101	32	219	85	737	822
07:45 AM	62	83	49	23	194	23	121	59	32	203	84	87	6	3	177	30	122	66	8	218	66	792	858
Total	143	271	165	100	579	38	368	137	77	543	281	226	39	27	546	100	294	294	90	688	294	2356	2650
08:00 AM	29	57	32	22	118	9	106	57	33	172	64	74	4	4	142	35	86	45	5	166	64	598	662
08:15 AM	11	40	34	22	85	5	76	34	22	115	62	38	9	5	109	27	56	60	37	143	86	452	538
08:30 AM	6	48	30	22	84	13	83	19	10	115	37	30	4	2	71	38	43	47	4	128	38	398	436
08:45 AM	5	37	31	18	73	6	53	14	8	73	36	37	6	2	79	19	32	21	4	72	32	297	329
Total	51	182	127	84	360	33	318	124	73	475	199	179	23	13	401	119	217	173	50	509	220	1745	1965
Grand Total	194	453	292	184	939	71	686	261	150	1018	480	405	62	40	947	219	511	467	140	1197	514	4101	4615
Apprch %	20.7	48.2	31.1			7	67.4	25.6			50.7	42.8	6.5			18.3	42.7	39					
Total %	4.7	11	7.1		22.9	1.7	16.7	6.4		24.8	11.7	9.9	1.5		23.1	5.3	12.5	11.4		29.2	11.1	88.9	

	Menifee Road Southbound				McCall Boulevard Westbound				Menifee Road Northbound				McCall Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	17	67	36	120	5	77	25	107	52	38	11	101	28	48	72	148	476
07:30 AM	56	72	40	168	8	103	38	149	108	75	18	201	21	97	101	219	737
07:45 AM	62	83	49	194	23	121	59	203	84	87	6	177	30	122	66	218	792
08:00 AM	29	57	32	118	9	106	57	172	64	74	4	142	35	86	45	166	598
Total Volume	164	279	157	600	45	407	179	631	308	274	39	621	114	353	284	751	2603
% App. Total	27.3	46.5	26.2		7.1	64.5	28.4		49.6	44.1	6.3		15.2	47	37.8		
PHF	.661	.840	.801	.773	.489	.841	.758	.777	.713	.787	.542	.772	.814	.723	.703	.857	.822

City of Menifee
 N/S: Menifee Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Meni_McC AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: Menifee Road
E/W: McCall Boulevard
Weather: Clear

File Name : 04_MEN_Meni_McC AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Menifee Road Southbound				McCall Boulevard Westbound				Menifee Road Northbound				McCall Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:30 AM				07:30 AM				07:15 AM				
+0 mins.	17	67	36	120	8	103	38	149	108	75	18	201	28	48	72	148	
+15 mins.	56	72	40	168	23	121	59	203	84	87	6	177	21	97	101	219	
+30 mins.	62	83	49	194	9	106	57	172	64	74	4	142	30	122	66	218	
+45 mins.	29	57	32	118	5	76	34	115	62	38	9	109	35	86	45	166	
Total Volume	164	279	157	600	45	406	188	639	318	274	37	629	114	353	284	751	
% App. Total	27.3	46.5	26.2		7	63.5	29.4		50.6	43.6	5.9		15.2	47	37.8		
PHF	.661	.840	.801	.773	.489	.839	.797	.787	.736	.787	.514	.782	.814	.723	.703	.857	

City of Menifee
N/S: Menifee Road
E/W: McCall Boulevard
Weather: Clear

File Name : 04_MEN_Meni_McC PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

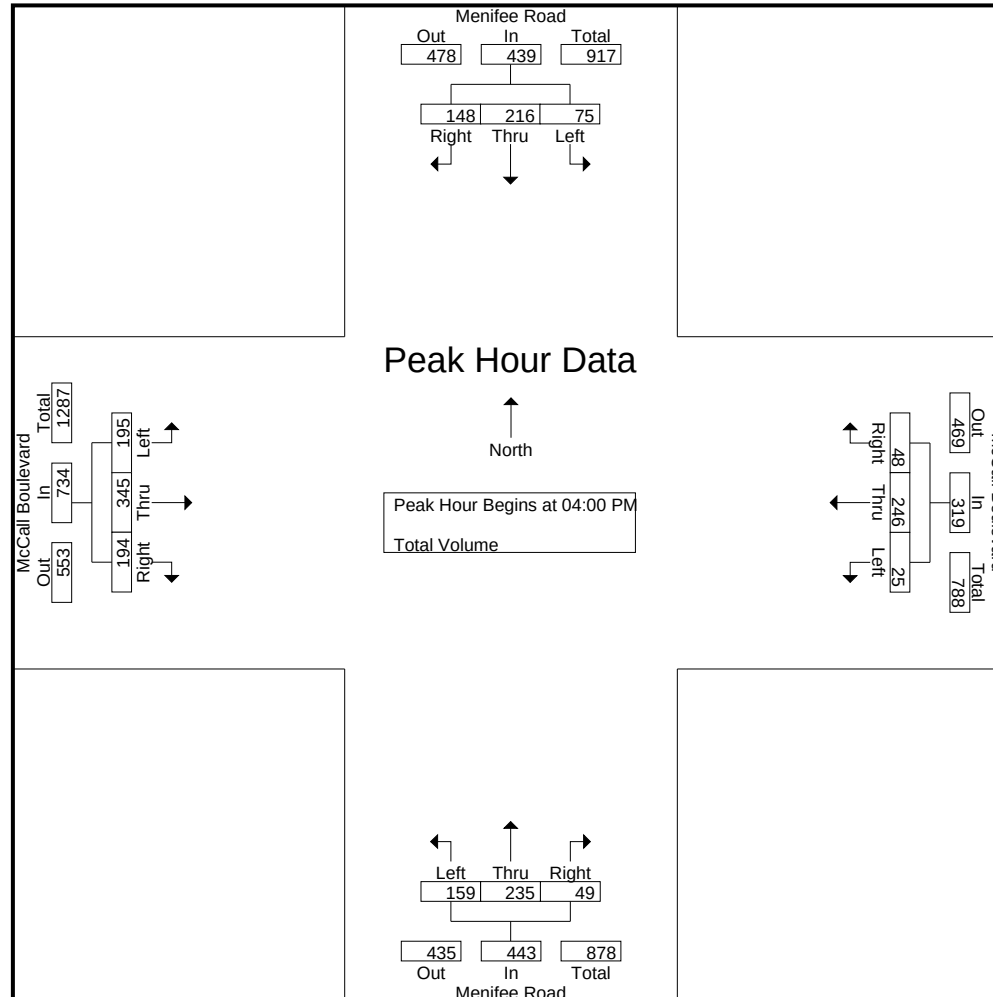
Groups Printed- Total Volume

	Menifee Road Southbound					McCall Boulevard Westbound					Menifee Road Northbound					McCall Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	23	62	47	41	132	6	71	14	11	91	55	68	11	8	134	46	96	53	9	195	69	552	621
04:15 PM	18	56	23	14	97	3	55	11	5	69	40	46	8	6	94	55	87	44	10	186	35	446	481
04:30 PM	17	46	36	22	99	9	56	13	11	78	31	53	11	4	95	53	84	52	9	189	46	461	507
04:45 PM	17	52	42	26	111	7	64	10	4	81	33	68	19	8	120	41	78	45	13	164	51	476	527
Total	75	216	148	103	439	25	246	48	31	319	159	235	49	26	443	195	345	194	41	734	201	1935	2136
05:00 PM	23	62	46	32	131	7	37	12	9	56	39	54	11	8	104	54	84	32	7	170	56	461	517
05:15 PM	21	56	40	34	117	9	53	8	5	70	34	63	13	6	110	63	92	53	7	208	52	505	557
05:30 PM	18	68	39	32	125	17	41	9	6	67	34	49	14	10	97	49	106	35	5	190	53	479	532
05:45 PM	15	53	43	40	111	9	48	12	5	69	40	60	17	13	117	44	94	38	8	176	66	473	539
Total	77	239	168	138	484	42	179	41	25	262	147	226	55	37	428	210	376	158	27	744	227	1918	2145
Grand Total	152	455	316	241	923	67	425	89	56	581	306	461	104	63	871	405	721	352	68	1478	428	3853	4281
Apprch %	16.5	49.3	34.2			11.5	73.1	15.3			35.1	52.9	11.9			27.4	48.8	23.8					
Total %	3.9	11.8	8.2		24	1.7	11	2.3		15.1	7.9	12	2.7		22.6	10.5	18.7	9.1		38.4	10	90	

	Menifee Road Southbound				McCall Boulevard Westbound				Menifee Road Northbound				McCall Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	23	62	47	132	6	71	14	91	55	68	11	134	46	96	53	195	552
04:15 PM	18	56	23	97	3	55	11	69	40	46	8	94	55	87	44	186	446
04:30 PM	17	46	36	99	9	56	13	78	31	53	11	95	53	84	52	189	461
04:45 PM	17	52	42	111	7	64	10	81	33	68	19	120	41	78	45	164	476
Total Volume	75	216	148	439	25	246	48	319	159	235	49	443	195	345	194	734	1935
% App. Total	17.1	49.2	33.7		7.8	77.1	15		35.9	53	11.1		26.6	47	26.4		
PHF	.815	.871	.787	.831	.694	.866	.857	.876	.723	.864	.645	.826	.886	.898	.915	.941	.876

City of Menifee
 N/S: Menifee Road
 E/W: McCall Boulevard
 Weather: Clear

File Name : 04_MEN_Meni_McC PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: Menifee Road
E/W: McCall Boulevard
Weather: Clear

File Name : 04_MEN_Meni_McC PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Menifee Road Southbound				McCall Boulevard Westbound				Menifee Road Northbound				McCall Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:00 PM				04:00 PM				05:00 PM				
+0 mins.	17	52	42	111	6	71	14	91	55	68	11	134	54	84	32	170	
+15 mins.	23	62	46	131	3	55	11	69	40	46	8	94	63	92	53	208	
+30 mins.	21	56	40	117	9	56	13	78	31	53	11	95	49	106	35	190	
+45 mins.	18	68	39	125	7	64	10	81	33	68	19	120	44	94	38	176	
Total Volume	79	238	167	484	25	246	48	319	159	235	49	443	210	376	158	744	
% App. Total	16.3	49.2	34.5		7.8	77.1	15		35.9	53	11.1		28.2	50.5	21.2		
PHF	.859	.875	.908	.924	.694	.866	.857	.876	.723	.864	.645	.826	.833	.887	.745	.894	

Location: Menifee
 N/S: Menifee Road
 E/W: McCall Boulevard



Date: 5/25/2023
 Day: Thursday

PEDESTRIANS

	North Leg Menifee Road	East Leg McCall Boulevard	South Leg Menifee Road	West Leg McCall Boulevard	
	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 Menifee Road	East Leg McCall Boulevard	South Leg Menifee Road	West Leg McCall Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	2	0	0	2
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	2	2	0	0	4
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:	2	4	0	0	6

Location: Menifee
 N/S: Menifee Road
 E/W: McCall Boulevard



Date: 5/25/2023
 Day: Thursday

BICYCLES

	Southbound Menifee Road			Westbound McCall Boulevard			Northbound Menifee Road			Eastbound McCall Boulevard			
	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 Menifee Road			Westbound McCall Boulevard			Northbound Menifee Road			Eastbound McCall Boulevard			
	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	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	2	0	0	1	0	0	0	0	0	0	0	3

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

File Name : 05_MEN_Meni_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

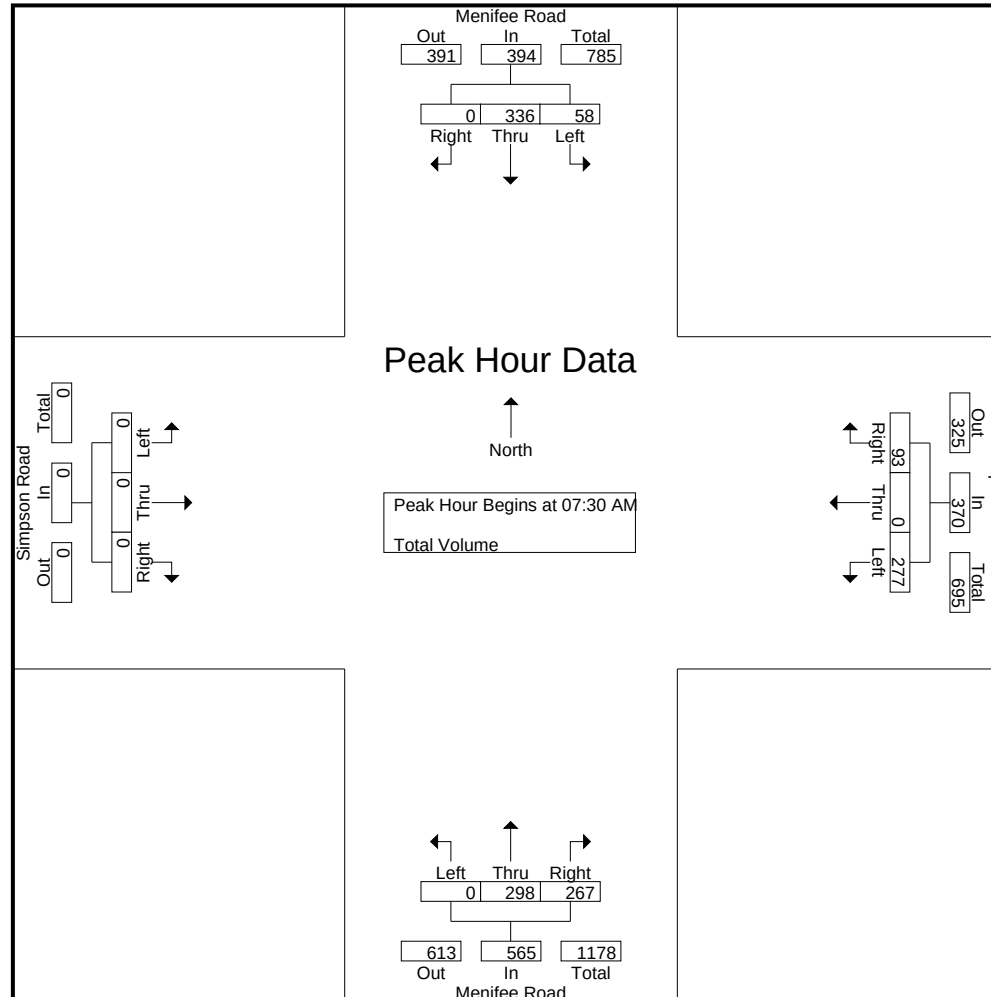
Groups Printed- Total Volume

	Menifee Road Southbound					Simpson Road Westbound					Menifee Road Northbound					Simpson Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	8	10	0	0	18	13	0	7	1	20	0	16	20	5	36	0	0	0	0	0	6	74	80
07:15 AM	16	15	0	0	31	26	0	8	4	34	0	31	44	11	75	0	0	0	0	0	15	140	155
07:30 AM	20	52	0	0	72	51	0	36	20	87	0	79	75	28	154	0	0	0	0	0	48	313	361
07:45 AM	13	95	0	0	108	65	0	30	20	95	0	94	53	14	147	0	0	0	0	0	34	350	384
Total	57	172	0	0	229	155	0	81	45	236	0	220	192	58	412	0	0	0	0	0	103	877	980
08:00 AM	14	122	0	0	136	101	0	13	5	114	0	68	62	27	130	0	0	0	0	0	32	380	412
08:15 AM	11	67	0	0	78	60	0	14	8	74	0	57	77	20	134	0	0	0	0	0	28	286	314
08:30 AM	2	25	0	0	27	30	0	4	2	34	0	52	56	13	108	0	0	0	0	0	15	169	184
08:45 AM	5	26	0	0	31	18	0	5	0	23	0	21	22	5	43	0	0	0	0	0	5	97	102
Total	32	240	0	0	272	209	0	36	15	245	0	198	217	65	415	0	0	0	0	0	80	932	1012
Grand Total	89	412	0	0	501	364	0	117	60	481	0	418	409	123	827	0	0	0	0	0	183	1809	1992
Apprch %	17.8	82.2	0			75.7	0	24.3			0	50.5	49.5			0	0	0			9.2	90.8	
Total %	4.9	22.8	0		27.7	20.1	0	6.5		26.6	0	23.1	22.6		45.7	0	0	0		0			

	Menifee Road Southbound				Simpson Road Westbound				Menifee Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	20	52	0	72	51	0	36	87	0	79	75	154	0	0	0	0	313
07:45 AM	13	95	0	108	65	0	30	95	0	94	53	147	0	0	0	0	350
08:00 AM	14	122	0	136	101	0	13	114	0	68	62	130	0	0	0	0	380
08:15 AM	11	67	0	78	60	0	14	74	0	57	77	134	0	0	0	0	286
Total Volume	58	336	0	394	277	0	93	370	0	298	267	565	0	0	0	0	1329
% App. Total	14.7	85.3	0		74.9	0	25.1		0	52.7	47.3		0	0	0		
PHF	.725	.689	.000	.724	.686	.000	.646	.811	.000	.793	.867	.917	.000	.000	.000	.000	.874

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

File Name : 05_MEN_Meni_Simpson AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



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

File Name : 05_MEN_Meni_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Menifee Road Southbound				Simpson Road Westbound				Menifee Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:00 AM				
+0 mins.	20	52	0	72	51	0	36	87	0	79	75	154	0	0	0	0	
+15 mins.	13	95	0	108	65	0	30	95	0	94	53	147	0	0	0	0	
+30 mins.	14	122	0	136	101	0	13	114	0	68	62	130	0	0	0	0	
+45 mins.	11	67	0	78	60	0	14	74	0	57	77	134	0	0	0	0	
Total Volume	58	336	0	394	277	0	93	370	0	298	267	565	0	0	0	0	
% App. Total	14.7	85.3	0		74.9	0	25.1		0	52.7	47.3		0	0	0		
PHF	.725	.689	.000	.724	.686	.000	.646	.811	.000	.793	.867	.917	.000	.000	.000	.000	

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

File Name : 05_MEN_Meni_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

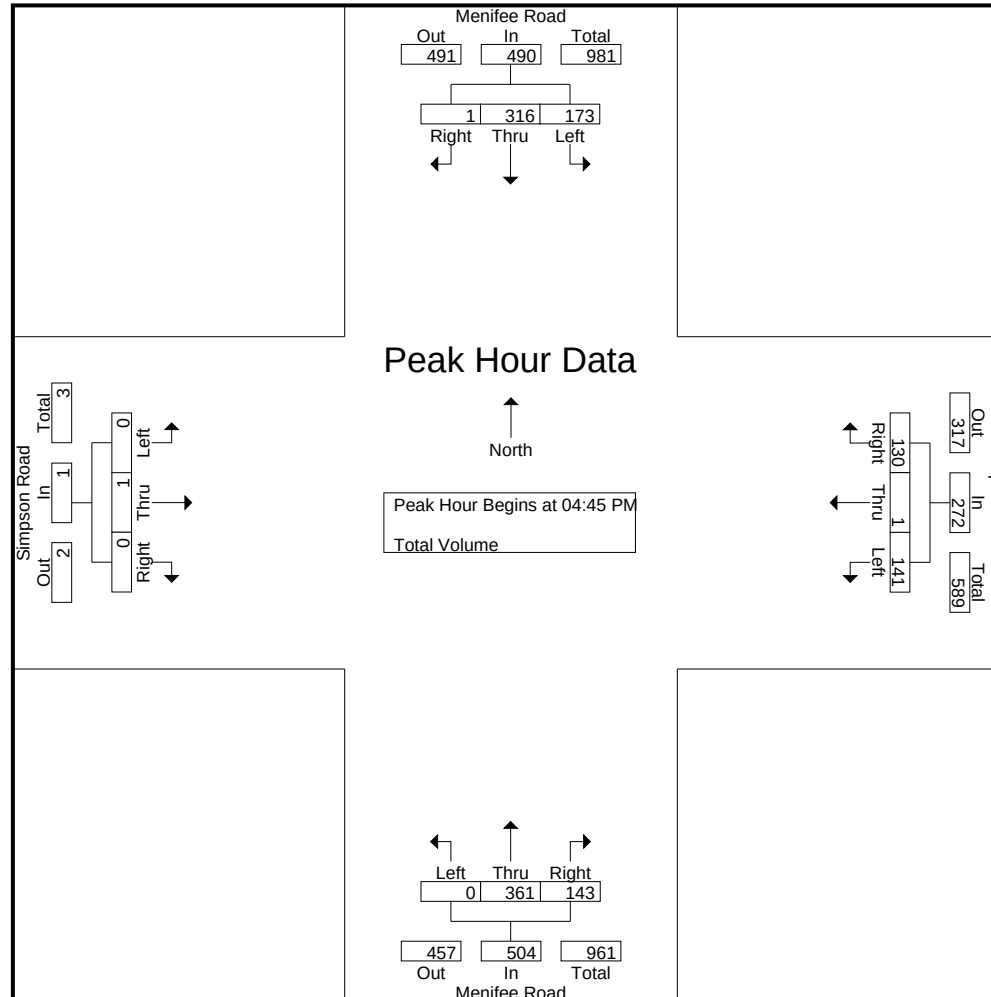
Groups Printed- Total Volume

	Menifee Road Southbound					Simpson Road Westbound					Menifee Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	49	80	0	0	129	34	0	47	23	81	0	95	36	7	131	1	0	0	0	1	30	342	372
04:15 PM	44	70	0	0	114	38	0	36	18	74	0	87	32	9	119	0	0	1	1	1	28	308	336
04:30 PM	38	77	0	0	115	48	0	40	18	88	0	64	34	11	98	0	0	0	0	0	29	301	330
04:45 PM	32	73	0	0	105	39	0	35	21	74	0	103	31	10	134	0	0	0	0	0	31	313	344
Total	163	300	0	0	463	159	0	158	80	317	0	349	133	37	482	1	0	1	1	2	118	1264	1382
05:00 PM	46	74	1	0	121	39	0	35	22	74	0	91	37	11	128	0	0	0	0	0	33	323	356
05:15 PM	52	87	0	0	139	33	0	35	25	68	0	76	41	12	117	0	1	0	0	1	37	325	362
05:30 PM	43	82	0	0	125	30	1	25	19	56	0	91	34	8	125	0	0	0	0	0	27	306	333
05:45 PM	40	68	2	2	110	23	1	29	20	53	1	102	32	8	135	0	0	0	0	0	30	298	328
Total	181	311	3	2	495	125	2	124	86	251	1	360	144	39	505	0	1	0	0	1	127	1252	1379
Grand Total	344	611	3	2	958	284	2	282	166	568	1	709	277	76	987	1	1	1	1	3	245	2516	2761
Apprch %	35.9	63.8	0.3			50	0.4	49.6			0.1	71.8	28.1			33.3	33.3	33.3					
Total %	13.7	24.3	0.1		38.1	11.3	0.1	11.2		22.6	0	28.2	11		39.2	0	0	0		0.1	8.9	91.1	

	Menifee Road Southbound				Simpson Road Westbound				Menifee Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	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 04:45 PM																	
04:45 PM	32	73	0	105	39	0	35	74	0	103	31	134	0	0	0	0	313
05:00 PM	46	74	1	121	39	0	35	74	0	91	37	128	0	0	0	0	323
05:15 PM	52	87	0	139	33	0	35	68	0	76	41	117	0	1	0	1	325
05:30 PM	43	82	0	125	30	1	25	56	0	91	34	125	0	0	0	0	306
Total Volume	173	316	1	490	141	1	130	272	0	361	143	504	0	1	0	1	1267
% App. Total	35.3	64.5	0.2		51.8	0.4	47.8		0	71.6	28.4		0	100	0		
PHF	.832	.908	.250	.881	.904	.250	.929	.919	.000	.876	.872	.940	.000	.250	.000	.250	.975

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

File Name : 05_MEN_Meni_Simpson PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



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

File Name : 05_MEN_Meni_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Menifee Road Southbound				Simpson Road Westbound				Menifee Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				04:00 PM				05:00 PM				04:00 PM				
+0 mins.	46	74	1	121	34	0	47	81	0	91	37	128	1	0	0	1	
+15 mins.	52	87	0	139	38	0	36	74	0	76	41	117	0	0	1	1	
+30 mins.	43	82	0	125	48	0	40	88	0	91	34	125	0	0	0	0	
+45 mins.	40	68	2	110	39	0	35	74	1	102	32	135	0	0	0	0	
Total Volume	181	311	3	495	159	0	158	317	1	360	144	505	1	0	1	2	
% App. Total	36.6	62.8	0.6		50.2	0	49.8		0.2	71.3	28.5		50	0	50		
PHF	.870	.894	.375	.890	.828	.000	.840	.901	.250	.882	.878	.935	.250	.000	.250	.500	

Location: Menifee
 N/S: Menifee Road
 E/W: Simpson Road



Date: 5/25/2023
 Day: Thursday

PEDESTRIANS

	North Leg Menifee Road	East Leg Simpson Road	South Leg Menifee Road	West Leg Simpson Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	1	0	0	1
7:45 AM	0	1	0	0	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	1	0	0	1
TOTAL VOLUMES:	0	3	0	0	3

	North Leg Menifee Road	East Leg Simpson Road	South Leg Menifee Road	West Leg Simpson 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	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	2	0	0	2

Location: Menifee
 N/S: Menifee Road
 E/W: Simpson Road



Date: 5/25/2023
 Day: Thursday

BICYCLES

		Southbound Menifee Road			Westbound Simpson Road			Northbound Menifee Road			Eastbound Simpson 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	1	0	0	0	0	1
	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	1	0	0	0	0	1

		Southbound Menifee Road			Westbound Simpson Road			Northbound Menifee Road			Eastbound Simpson 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	1	0	0	0	0	0	0	1
	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	1	0	0	0	0	0	0	1

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

File Name : 06_MEN_Meni_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

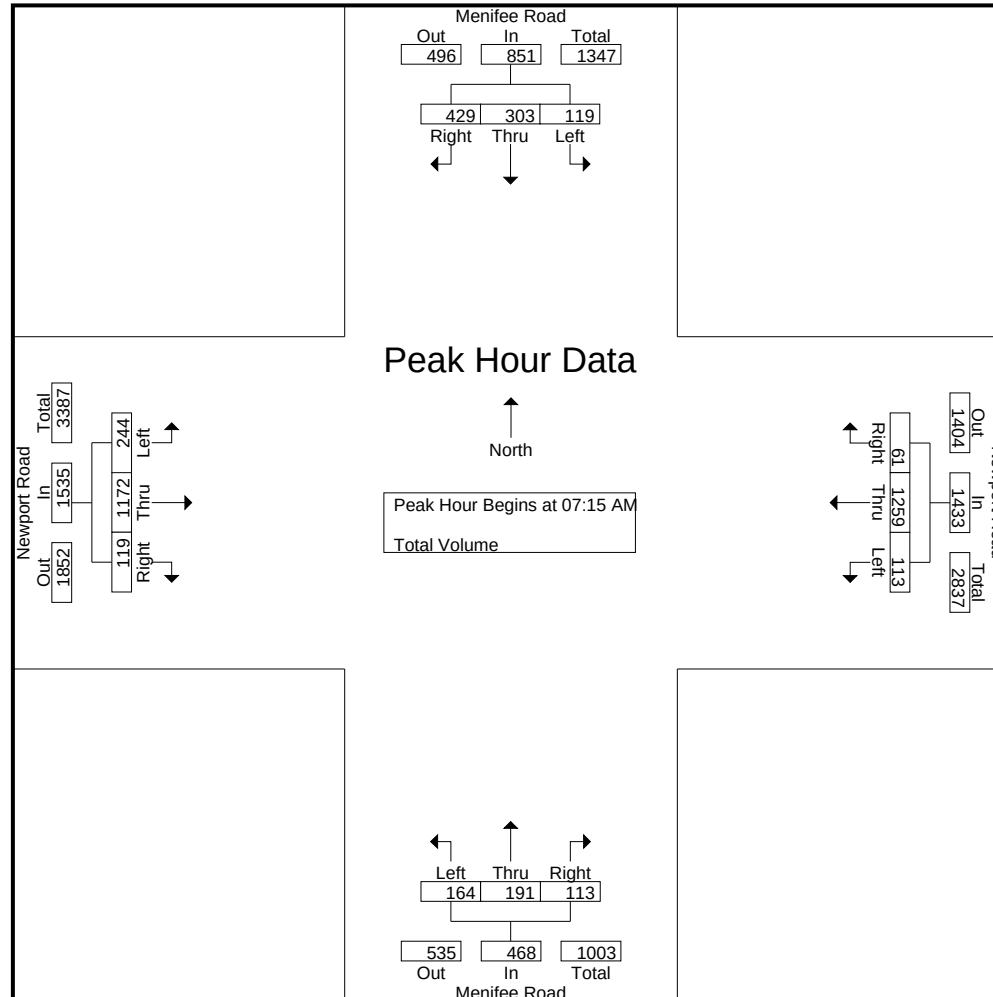
Groups Printed- Total Volume

	Menifee Road Southbound					Newport Road Westbound					Menifee Road Northbound					Newport Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	18	31	60	39	109	15	302	8	5	325	43	40	17	13	100	42	255	21	4	318	61	852	913
07:15 AM	33	66	99	54	198	24	359	14	6	397	41	50	33	25	124	62	273	23	2	358	87	1077	1164
07:30 AM	18	72	120	76	210	32	377	19	10	428	42	59	25	22	126	74	313	40	3	427	111	1191	1302
07:45 AM	44	104	115	53	263	28	281	9	1	318	42	41	31	18	114	49	317	31	1	397	73	1092	1165
Total	113	273	394	222	780	99	1319	50	22	1468	168	190	106	78	464	227	1158	115	10	1500	332	4212	4544
08:00 AM	24	61	95	52	180	29	242	19	6	290	39	41	24	16	104	59	269	25	7	353	81	927	1008
08:15 AM	20	47	90	54	157	26	286	9	3	321	58	53	27	21	138	41	276	20	3	337	81	953	1034
08:30 AM	17	38	82	39	137	16	287	5	3	308	47	38	26	21	111	57	237	24	3	318	66	874	940
08:45 AM	26	39	100	50	165	21	288	9	3	318	39	35	9	7	83	59	236	21	8	316	68	882	950
Total	87	185	367	195	639	92	1103	42	15	1237	183	167	86	65	436	216	1018	90	21	1324	296	3636	3932
Grand Total	200	458	761	417	1419	191	2422	92	37	2705	351	357	192	143	900	443	2176	205	31	2824	628	7848	8476
Apprch %	14.1	32.3	53.6			7.1	89.5	3.4			39	39.7	21.3			15.7	77.1	7.3					
Total %	2.5	5.8	9.7		18.1	2.4	30.9	1.2		34.5	4.5	4.5	2.4		11.5	5.6	27.7	2.6		36	7.4	92.6	

	Menifee Road Southbound				Newport Road Westbound				Menifee Road Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	33	66	99	198	24	359	14	397	41	50	33	124	62	273	23	358	1077
07:30 AM	18	72	120	210	32	377	19	428	42	59	25	126	74	313	40	427	1191
07:45 AM	44	104	115	263	28	281	9	318	42	41	31	114	49	317	31	397	1092
08:00 AM	24	61	95	180	29	242	19	290	39	41	24	104	59	269	25	353	927
Total Volume	119	303	429	851	113	1259	61	1433	164	191	113	468	244	1172	119	1535	4287
% App. Total	14	35.6	50.4		7.9	87.9	4.3		35	40.8	24.1		15.9	76.4	7.8		
PHF	.676	.728	.894	.809	.883	.835	.803	.837	.976	.809	.856	.929	.824	.924	.744	.899	.900

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

File Name : 06_MEN_Meni_New AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: Menifee Road
E/W: Newport Road
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File Name : 06_MEN_Meni_New AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Menifee Road Southbound				Newport Road Westbound				Menifee Road Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:00 AM				07:30 AM				07:15 AM				
+0 mins.	33	66	99	198	15	302	8	325	42	59	25	126	62	273	23	358	
+15 mins.	18	72	120	210	24	359	14	397	42	41	31	114	74	313	40	427	
+30 mins.	44	104	115	263	32	377	19	428	39	41	24	104	49	317	31	397	
+45 mins.	24	61	95	180	28	281	9	318	58	53	27	138	59	269	25	353	
Total Volume	119	303	429	851	99	1319	50	1468	181	194	107	482	244	1172	119	1535	
% App. Total	14	35.6	50.4		6.7	89.9	3.4		37.6	40.2	22.2		15.9	76.4	7.8		
PHF	.676	.728	.894	.809	.773	.875	.658	.857	.780	.822	.863	.873	.824	.924	.744	.899	

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

File Name : 06_MEN_Meni_New PM
Site Code : 05123548
Start Date : 5/25/2023
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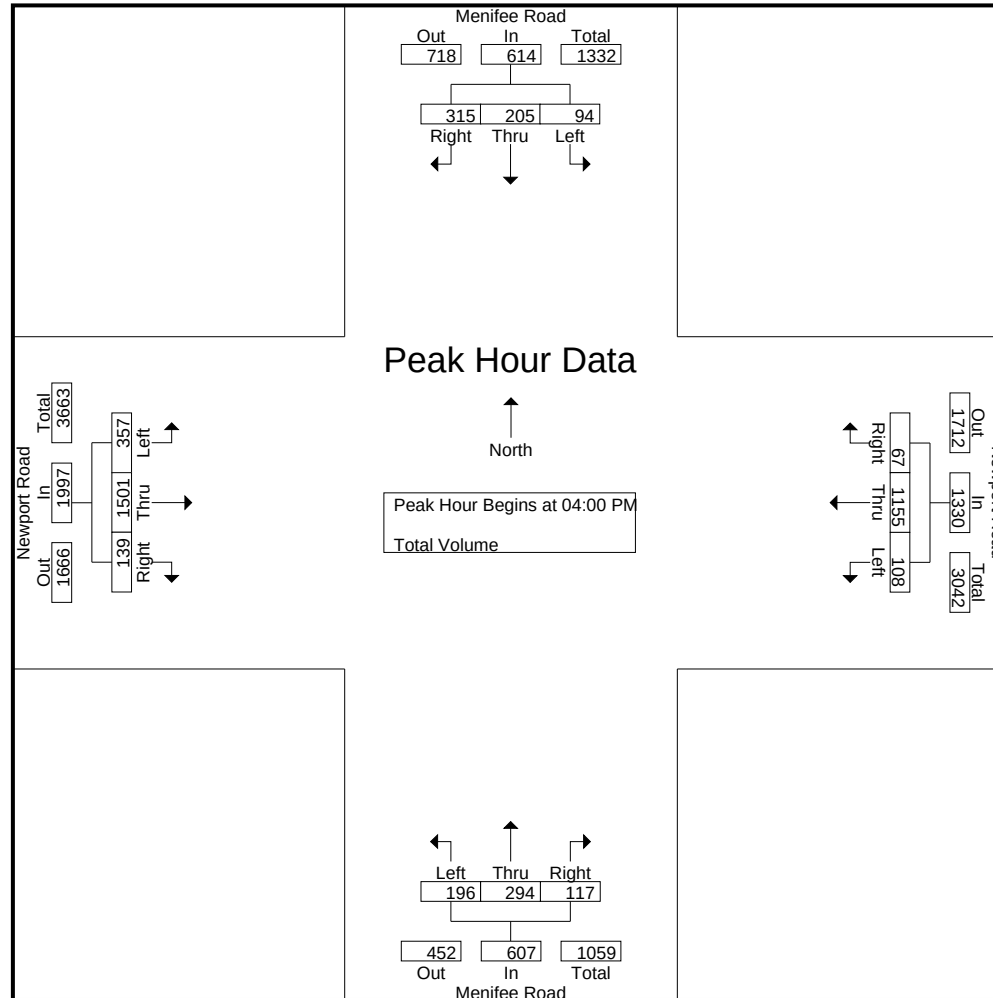
Groups Printed- Total Volume

	Menifee Road Southbound					Newport Road Westbound					Menifee Road Northbound					Newport Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	31	38	81	47	150	21	333	17	7	371	57	78	33	22	168	90	439	35	3	564	79	1253	1332
04:15 PM	21	61	83	39	165	35	253	15	9	303	38	80	28	14	146	89	353	24	2	466	64	1080	1144
04:30 PM	27	55	73	38	155	18	298	15	9	331	51	64	26	14	141	80	372	38	3	490	64	1117	1181
04:45 PM	15	51	78	45	144	34	271	20	7	325	50	72	30	14	152	98	337	42	3	477	69	1098	1167
Total	94	205	315	169	614	108	1155	67	32	1330	196	294	117	64	607	357	1501	139	11	1997	276	4548	4824
05:00 PM	28	46	80	37	154	18	268	16	5	302	41	73	32	19	146	74	389	38	2	501	63	1103	1166
05:15 PM	16	53	84	54	153	34	282	12	7	328	32	83	28	15	143	99	367	31	3	497	79	1121	1200
05:30 PM	19	46	77	45	142	23	291	14	6	328	58	67	24	15	149	83	376	33	4	492	70	1111	1181
05:45 PM	19	67	71	45	157	31	230	12	10	273	44	89	23	13	156	99	376	32	7	507	75	1093	1168
Total	82	212	312	181	606	106	1071	54	28	1231	175	312	107	62	594	355	1508	134	16	1997	287	4428	4715
Grand Total	176	417	627	350	1220	214	2226	121	60	2561	371	606	224	126	1201	712	3009	273	27	3994	563	8976	9539
Apprch %	14.4	34.2	51.4			8.4	86.9	4.7			30.9	50.5	18.7			17.8	75.3	6.8					
Total %	2	4.6	7		13.6	2.4	24.8	1.3		28.5	4.1	6.8	2.5		13.4	7.9	33.5	3		44.5	5.9	94.1	

	Menifee Road Southbound				Newport Road Westbound				Menifee Road Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	31	38	81	150	21	333	17	371	57	78	33	168	90	439	35	564	1253
04:15 PM	21	61	83	165	35	253	15	303	38	80	28	146	89	353	24	466	1080
04:30 PM	27	55	73	155	18	298	15	331	51	64	26	141	80	372	38	490	1117
04:45 PM	15	51	78	144	34	271	20	325	50	72	30	152	98	337	42	477	1098
Total Volume	94	205	315	614	108	1155	67	1330	196	294	117	607	357	1501	139	1997	4548
% App. Total	15.3	33.4	51.3		8.1	86.8	5		32.3	48.4	19.3		17.9	75.2	7		
PHF	.758	.840	.949	.930	.771	.867	.838	.896	.860	.919	.886	.903	.911	.855	.827	.885	.907

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

File Name : 06_MEN_Meni_New PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: Menifee Road
E/W: Newport Road
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File Name : 06_MEN_Meni_New PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Menifee Road Southbound				Newport Road Westbound				Menifee Road Northbound				Newport Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	21	61	83	165	21	333	17	371	57	78	33	168	90	439	35	564	
+15 mins.	27	55	73	155	35	253	15	303	38	80	28	146	89	353	24	466	
+30 mins.	15	51	78	144	18	298	15	331	51	64	26	141	80	372	38	490	
+45 mins.	28	46	80	154	34	271	20	325	50	72	30	152	98	337	42	477	
Total Volume	91	213	314	618	108	1155	67	1330	196	294	117	607	357	1501	139	1997	
% App. Total	14.7	34.5	50.8		8.1	86.8	5		32.3	48.4	19.3		17.9	75.2	7		
PHF	.813	.873	.946	.936	.771	.867	.838	.896	.860	.919	.886	.903	.911	.855	.827	.885	

Location: Menifee
 N/S: Menifee Road
 E/W: Newport Road



Date: 5/25/2023
 Day: Thursday

PEDESTRIANS

		North Leg Menifee Road	East Leg Newport Road	South Leg Menifee Road	West Leg Newport Road	
		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	2	1	1	4
	8:00 AM	0	0	0	1	1
	8:15 AM	0	0	0	0	0
	8:30 AM	1	2	0	1	4
	8:45 AM	1	1	1	0	3
	TOTAL VOLUMES:	2	5	2	3	12

		North Leg Menifee Road	East Leg Newport Road	South Leg Menifee Road	West Leg Newport 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	1	0	2
	4:45 PM	1	0	0	1	2
	5:00 PM	0	2	0	0	2
	5:15 PM	0	0	1	1	2
	5:30 PM	0	0	0	1	1
	5:45 PM	0	0	0	0	0
	TOTAL VOLUMES:	1	4	2	3	10

Location: Menifee
 N/S: Menifee Road
 E/W: Newport Road



Date: 5/25/2023
 Day: Thursday

BICYCLES

	Southbound Menifee Road			Westbound Newport Road			Northbound Menifee Road			Eastbound Newport 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	1	0	0	0	0	0	1	0	0	0	0	2
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	1	0	0	1	1	0	1	0	0	0	0	4

	Southbound Menifee Road			Westbound Newport Road			Northbound Menifee Road			Eastbound Newport Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	4	0	0	0	0	4
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1	0	0	5	0	0	2	0	9

City of Menifee
N/S: Lindenberg Road
E/W: Simpson Road
Weather: Clear

File Name : 07_MEN_Lind_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

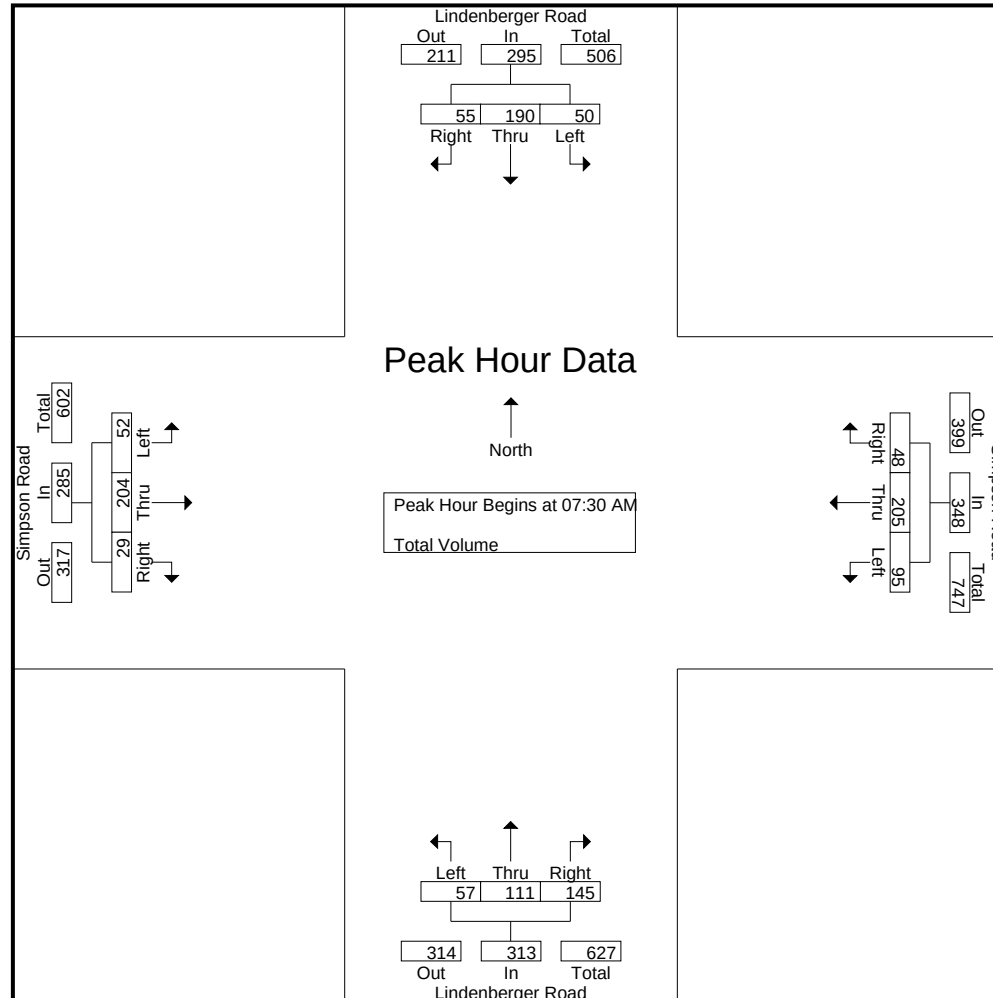
Groups Printed- Total Volume

	Lindenberg Road Southbound					Simpson Road Westbound					Lindenberg Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	7	16	6	2	29	11	32	3	1	46	6	7	12	4	25	1	47	8	3	56	10	156	166
07:15 AM	8	20	9	3	37	17	53	5	2	75	7	15	16	5	38	6	27	9	3	42	13	192	205
07:30 AM	5	44	8	6	57	32	57	7	5	96	6	40	31	10	77	7	54	3	3	64	24	294	318
07:45 AM	20	64	18	8	102	16	47	23	14	86	15	26	31	5	72	11	47	8	6	66	33	326	359
Total	40	144	41	19	225	76	189	38	22	303	34	88	90	24	212	25	175	28	15	228	80	968	1048
08:00 AM	19	54	22	11	95	31	45	13	6	89	15	24	45	17	84	33	56	5	1	94	35	362	397
08:15 AM	6	28	7	3	41	16	56	5	1	77	21	21	38	21	80	1	47	13	8	61	33	259	292
08:30 AM	3	19	5	3	27	34	48	3	2	85	10	23	19	7	52	8	37	10	8	55	20	219	239
08:45 AM	5	16	8	4	29	15	63	2	0	80	8	10	23	8	41	4	29	11	6	44	18	194	212
Total	33	117	42	21	192	96	212	23	9	331	54	78	125	53	257	46	169	39	23	254	106	1034	1140
Grand Total	73	261	83	40	417	172	401	61	31	634	88	166	215	77	469	71	344	67	38	482	186	2002	2188
Apprch %	17.5	62.6	19.9			27.1	63.2	9.6			18.8	35.4	45.8			14.7	71.4	13.9					
Total %	3.6	13	4.1		20.8	8.6	20	3		31.7	4.4	8.3	10.7		23.4	3.5	17.2	3.3		24.1	8.5	91.5	

	Lindenberg Road Southbound				Simpson Road Westbound				Lindenberg Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	5	44	8	57	32	57	7	96	6	40	31	77	7	54	3	64	294
07:45 AM	20	64	18	102	16	47	23	86	15	26	31	72	11	47	8	66	326
08:00 AM	19	54	22	95	31	45	13	89	15	24	45	84	33	56	5	94	362
08:15 AM	6	28	7	41	16	56	5	77	21	21	38	80	1	47	13	61	259
Total Volume	50	190	55	295	95	205	48	348	57	111	145	313	52	204	29	285	1241
% App. Total	16.9	64.4	18.6		27.3	58.9	13.8		18.2	35.5	46.3		18.2	71.6	10.2		
PHF	.625	.742	.625	.723	.742	.899	.522	.906	.679	.694	.806	.932	.394	.911	.558	.758	.857

City of Menifee
 N/S: Lindenberg Road
 E/W: Simpson Road
 Weather: Clear

File Name : 07_MEN_Lind_Simpson AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: Lindenberg Road
E/W: Simpson Road
Weather: Clear

File Name : 07_MEN_Lind_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Lindenberg Road Southbound				Simpson Road Westbound				Lindenberg Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	5	44	8	57	32	57	7	96	6	40	31	77	7	54	3	64	
+15 mins.	20	64	18	102	16	47	23	86	15	26	31	72	11	47	8	66	
+30 mins.	19	54	22	95	31	45	13	89	15	24	45	84	33	56	5	94	
+45 mins.	6	28	7	41	16	56	5	77	21	21	38	80	1	47	13	61	
Total Volume	50	190	55	295	95	205	48	348	57	111	145	313	52	204	29	285	
% App. Total	16.9	64.4	18.6		27.3	58.9	13.8		18.2	35.5	46.3		18.2	71.6	10.2		
PHF	.625	.742	.625	.723	.742	.899	.522	.906	.679	.694	.806	.932	.394	.911	.558	.758	

City of Menifee
N/S: Lindenberg Road
E/W: Simpson Road
Weather: Clear

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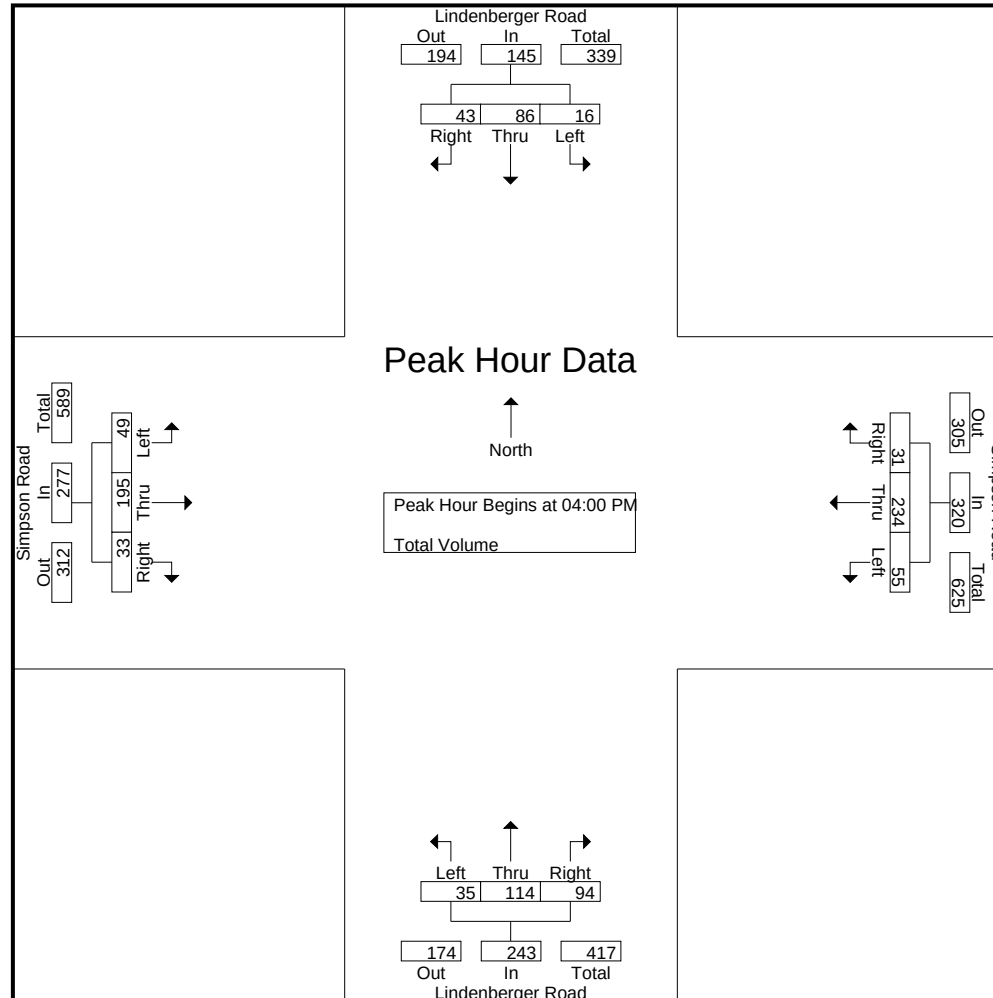
Groups Printed- Total Volume

	Lindenberg Road Southbound					Simpson Road Westbound					Lindenberg Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	5	32	11	6	48	17	56	9	4	82	13	42	21	5	76	15	53	8	4	76	19	282	301
04:15 PM	5	14	10	2	29	12	58	7	0	77	6	20	25	11	51	10	52	8	2	70	15	227	242
04:30 PM	6	19	13	5	38	17	65	6	1	88	8	26	23	9	57	13	47	6	2	66	17	249	266
04:45 PM	0	21	9	7	30	9	55	9	1	73	8	26	25	12	59	11	43	11	5	65	25	227	252
Total	16	86	43	20	145	55	234	31	6	320	35	114	94	37	243	49	195	33	13	277	76	985	1061
05:00 PM	6	24	4	2	34	11	58	4	2	73	4	24	24	6	52	11	53	9	1	73	11	232	243
05:15 PM	6	21	10	7	37	15	53	5	2	73	3	25	16	5	44	10	55	7	4	72	18	226	244
05:30 PM	3	24	10	7	37	17	42	7	4	66	10	23	26	15	59	16	47	10	2	73	28	235	263
05:45 PM	4	18	6	4	28	16	37	9	2	62	12	14	25	13	51	10	44	11	3	65	22	206	228
Total	19	87	30	20	136	59	190	25	10	274	29	86	91	39	206	47	199	37	10	283	79	899	978
Grand Total	35	173	73	40	281	114	424	56	16	594	64	200	185	76	449	96	394	70	23	560	155	1884	2039
Apprch %	12.5	61.6	26			19.2	71.4	9.4			14.3	44.5	41.2			17.1	70.4	12.5					
Total %	1.9	9.2	3.9		14.9	6.1	22.5	3		31.5	3.4	10.6	9.8		23.8	5.1	20.9	3.7		29.7	7.6	92.4	

	Lindenberg Road Southbound				Simpson Road Westbound				Lindenberg Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	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 04:00 PM																	
04:00 PM	5	32	11	48	17	56	9	82	13	42	21	76	15	53	8	76	282
04:15 PM	5	14	10	29	12	58	7	77	6	20	25	51	10	52	8	70	227
04:30 PM	6	19	13	38	17	65	6	88	8	26	23	57	13	47	6	66	249
04:45 PM	0	21	9	30	9	55	9	73	8	26	25	59	11	43	11	65	227
Total Volume	16	86	43	145	55	234	31	320	35	114	94	243	49	195	33	277	985
% App. Total	11	59.3	29.7		17.2	73.1	9.7		14.4	46.9	38.7		17.7	70.4	11.9		
PHF	.667	.672	.827	.755	.809	.900	.861	.909	.673	.679	.940	.799	.817	.920	.750	.911	.873

City of Menifee
 N/S: Lindenberg Road
 E/W: Simpson Road
 Weather: Clear

File Name : 07_MEN_Lind_Simpson PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



City of Menifee
N/S: Lindenberg Road
E/W: Simpson Road
Weather: Clear

File Name : 07_MEN_Lind_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Lindenberg Road Southbound				Simpson Road Westbound				Lindenberg Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:45 PM				
+0 mins.	5	32	11	48	17	56	9	82	13	42	21	76	11	43	11	65	
+15 mins.	5	14	10	29	12	58	7	77	6	20	25	51	11	53	9	73	
+30 mins.	6	19	13	38	17	65	6	88	8	26	23	57	10	55	7	72	
+45 mins.	0	21	9	30	9	55	9	73	8	26	25	59	16	47	10	73	
Total Volume	16	86	43	145	55	234	31	320	35	114	94	243	48	198	37	283	
% App. Total	11	59.3	29.7		17.2	73.1	9.7		14.4	46.9	38.7		17	70	13.1		
PHF	.667	.672	.827	.755	.809	.900	.861	.909	.673	.679	.940	.799	.750	.900	.841	.969	

Location: Menifee
 N/S: Lindenberg Road
 E/W: Simpson Road



Date: 5/25/2023
 Day: Thursday

PEDESTRIANS

		North Leg Lindenberg Road Pedestrians	East Leg Simpson Road Pedestrians	South Leg Lindenberg Road Pedestrians	West Leg Simpson Road Pedestrians	
	7:00 AM	1	0	0	0	1
	7:15 AM	0	0	0	0	0
	7:30 AM	0	0	0	0	0
	7:45 AM	0	0	0	1	1
	8:00 AM	0	0	0	1	1
	8:15 AM	0	0	0	0	0
	8:30 AM	0	0	0	0	0
	8:45 AM	1	0	0	0	1
	TOTAL VOLUMES:	2	0	0	2	4

		North Leg Lindenberg Road Pedestrians	East Leg Simpson Road Pedestrians	South Leg Lindenberg Road Pedestrians	West Leg Simpson Road Pedestrians	
	4:00 PM	0	0	0	1	1
	4:15 PM	0	0	0	2	2
	4:30 PM	0	0	0	1	1
	4:45 PM	0	0	0	0	0
	5:00 PM	0	0	0	0	0
	5:15 PM	2	0	0	0	2
	5:30 PM	0	0	0	0	0
	5:45 PM	0	0	0	0	0
	TOTAL VOLUMES:	2	0	0	4	6

Location: Menifee
 N/S: Lindenberger Road
 E/W: Simpson Road



Date: 5/25/2023
 Day: Thursday

BICYCLES

	Southbound Lindenberger Road			Westbound Simpson Road			Northbound Lindenberger Road			Eastbound Simpson 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	2	0	0	0	0	2
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	1	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	0	3	0	0	0	0	3

	Southbound Lindenberger Road			Westbound Simpson Road			Northbound Lindenberger Road			Eastbound Simpson 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	1	0	0	0	0	0	4	0	0	0	0	5
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	4	0	0	0	0	5

City of Menifee
N/S: Briggs Road
E/W: McCall Boulevard
Weather: Clear

File Name : 09_MEN_Brig_McC AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

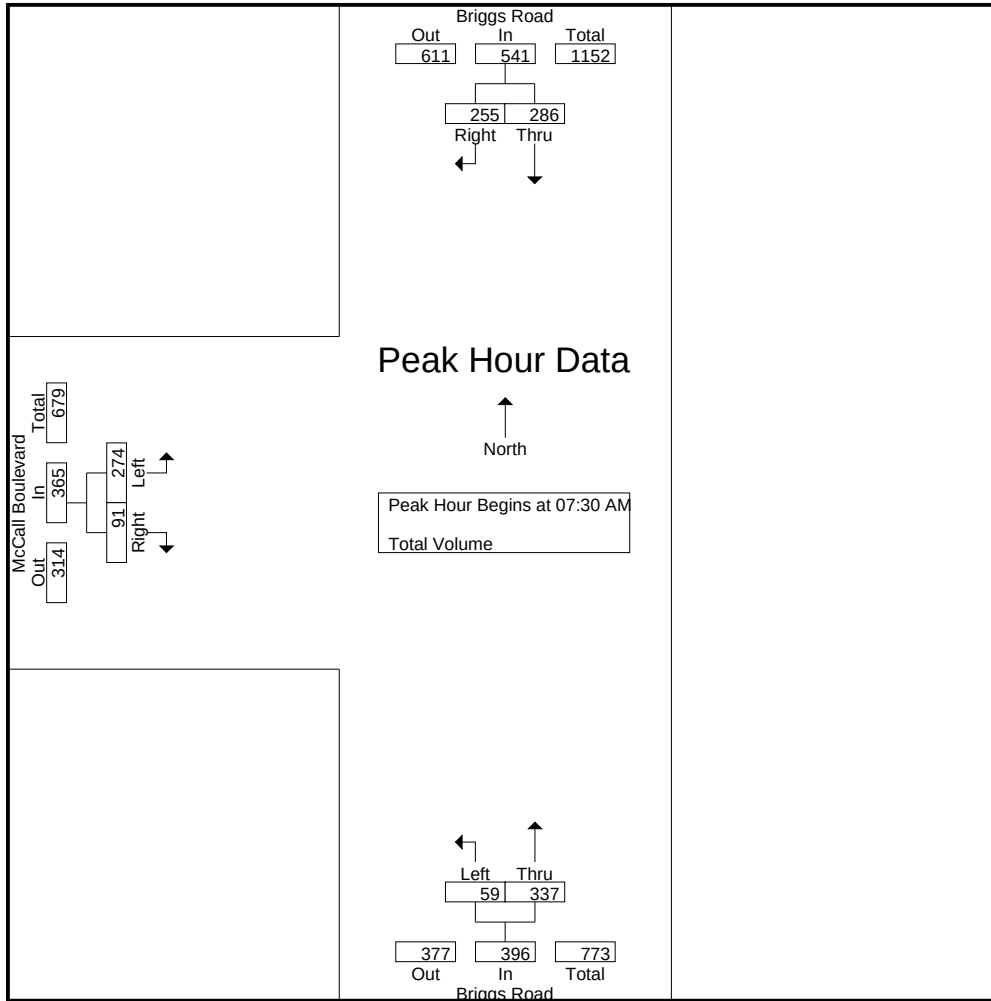
Groups Printed- Total Volume

	Briggs Road Southbound				Briggs Road Northbound				McCall Boulevard Eastbound						
Start Time	Thru	Right	RTOR	App. Total	Left	Thru	RTOR	App. Total	Left	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	16	18	4	34	7	10	0	17	13	8	2	21	6	72	78
07:15 AM	32	43	10	75	16	13	0	29	26	4	1	30	11	134	145
07:30 AM	78	77	27	155	21	53	0	74	47	36	21	83	48	312	360
07:45 AM	96	51	17	147	13	93	0	106	66	32	19	98	36	351	387
Total	222	189	58	411	57	169	0	226	152	80	43	232	101	869	970
08:00 AM	63	55	23	118	14	120	0	134	100	11	8	111	31	363	394
08:15 AM	49	72	16	121	11	71	0	82	61	12	8	73	24	276	300
08:30 AM	55	52	11	107	2	25	0	27	30	3	1	33	12	167	179
08:45 AM	21	25	8	46	6	24	0	30	20	5	1	25	9	101	110
Total	188	204	58	392	33	240	0	273	211	31	18	242	76	907	983
Grand Total	410	393	116	803	90	409	0	499	363	111	61	474	177	1776	1953
Apprch %	51.1	48.9			18	82			76.6	23.4					
Total %	23.1	22.1		45.2	5.1	23		28.1	20.4	6.2		26.7	9.1	90.9	

	Briggs Road Southbound			Briggs Road Northbound			McCall Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	78	77	155	21	53	74	47	36	83	312
07:45 AM	96	51	147	13	93	106	66	32	98	351
08:00 AM	63	55	118	14	120	134	100	11	111	363
08:15 AM	49	72	121	11	71	82	61	12	73	276
Total Volume	286	255	541	59	337	396	274	91	365	1302
% App. Total	52.9	47.1		14.9	85.1		75.1	24.9		
PHF	.745	.828	.873	.702	.702	.739	.685	.632	.822	.897

City of Menifee
N/S: Briggs Road
E/W: McCall Boulevard
Weather: Clear

File Name : 09_MEN_Brig_McC AM
Site Code : 05123548
Start Date : 5/25/2023
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			07:30 AM			07:30 AM		
+0 mins.	78	77	155	21	53	74	47	36	83
+15 mins.	96	51	147	13	93	106	66	32	98
+30 mins.	63	55	118	14	120	134	100	11	111
+45 mins.	49	72	121	11	71	82	61	12	73
Total Volume	286	255	541	59	337	396	274	91	365
% App. Total	52.9	47.1		14.9	85.1		75.1	24.9	
PHF	.745	.828	.873	.702	.702	.739	.685	.632	.822

City of Menifee
N/S: Briggs Road
E/W: McCall Boulevard
Weather: Clear

File Name : 09_MEN_Brig_McC PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

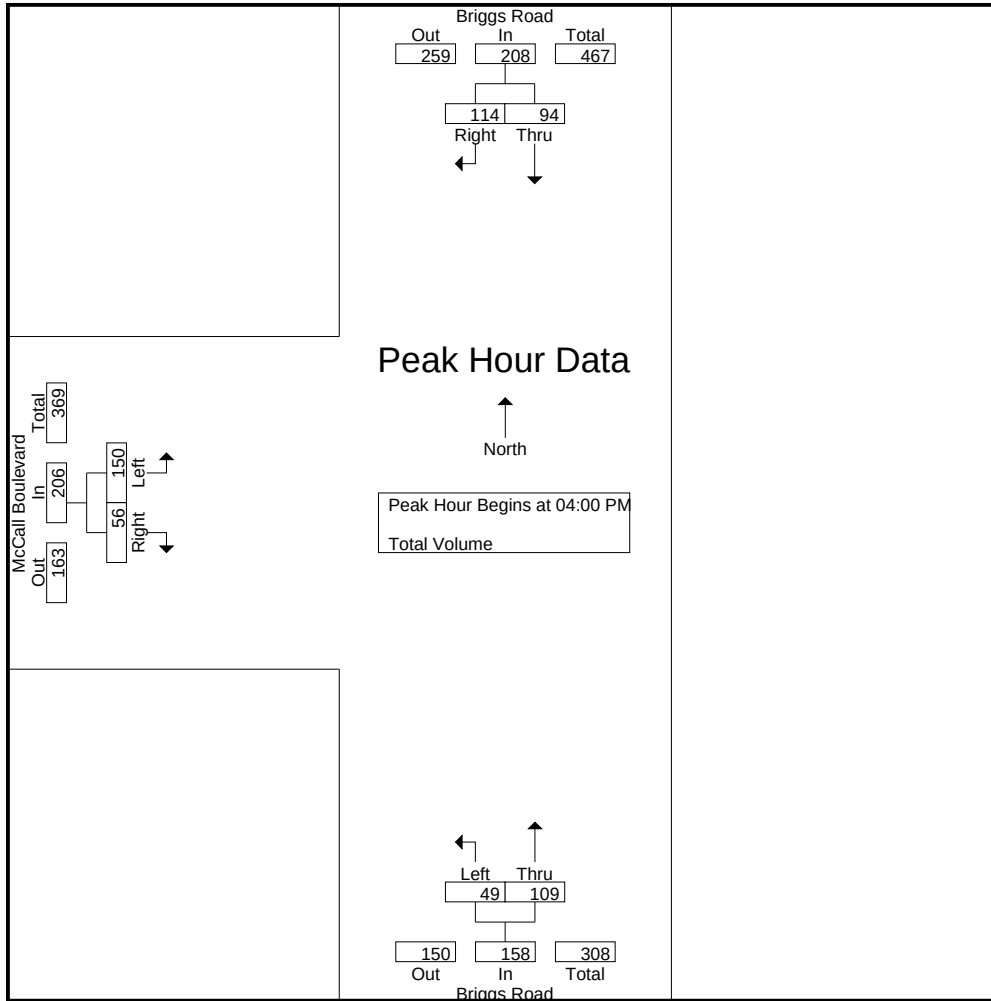
Groups Printed- Total Volume

	Briggs Road Southbound			Briggs Road Northbound			McCall Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	24	34	58	16	28	44	47	16	63	165
04:15 PM	23	29	52	9	28	37	38	11	49	138
04:30 PM	25	25	50	11	32	43	33	15	48	141
04:45 PM	22	26	48	13	21	34	32	14	46	128
Total	94	114	208	49	109	158	150	56	206	572
05:00 PM	27	16	43	15	24	39	38	14	52	134
05:15 PM	18	20	38	9	30	39	35	14	49	126
05:30 PM	27	17	44	9	26	35	38	8	46	125
05:45 PM	17	23	40	4	26	30	32	12	44	114
Total	89	76	165	37	106	143	143	48	191	499
Grand Total	183	190	373	86	215	301	293	104	397	1071
Apprch %	49.1	50.9		28.6	71.4		73.8	26.2		
Total %	17.1	17.7	34.8	8	20.1	28.1	27.4	9.7	37.1	

	Briggs Road Southbound			Briggs Road Northbound			McCall Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	24	34	58	16	28	44	47	16	63	165
04:15 PM	23	29	52	9	28	37	38	11	49	138
04:30 PM	25	25	50	11	32	43	33	15	48	141
04:45 PM	22	26	48	13	21	34	32	14	46	128
Total Volume	94	114	208	49	109	158	150	56	206	572
% App. Total	45.2	54.8		31	69		72.8	27.2		
PHF	.940	.838	.897	.766	.852	.898	.798	.875	.817	.867

City of Menifee
N/S: Briggs Road
E/W: McCall Boulevard
Weather: Clear

File Name : 09_MEN_Brig_McC PM
Site Code : 05123548
Start Date : 5/25/2023
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			04:00 PM			04:00 PM		
+0 mins.	24	34	58	16	28	44	47	16	63
+15 mins.	23	29	52	9	28	37	38	11	49
+30 mins.	25	25	50	11	32	43	33	15	48
+45 mins.	22	26	48	13	21	34	32	14	46
Total Volume	94	114	208	49	109	158	150	56	206
% App. Total	45.2	54.8		31	69		72.8	27.2	
PHF	.940	.838	.897	.766	.852	.898	.798	.875	.817

Location: Menifee
 N/S: Briggs Road
 E/W: McCall Boulevard



Date: 5/25/2023
 Day: Thursday

PEDESTRIANS

		North Leg Briggs Road	East Leg McCall Boulevard	South Leg Briggs Road	West Leg McCall Boulevard	
		Pedestrians	Pedestrians	Pedestrians	Pedestrians	
	7:00 AM	0	0	0	0	0
	7:15 AM	0	0	0	0	0
	7:30 AM	1	0	0	1	2
	7:45 AM	0	0	0	1	1
	8:00 AM	1	0	0	0	1
	8:15 AM	0	0	0	0	0
	8:30 AM	0	0	0	0	0
	8:45 AM	0	0	0	1	1
	TOTAL VOLUMES:	2	0	0	3	5

		North Leg Briggs Road	East Leg McCall Boulevard	South Leg Briggs Road	West Leg McCall Boulevard	
		Pedestrians	Pedestrians	Pedestrians	Pedestrians	
	4:00 PM	0	0	0	5	5
	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	5	5

Location: Menifee
 N/S: Briggs Road
 E/W: McCall Boulevard



Date: 5/25/2023
 Day: Thursday

BICYCLES

	Southbound Briggs Road			Westbound McCall Boulevard			Northbound Briggs Road			Eastbound McCall Boulevard			
	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	1	0	0	0	0	0	1	0	1	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	1	0	0	0	0	0	0	0	1	0	0	2
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	3	0	0	0	0	0	1	0	2	0	0	6

	Southbound Briggs Road			Westbound McCall Boulevard			Northbound Briggs Road			Eastbound McCall Boulevard			
	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	1	0	0	0	0	1
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	1	0	0	0	0	1

City of Menifee
N/S: Briggs Road
E/W: Simpson Road
Weather: Clear

File Name : 10_MEN_Brig_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

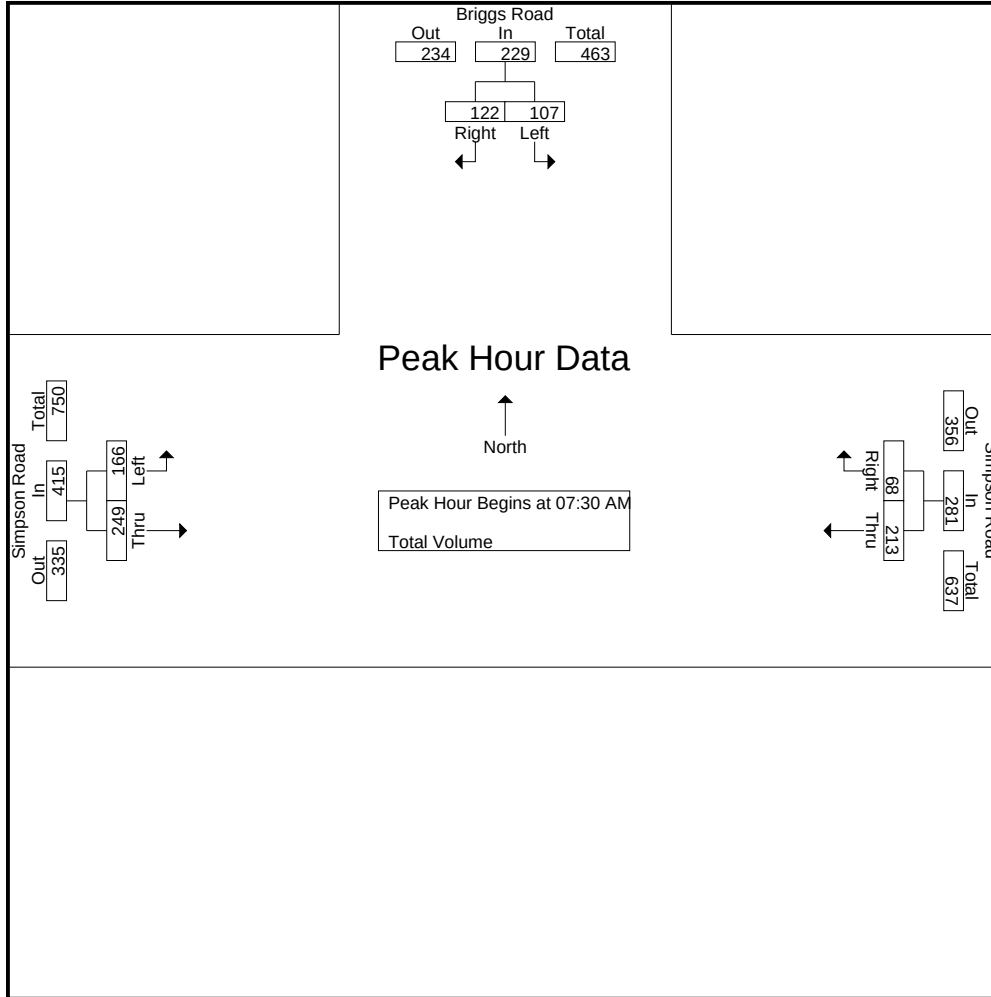
Groups Printed- Total Volume

	Briggs Road Southbound			Simpson Road Westbound			Simpson Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	14	12	26	50	16	66	5	58	63	155
07:15 AM	14	16	30	61	15	76	12	54	66	172
07:30 AM	30	29	59	62	29	91	22	70	92	242
07:45 AM	28	34	62	63	12	75	43	67	110	247
Total	86	91	177	236	72	308	82	249	331	816
08:00 AM	24	26	50	49	11	60	64	58	122	232
08:15 AM	25	33	58	39	16	55	37	54	91	204
08:30 AM	10	49	59	52	7	59	17	39	56	174
08:45 AM	9	10	19	50	7	57	23	41	64	140
Total	68	118	186	190	41	231	141	192	333	750
Grand Total	154	209	363	426	113	539	223	441	664	1566
Apprch %	42.4	57.6		79	21		33.6	66.4		
Total %	9.8	13.3	23.2	27.2	7.2	34.4	14.2	28.2	42.4	

	Briggs Road Southbound			Simpson Road Westbound			Simpson Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	30	29	59	62	29	91	22	70	92	242
07:45 AM	28	34	62	63	12	75	43	67	110	247
08:00 AM	24	26	50	49	11	60	64	58	122	232
08:15 AM	25	33	58	39	16	55	37	54	91	204
Total Volume	107	122	229	213	68	281	166	249	415	925
% App. Total	46.7	53.3		75.8	24.2		40	60		
PHF	.892	.897	.923	.845	.586	.772	.648	.889	.850	.936

City of Menifee
N/S: Briggs Road
E/W: Simpson Road
Weather: Clear

File Name : 10_MEN_Brig_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
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			07:30 AM		
+0 mins.	30	29	59	50	16	66	22	70	92
+15 mins.	28	34	62	61	15	76	43	67	110
+30 mins.	24	26	50	62	29	91	64	58	122
+45 mins.	25	33	58	63	12	75	37	54	91
Total Volume	107	122	229	236	72	308	166	249	415
% App. Total	46.7	53.3		76.6	23.4		40	60	
PHF	.892	.897	.923	.937	.621	.846	.648	.889	.850

City of Menifee
N/S: Briggs Road
E/W: Simpson Road
Weather: Clear

File Name : 10_MEN_Brig_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

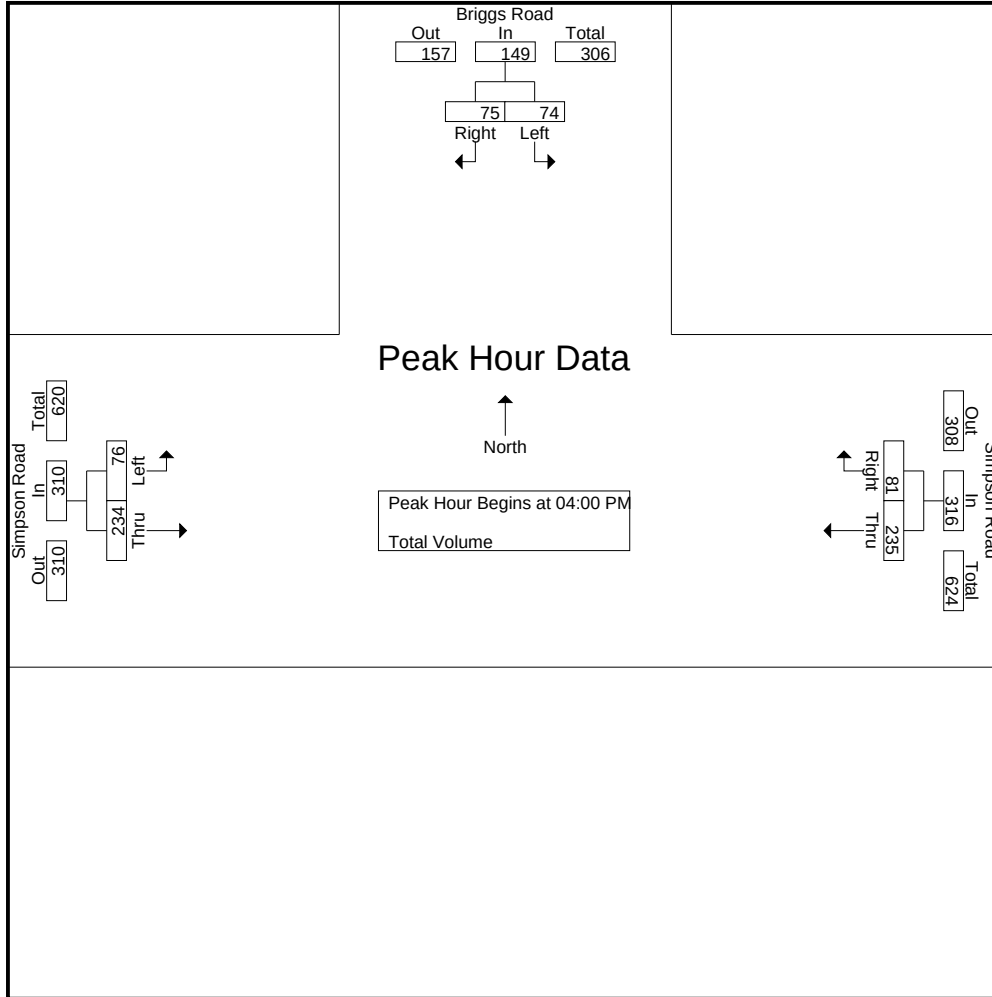
Groups Printed- Total Volume

	Briggs Road Southbound			Simpson Road Westbound			Simpson Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	18	19	37	57	27	84	18	70	88	209
04:15 PM	17	20	37	62	15	77	23	59	82	196
04:30 PM	20	18	38	64	22	86	20	51	71	195
04:45 PM	19	18	37	52	17	69	15	54	69	175
Total	74	75	149	235	81	316	76	234	310	775
05:00 PM	21	22	43	56	16	72	20	65	85	200
05:15 PM	20	11	31	53	20	73	25	58	83	187
05:30 PM	14	21	35	44	18	62	23	52	75	172
05:45 PM	10	16	26	46	11	57	21	48	69	152
Total	65	70	135	199	65	264	89	223	312	711
Grand Total	139	145	284	434	146	580	165	457	622	1486
Apprch %	48.9	51.1		74.8	25.2		26.5	73.5		
Total %	9.4	9.8	19.1	29.2	9.8	39	11.1	30.8	41.9	

	Briggs Road Southbound			Simpson Road Westbound			Simpson Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	18	19	37	57	27	84	18	70	88	209
04:15 PM	17	20	37	62	15	77	23	59	82	196
04:30 PM	20	18	38	64	22	86	20	51	71	195
04:45 PM	19	18	37	52	17	69	15	54	69	175
Total Volume	74	75	149	235	81	316	76	234	310	775
% App. Total	49.7	50.3		74.4	25.6		24.5	75.5		
PHF	.925	.938	.980	.918	.750	.919	.826	.836	.881	.927

City of Menifee
N/S: Briggs Road
E/W: Simpson Road
Weather: Clear

File Name : 10_MEN_Brig_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
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.	17	20	37	57	27	84	15	54	69
+15 mins.	20	18	38	62	15	77	20	65	85
+30 mins.	19	18	37	64	22	86	25	58	83
+45 mins.	21	22	43	52	17	69	23	52	75
Total Volume	77	78	155	235	81	316	83	229	312
% App. Total	49.7	50.3		74.4	25.6		26.6	73.4	
PHF	.917	.886	.901	.918	.750	.919	.830	.881	.918

Location: Menifee
 N/S: Briggs Road
 E/W: Simpson Road



Date: 5/25/2023
 Day: Thursday

PEDESTRIANS

		North Leg Briggs Road	East Leg Simpson Road	South Leg Briggs Road	West Leg Simpson Road	
		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 Briggs Road	East Leg Simpson Road	South Leg Briggs Road	West Leg Simpson 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	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: Briggs Road
 E/W: Simpson Road



Date: 5/25/2023
 Day: Thursday

BICYCLES

		Southbound Briggs Road			Westbound Simpson Road			Northbound Briggs Road			Eastbound Simpson 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 Briggs Road			Westbound Simpson Road			Northbound Briggs Road			Eastbound Simpson 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

County of Riverside
N/S: Leon Road
E/W: Simpson Road
Weather: Clear

File Name : 11_CRV_Leon_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

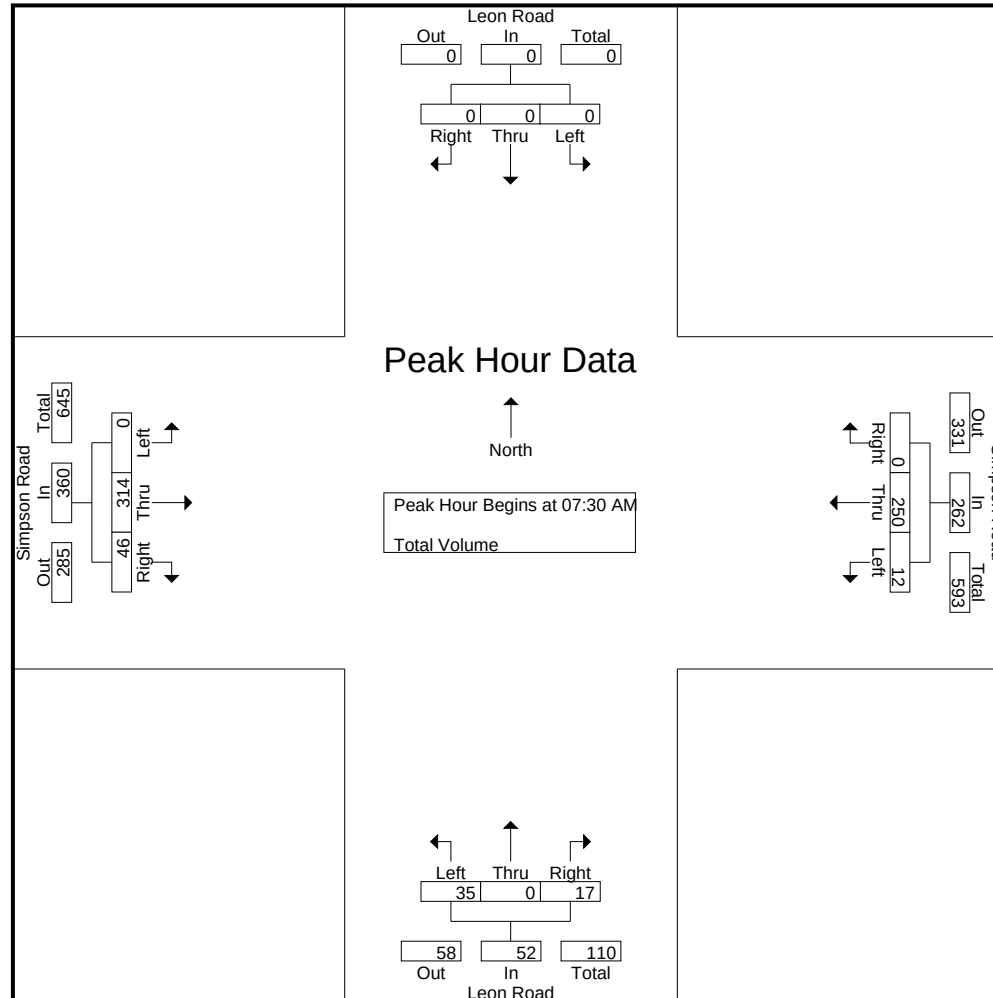
Groups Printed- Total Volume

	Leon Road Southbound					Simpson Road Westbound					Leon Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	10	53	0	0	63	10	0	11	0	21	0	59	15	0	74	0	158	158
07:15 AM	1	0	0	0	1	3	62	0	0	65	7	0	3	0	10	0	52	8	0	60	0	136	136
07:30 AM	0	0	0	0	0	3	80	0	0	83	10	0	4	0	14	0	83	17	0	100	0	197	197
07:45 AM	0	0	0	0	0	3	68	0	0	71	6	0	4	0	10	0	87	7	0	94	0	175	175
Total	1	0	0	0	1	19	263	0	0	282	33	0	22	0	55	0	281	47	0	328	0	666	666
08:00 AM	0	0	0	0	0	3	56	0	0	59	8	0	3	0	11	0	72	15	0	87	0	157	157
08:15 AM	0	0	0	0	0	3	46	0	0	49	11	0	6	0	17	0	72	7	0	79	0	145	145
08:30 AM	0	0	0	0	0	3	51	0	0	54	6	0	5	0	11	0	44	10	0	54	0	119	119
08:45 AM	0	0	1	0	1	4	54	0	0	58	9	0	2	0	11	0	41	7	0	48	0	118	118
Total	0	0	1	0	1	13	207	0	0	220	34	0	16	0	50	0	229	39	0	268	0	539	539
Grand Total	1	0	1	0	2	32	470	0	0	502	67	0	38	0	105	0	510	86	0	596	0	1205	1205
Apprch %	50	0	50			6.4	93.6	0			63.8	0	36.2			0	85.6	14.4			0	1205	1205
Total %	0.1	0	0.1		0.2	2.7	39	0		41.7	5.6	0	3.2		8.7	0	42.3	7.1		49.5	0	100	

	Leon Road Southbound				Simpson Road Westbound				Leon Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	3	80	0	83	10	0	4	14	0	83	17	100	197
07:45 AM	0	0	0	0	3	68	0	71	6	0	4	10	0	87	7	94	175
08:00 AM	0	0	0	0	3	56	0	59	8	0	3	11	0	72	15	87	157
08:15 AM	0	0	0	0	3	46	0	49	11	0	6	17	0	72	7	79	145
Total Volume	0	0	0	0	12	250	0	262	35	0	17	52	0	314	46	360	674
% App. Total	0	0	0	0	4.6	95.4	0		67.3	0	32.7		0	87.2	12.8		
PHF	.000	.000	.000	.000	1.00	.781	.000	.789	.795	.000	.708	.765	.000	.902	.676	.900	.855

County of Riverside
 N/S: Leon Road
 E/W: Simpson Road
 Weather: Clear

File Name : 11_CRV_Leon_Simpson AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



County of Riverside
N/S: Leon Road
E/W: Simpson Road
Weather: Clear

File Name : 11_CRV_Leon_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Leon Road Southbound				Simpson Road Westbound				Leon Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:30 AM				
+0 mins.	0	0	0	0	10	53	0	63	10	0	11	21	0	83	17	100	
+15 mins.	1	0	0	1	3	62	0	65	7	0	3	10	0	87	7	94	
+30 mins.	0	0	0	0	3	80	0	83	10	0	4	14	0	72	15	87	
+45 mins.	0	0	0	0	3	68	0	71	6	0	4	10	0	72	7	79	
Total Volume	1	0	0	1	19	263	0	282	33	0	22	55	0	314	46	360	
% App. Total	100	0	0		6.7	93.3	0		60	0	40		0	87.2	12.8		
PHF	.250	.000	.000	.250	.475	.822	.000	.849	.825	.000	.500	.655	.000	.902	.676	.900	

County of Riverside
N/S: Leon Road
E/W: Simpson Road
Weather: Clear

File Name : 11_CRV_Leon_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

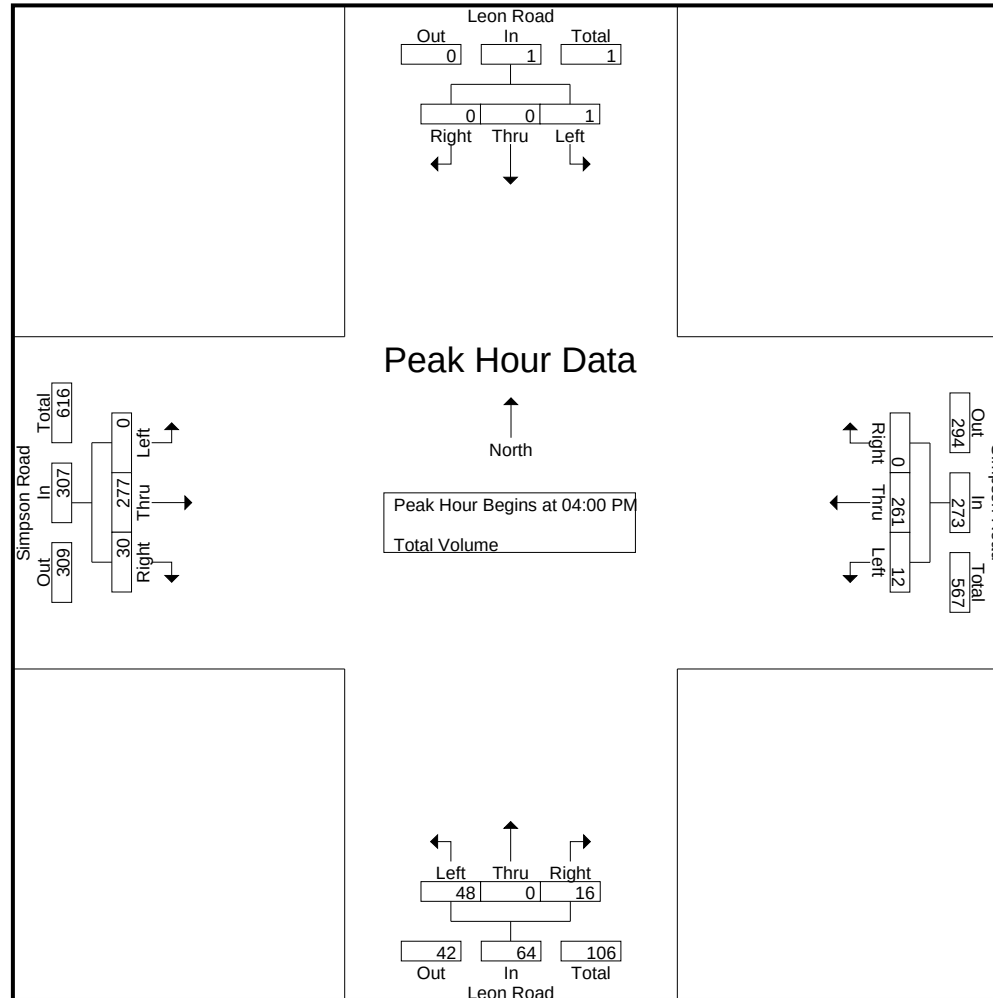
Groups Printed- Total Volume

	Leon Road Southbound					Simpson Road Westbound					Leon Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	4	63	0	0	67	20	0	5	0	25	0	79	3	0	82	0	174	174
04:15 PM	0	0	0	0	0	1	62	0	0	63	11	0	3	0	14	0	69	9	0	78	0	155	155
04:30 PM	0	0	0	0	0	4	72	0	0	76	12	0	2	0	14	0	60	9	0	69	0	159	159
04:45 PM	1	0	0	0	1	3	64	0	0	67	5	0	6	0	11	0	69	9	0	78	0	157	157
Total	1	0	0	0	1	12	261	0	0	273	48	0	16	0	64	0	277	30	0	307	0	645	645
05:00 PM	0	0	0	0	0	3	65	0	0	68	5	0	1	0	6	0	77	7	0	84	0	158	158
05:15 PM	0	0	0	0	0	2	55	0	0	57	12	0	5	0	17	0	56	10	0	66	0	140	140
05:30 PM	0	0	0	0	0	2	56	0	0	58	7	0	6	0	13	0	65	7	0	72	0	143	143
05:45 PM	0	0	0	0	0	4	57	0	0	61	3	0	2	0	5	0	54	8	0	62	0	128	128
Total	0	0	0	0	0	11	233	0	0	244	27	0	14	0	41	0	252	32	0	284	0	569	569
Grand Total	1	0	0	0	1	23	494	0	0	517	75	0	30	0	105	0	529	62	0	591	0	1214	1214
Apprch %	100	0	0			4.4	95.6	0			71.4	0	28.6			0	89.5	10.5			0		
Total %	0.1	0	0		0.1	1.9	40.7	0		42.6	6.2	0	2.5		8.6	0	43.6	5.1		48.7	0	100	

	Leon Road Southbound				Simpson Road Westbound				Leon Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	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 04:00 PM																	
04:00 PM	0	0	0	0	4	63	0	67	20	0	5	25	0	79	3	82	174
04:15 PM	0	0	0	0	1	62	0	63	11	0	3	14	0	69	9	78	155
04:30 PM	0	0	0	0	4	72	0	76	12	0	2	14	0	60	9	69	159
04:45 PM	1	0	0	1	3	64	0	67	5	0	6	11	0	69	9	78	157
Total Volume	1	0	0	1	12	261	0	273	48	0	16	64	0	277	30	307	645
% App. Total	100	0	0		4.4	95.6	0		75	0	25		0	90.2	9.8		
PHF	.250	.000	.000	.250	.750	.906	.000	.898	.600	.000	.667	.640	.000	.877	.833	.936	.927

County of Riverside
 N/S: Leon Road
 E/W: Simpson Road
 Weather: Clear

File Name : 11_CRV_Leon_Simpson PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



County of Riverside
N/S: Leon Road
E/W: Simpson Road
Weather: Clear

File Name : 11_CRV_Leon_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Leon Road Southbound				Simpson Road Westbound				Leon Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:15 PM				04:00 PM				04:15 PM				
+0 mins.	0	0	0	0	1	62	0	63	20	0	5	25	0	69	9	78	
+15 mins.	0	0	0	0	4	72	0	76	11	0	3	14	0	60	9	69	
+30 mins.	0	0	0	0	3	64	0	67	12	0	2	14	0	69	9	78	
+45 mins.	1	0	0	1	3	65	0	68	5	0	6	11	0	77	7	84	
Total Volume	1	0	0	1	11	263	0	274	48	0	16	64	0	275	34	309	
% App. Total	100	0	0		4	96	0		75	0	25		0	89	11		
PHF	.250	.000	.000	.250	.688	.913	.000	.901	.600	.000	.667	.640	.000	.893	.944	.920	

Location: County of Riverside
 N/S: Leon Road
 E/W: Simpson Road



Date: 5/25/2023
 Day: Thursday

PEDESTRIANS

		North Leg Leon Road	East Leg Simpson Road	South Leg Leon Road	West Leg Simpson Road	
		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 Leon Road	East Leg Simpson Road	South Leg Leon Road	West Leg Simpson 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	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	2	2
	5:30 PM	0	0	0	0	0
	5:45 PM	0	0	0	2	2
	TOTAL VOLUMES:	0	0	0	4	4

Location: County of Riverside
 N/S: Leon Road
 E/W: Simpson Road



Date: 5/25/2023
 Day: Thursday

BICYCLES

		Southbound Leon Road			Westbound Simpson Road			Northbound Leon Road			Eastbound Simpson 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 Leon Road			Westbound Simpson Road			Northbound Leon Road			Eastbound Simpson 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

County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

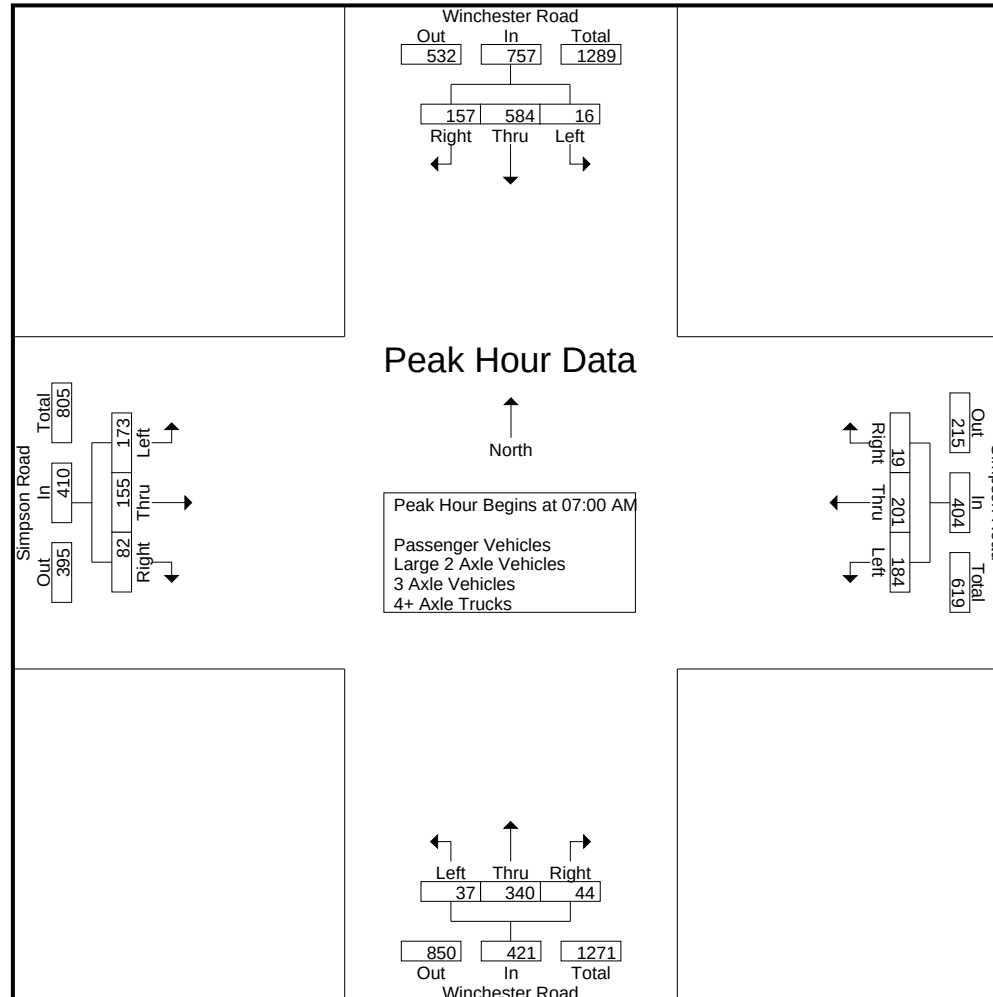
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Winchester Road Southbound					Simpson Road Westbound					Winchester Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	5	130	48	20	183	51	62	4	3	117	9	75	15	4	99	37	38	17	8	92	35	491	526
07:15 AM	2	153	56	23	211	47	75	5	5	127	9	68	7	0	84	39	33	18	6	90	34	512	546
07:30 AM	3	149	25	11	177	52	34	4	3	90	11	78	11	6	100	55	42	25	6	122	26	489	515
07:45 AM	6	152	28	14	186	34	30	6	2	70	8	119	11	3	138	42	42	22	13	106	32	500	532
Total	16	584	157	68	757	184	201	19	13	404	37	340	44	13	421	173	155	82	33	410	127	1992	2119
08:00 AM	3	147	14	4	164	27	33	15	7	75	8	67	15	3	90	21	42	21	10	84	24	413	437
08:15 AM	3	141	14	5	158	26	31	6	3	63	7	96	8	4	111	20	39	21	13	80	25	412	437
08:30 AM	9	134	16	9	159	16	31	3	1	50	9	66	9	5	84	17	26	10	5	53	20	346	366
08:45 AM	1	105	26	10	132	9	18	2	2	29	12	62	10	3	84	14	13	10	4	37	19	282	301
Total	16	527	70	28	613	78	113	26	13	217	36	291	42	15	369	72	120	62	32	254	88	1453	1541
Grand Total	32	1111	227	96	1370	262	314	45	26	621	73	631	86	28	790	245	275	144	65	664	215	3445	3660
Apprch %	2.3	81.1	16.6			42.2	50.6	7.2			9.2	79.9	10.9			36.9	41.4	21.7					
Total %	0.9	32.2	6.6		39.8	7.6	9.1	1.3		18	2.1	18.3	2.5		22.9	7.1	8	4.2		19.3	5.9	94.1	
Passenger Vehicles	31	1077	222		1425	253	312	41		629	57	596	80		761	241	267	127		695	0	0	3510
% Passenger Vehicles	96.9	96.9	97.8	99	97.2	96.6	99.4	91.1	88.5	97.2	78.1	94.5	93	100	93	98.4	97.1	88.2	92.3	95.3	0	0	95.9
Large 2 Axle Vehicles	1	17	2		21	5	2	4		14	5	14	6		25	2	6	7		17	0	0	77
% Large 2 Axle Vehicles	3.1	1.5	0.9	1	1.4	1.9	0.6	8.9	11.5	2.2	6.8	2.2	7	0	3.1	0.8	2.2	4.9	3.1	2.3	0	0	2.1
3 Axle Vehicles	0	8	1		9	2	0	0		2	3	6	0		9	2	1	4		8	0	0	28
% 3 Axle Vehicles	0	0.7	0.4	0	0.6	0.8	0	0	0	0.3	4.1	1	0	0	1.1	0.8	0.4	2.8	1.5	1.1	0	0	0.8
4+ Axle Trucks	0	9	2		11	2	0	0		2	8	15	0		23	0	1	6		9	0	0	45
% 4+ Axle Trucks	0	0.8	0.9	0	0.8	0.8	0	0	0	0.3	11	2.4	0	0	2.8	0	0.4	4.2	3.1	1.2	0	0	1.2

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	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	5	130	48	183	51	62	4	117	9	75	15	99	37	38	17	92	491
07:15 AM	2	153	56	211	47	75	5	127	9	68	7	84	39	33	18	90	512
07:30 AM	3	149	25	177	52	34	4	90	11	78	11	100	55	42	25	122	489
07:45 AM	6	152	28	186	34	30	6	70	8	119	11	138	42	42	22	106	500
Total Volume	16	584	157	757	184	201	19	404	37	340	44	421	173	155	82	410	1992
% App. Total	2.1	77.1	20.7		45.5	49.8	4.7		8.8	80.8	10.5		42.2	37.8	20		
PHF	.667	.954	.701	.897	.885	.670	.792	.795	.841	.714	.733	.763	.786	.923	.820	.840	.973

County of Riverside
 N/S: Winchester Road (SR-79)
 E/W: Simpson Road
 Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:30 AM				07:00 AM				
+0 mins.	5	130	48	183	51	62	4	117	11	78	11	100	37	38	17	92	
+15 mins.	2	153	56	211	47	75	5	127	8	119	11	138	39	33	18	90	
+30 mins.	3	149	25	177	52	34	4	90	8	67	15	90	55	42	25	122	
+45 mins.	6	152	28	186	34	30	6	70	7	96	8	111	42	42	22	106	
Total Volume	16	584	157	757	184	201	19	404	34	360	45	439	173	155	82	410	
% App. Total	2.1	77.1	20.7		45.5	49.8	4.7		7.7	82	10.3		42.2	37.8	20		
PHF	.667	.954	.701	.897	.885	.670	.792	.795	.773	.756	.750	.795	.786	.923	.820	.840	

County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

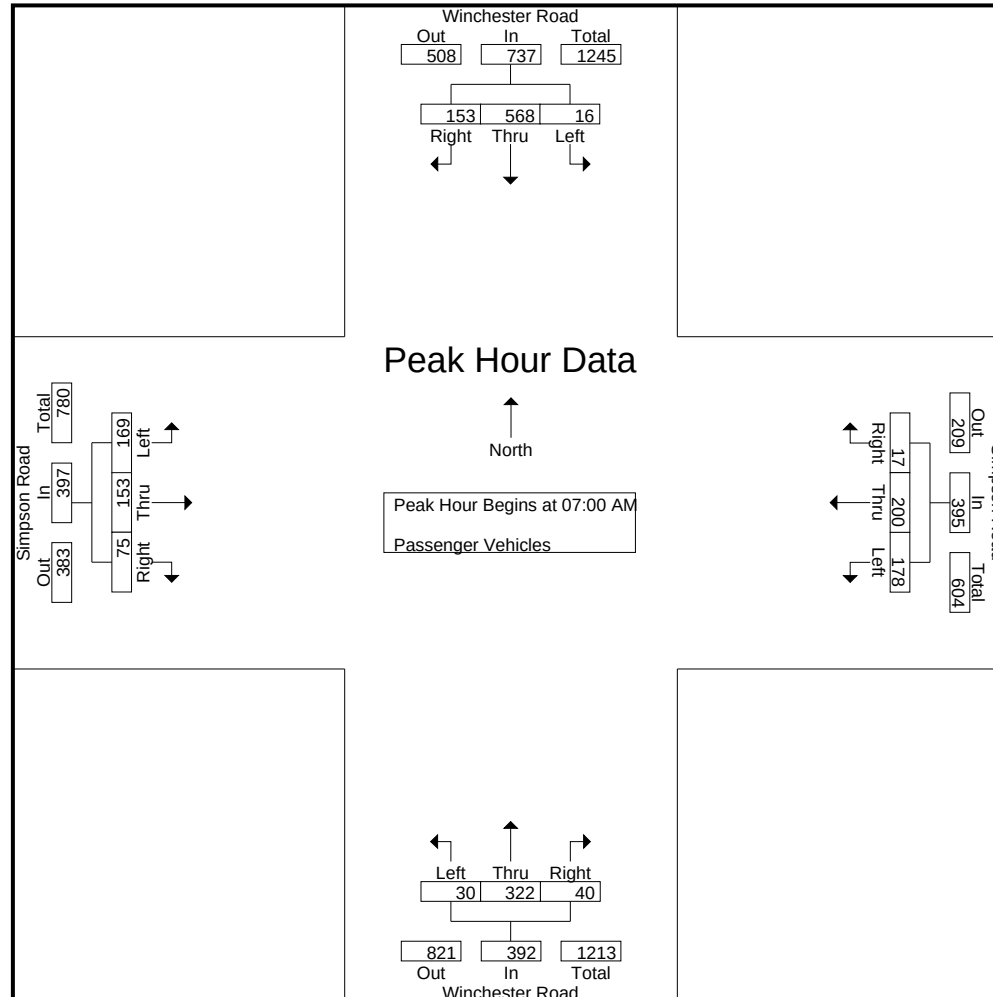
Groups Printed- Passenger Vehicles

	Winchester Road Southbound					Simpson Road Westbound					Winchester Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	5	128	47	20	180	50	62	4	3	116	8	75	15	4	98	36	38	17	8	91	35	485	520
07:15 AM	2	148	55	23	205	45	75	3	3	123	8	60	5	0	73	39	33	16	6	88	32	489	521
07:30 AM	3	144	24	11	171	51	34	4	3	89	7	76	10	6	93	54	42	20	6	116	26	469	495
07:45 AM	6	148	27	14	181	32	29	6	2	67	7	111	10	3	128	40	40	22	13	102	32	478	510
Total	16	568	153	68	737	178	200	17	11	395	30	322	40	13	392	169	153	75	33	397	125	1921	2046
08:00 AM	3	139	14	4	156	25	33	14	7	72	7	66	15	3	88	21	39	17	8	77	22	393	415
08:15 AM	3	135	14	5	152	25	31	5	2	61	6	92	8	4	106	20	38	19	12	77	23	396	419
08:30 AM	8	130	16	9	154	16	30	3	1	49	6	59	8	5	73	17	25	9	5	51	20	327	347
08:45 AM	1	105	25	9	131	9	18	2	2	29	8	57	9	3	74	14	12	7	2	33	16	267	283
Total	15	509	69	27	593	75	112	24	12	211	27	274	40	15	341	72	114	52	27	238	81	1383	1464
Grand Total	31	1077	222	95	1330	253	312	41	23	606	57	596	80	28	733	241	267	127	60	635	206	3304	3510
Apprch %	2.3	81	16.7			41.7	51.5	6.8			7.8	81.3	10.9			38	42	20					
Total %	0.9	32.6	6.7		40.3	7.7	9.4	1.2		18.3	1.7	18	2.4		22.2	7.3	8.1	3.8		19.2	5.9	94.1	

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	5	128	47	180	50	62	4	116	8	75	15	98	36	38	17	91	485
07:15 AM	2	148	55	205	45	75	3	123	8	60	5	73	39	33	16	88	489
07:30 AM	3	144	24	171	51	34	4	89	7	76	10	93	54	42	20	116	469
07:45 AM	6	148	27	181	32	29	6	67	7	111	10	128	40	40	22	102	478
Total Volume	16	568	153	737	178	200	17	395	30	322	40	392	169	153	75	397	1921
% App. Total	2.2	77.1	20.8		45.1	50.6	4.3		7.7	82.1	10.2		42.6	38.5	18.9		
PHF	.667	.959	.695	.899	.873	.667	.708	.803	.938	.725	.667	.766	.782	.911	.852	.856	.982

County of Riverside
 N/S: Winchester Road (SR-79)
 E/W: Simpson Road
 Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	5	128	47	180	50	62	4	116	8	75	15	98	36	38	17	91	
+15 mins.	2	148	55	205	45	75	3	123	8	60	5	73	39	33	16	88	
+30 mins.	3	144	24	171	51	34	4	89	7	76	10	93	54	42	20	116	
+45 mins.	6	148	27	181	32	29	6	67	7	111	10	128	40	40	22	102	
Total Volume	16	568	153	737	178	200	17	395	30	322	40	392	169	153	75	397	
% App. Total	2.2	77.1	20.8		45.1	50.6	4.3		7.7	82.1	10.2		42.6	38.5	18.9		
PHF	.667	.959	.695	.899	.873	.667	.708	.803	.938	.725	.667	.766	.782	.911	.852	.856	

County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

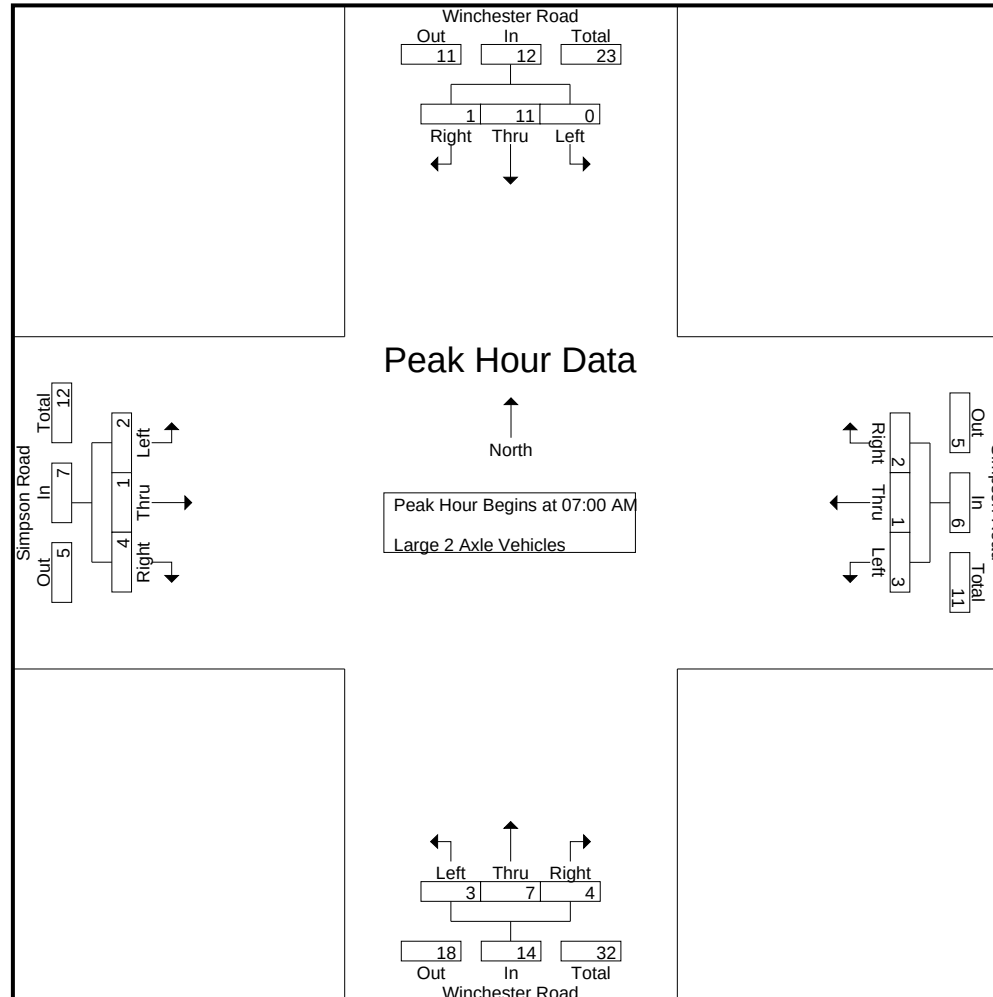
Groups Printed- Large 2 Axle Vehicles

	Winchester Road Southbound					Simpson Road Westbound					Winchester Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	2
07:15 AM	0	2	1	0	3	1	0	2	2	3	1	4	2	0	7	0	0	2	0	2	2	15	17
07:30 AM	0	4	0	0	4	1	0	0	0	1	0	2	1	0	3	1	0	2	0	3	0	11	11
07:45 AM	0	4	0	0	4	1	1	0	0	2	1	1	1	0	3	1	1	0	0	2	0	11	11
Total	0	11	1	0	12	3	1	2	2	6	3	7	4	0	14	2	1	4	0	7	2	39	41
08:00 AM	0	4	0	0	4	1	0	1	0	2	0	1	0	0	1	0	3	2	1	5	1	12	13
08:15 AM	0	2	0	0	2	1	0	1	1	2	1	1	0	0	2	0	1	1	1	2	2	8	10
08:30 AM	1	0	0	0	1	0	1	0	0	1	1	2	1	0	4	0	0	0	0	0	0	6	6
08:45 AM	0	0	1	1	1	0	0	0	0	0	0	3	1	0	4	0	1	0	0	1	1	6	7
Total	1	6	1	1	8	2	1	2	1	5	2	7	2	0	11	0	5	3	2	8	4	32	36
Grand Total	1	17	2	1	20	5	2	4	3	11	5	14	6	0	25	2	6	7	2	15	6	71	77
Apprch %	5	85	10			45.5	18.2	36.4			20	56	24			13.3	40	46.7					
Total %	1.4	23.9	2.8		28.2	7	2.8	5.6		15.5	7	19.7	8.5		35.2	2.8	8.5	9.9		21.1	7.8	92.2	

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
07:15 AM	0	2	1	3	1	0	2	3	1	4	2	7	0	0	2	2	15
07:30 AM	0	4	0	4	1	0	0	1	0	2	1	3	1	0	2	3	11
07:45 AM	0	4	0	4	1	1	0	2	1	1	1	3	1	1	0	2	11
Total Volume	0	11	1	12	3	1	2	6	3	7	4	14	2	1	4	7	39
% App. Total	0	91.7	8.3		50	16.7	33.3		21.4	50	28.6		28.6	14.3	57.1		
PHF	.000	.688	.250	.750	.750	.250	.250	.500	.750	.438	.500	.500	.500	.250	.500	.583	.650

County of Riverside
 N/S: Winchester Road (SR-79)
 E/W: Simpson Road
 Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for 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	1	0	0	1	0	0	0	0	0
+15 mins.	0	2	1	3	1	0	2	3	1	4	2	7	0	0	2	2	2
+30 mins.	0	4	0	4	1	0	0	1	0	2	1	3	1	0	2	3	3
+45 mins.	0	4	0	4	1	1	0	2	1	1	1	3	1	1	0	2	2
Total Volume	0	11	1	12	3	1	2	6	3	7	4	14	2	1	4	7	7
% App. Total	0	91.7	8.3		50	16.7	33.3		21.4	50	28.6		28.6	14.3	57.1		
PHF	.000	.688	.250	.750	.750	.250	.250	.500	.750	.438	.500	.500	.500	.250	.500	.583	

County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

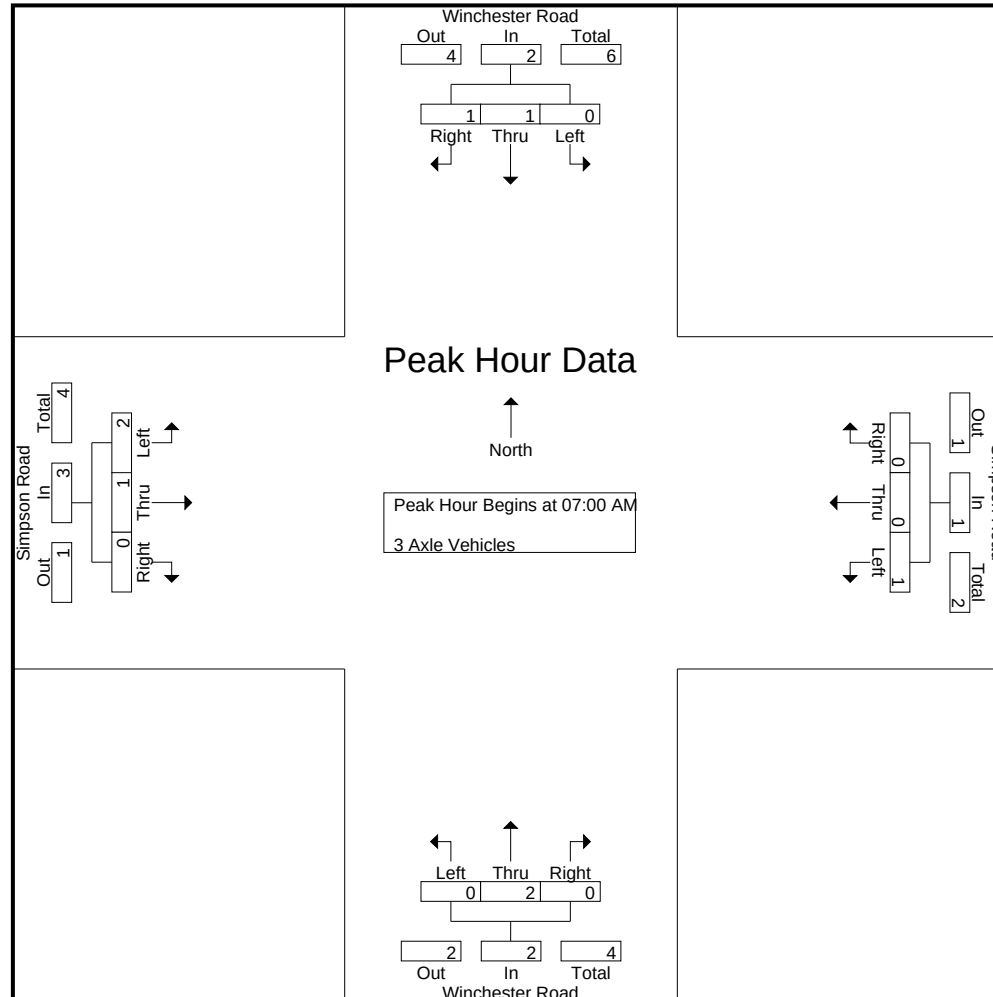
Groups Printed- 3 Axle Vehicles

	Winchester Road Southbound					Simpson Road Westbound					Winchester Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	1	1	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	3	3
07:15 AM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	2	2
07:30 AM	0	0	0	0	0	0	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	1	0	0	1	1	1	0	0	2	0	3	3
Total	0	1	1	0	2	1	0	0	0	1	0	2	0	0	2	2	1	0	0	3	0	8	8
08:00 AM	0	3	0	0	3	1	0	0	0	1	1	0	0	0	1	0	0	2	1	2	1	7	8
08:15 AM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	6	6
08:30 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	4	4
08:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	2	2
Total	0	7	0	0	7	1	0	0	0	1	3	4	0	0	7	0	0	4	1	4	1	19	20
Grand Total	0	8	1	0	9	2	0	0	0	2	3	6	0	0	9	2	1	4	1	7	1	27	28
Apprch %	0	88.9	11.1			100	0	0			33.3	66.7	0			28.6	14.3	57.1					
Total %	0	29.6	3.7		33.3	7.4	0	0		7.4	11.1	22.2	0		33.3	7.4	3.7	14.8		25.9	3.6	96.4	

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	1	1	2	0	0	0	0	0	0	0	0	1	0	0	1	3
07:15 AM	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	2	3
Total Volume	0	1	1	2	1	0	0	1	0	2	0	2	2	1	0	3	8
% App. Total	0	50	50		100	0	0		0	100	0		66.7	33.3	0		
PHF	.000	.250	.250	.250	.250	.000	.000	.250	.000	.500	.000	.500	.500	.250	.000	.375	.667

County of Riverside
 N/S: Winchester Road (SR-79)
 E/W: Simpson Road
 Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



County of Riverside
N/S: Winchester Road (SR-79)
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File Name : 12_CRV_SR79_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	1	1	2	0	0	0	0	0	0	0	0	1	0	0	1	
+15 mins.	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	2	
Total Volume	0	1	1	2	1	0	0	1	0	2	0	2	2	1	0	3	
% App. Total	0	50	50		100	0	0		0	100	0		66.7	33.3	0		
PHF	.000	.250	.250	.250	.250	.000	.000	.250	.000	.500	.000	.500	.500	.250	.000	.375	

County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

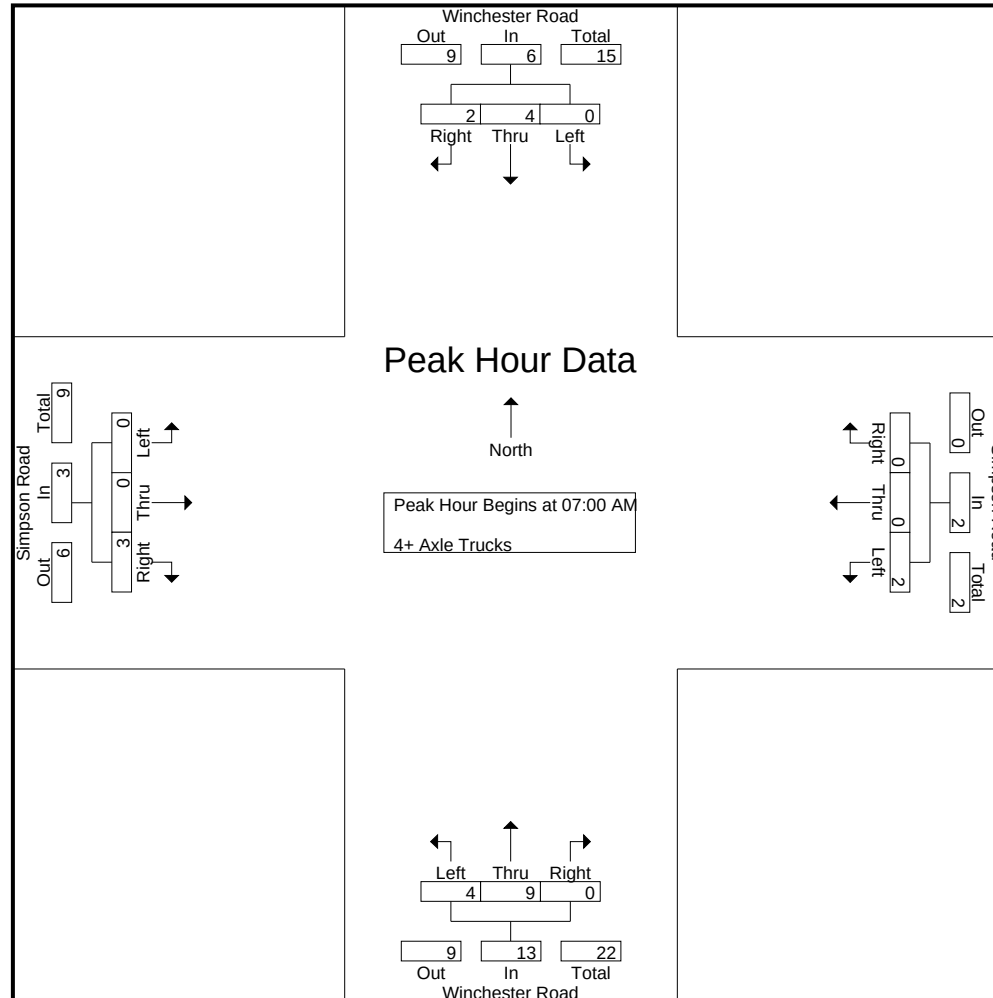
Groups Printed- 4+ Axle Trucks

	Winchester Road Southbound					Simpson Road Westbound					Winchester Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
07:15 AM	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	6	6
07:30 AM	0	1	1	0	2	0	0	0	0	0	4	0	0	0	4	0	0	3	0	3	0	9	9
07:45 AM	0	0	1	0	1	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	0	8	8
Total	0	4	2	0	6	2	0	0	0	2	4	9	0	0	13	0	0	3	0	3	0	24	24
08:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
08:30 AM	0	3	0	0	3	0	0	0	0	0	2	3	0	0	5	0	1	0	0	1	0	9	9
08:45 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	4	0	0	3	2	3	2	7	9
Total	0	5	0	0	5	0	0	0	0	0	4	6	0	0	10	0	1	3	2	4	2	19	21
Grand Total	0	9	2	0	11	2	0	0	0	2	8	15	0	0	23	0	1	6	2	7	2	43	45
Apprch %	0	81.8	18.2			100	0	0			34.8	65.2	0			0	14.3	85.7					
Total %	0	20.9	4.7		25.6	4.7	0	0		4.7	18.6	34.9	0		53.5	0	2.3	14		16.3	4.4	95.6	

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	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 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
07:15 AM	0	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0	6
07:30 AM	0	1	1	2	0	0	0	0	4	0	0	4	0	0	3	3	9
07:45 AM	0	0	1	1	1	0	0	1	0	6	0	6	0	0	0	0	8
Total Volume	0	4	2	6	2	0	0	2	4	9	0	13	0	0	3	3	24
% App. Total	0	66.7	33.3		100	0	0		30.8	69.2	0		0	0	100		
PHF	.000	.333	.500	.500	.500	.000	.000	.500	.250	.375	.000	.542	.000	.000	.250	.250	.667

County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 2



County of Riverside
N/S: Winchester Road (SR-79)
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Weather: Clear

File Name : 12_CRV_SR79_Simpson AM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for 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	0	0
+15 mins.	0	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0	0
+30 mins.	0	1	1	2	0	0	0	0	4	0	0	4	0	0	3	3	0
+45 mins.	0	0	1	1	1	0	0	1	0	6	0	6	0	0	0	0	0
Total Volume	0	4	2	6	2	0	0	2	4	9	0	13	0	0	3	3	
% App. Total	0	66.7	33.3		100	0	0		30.8	69.2	0		0	0	100		
PHF	.000	.333	.500	.500	.500	.000	.000	.500	.250	.375	.000	.542	.000	.000	.250	.250	

County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

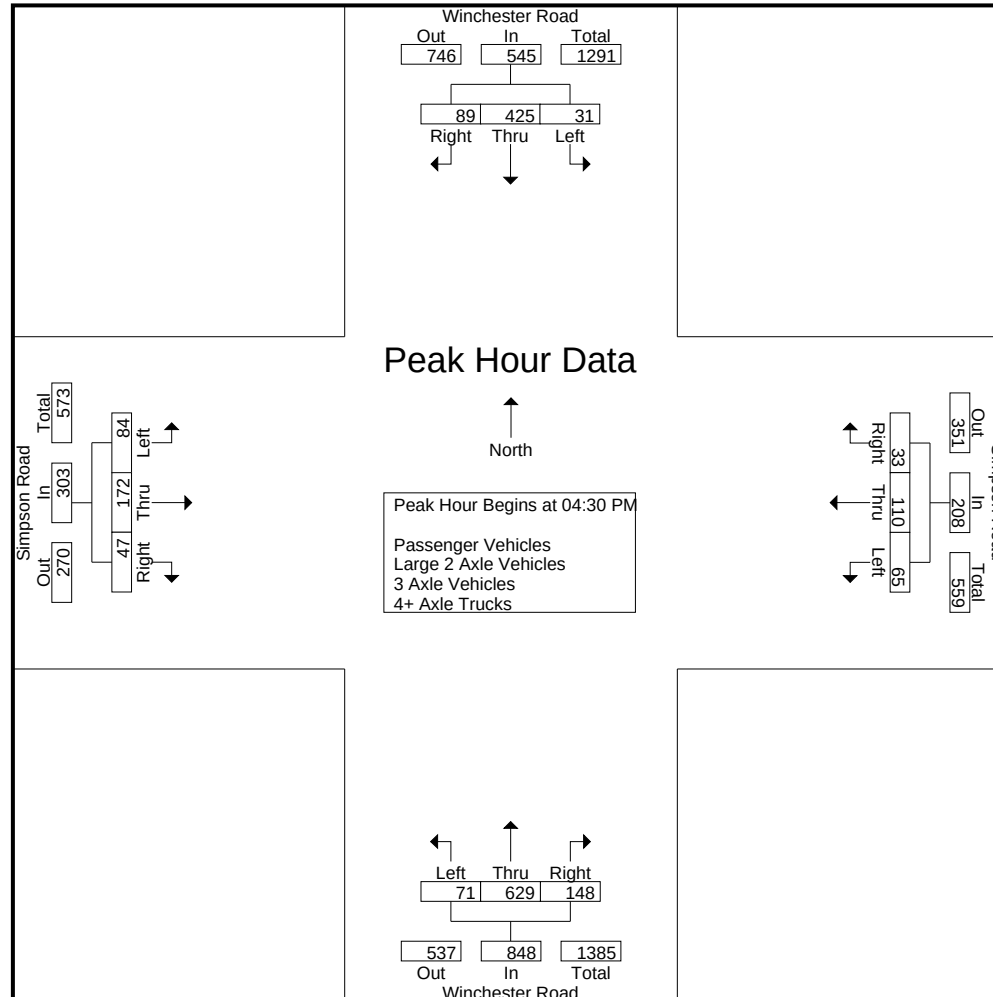
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Winchester Road Southbound					Simpson Road Westbound					Winchester Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	5	101	16	8	122	16	25	8	4	49	19	146	21	9	186	23	53	16	7	92	28	449	477
04:15 PM	8	107	29	13	144	11	27	14	5	52	20	164	35	11	219	19	30	19	7	68	36	483	519
04:30 PM	8	129	20	10	157	7	35	8	3	50	18	165	37	19	220	22	34	10	6	66	38	493	531
04:45 PM	6	76	27	14	109	18	22	3	1	43	20	143	43	19	206	24	46	12	8	82	42	440	482
Total	27	413	92	45	532	52	109	33	13	194	77	618	136	58	831	88	163	57	28	308	144	1865	2009
05:00 PM	10	109	18	5	137	16	27	17	5	60	11	140	25	10	176	21	48	12	7	81	27	454	481
05:15 PM	7	111	24	9	142	24	26	5	2	55	22	181	43	20	246	17	44	13	9	74	40	517	557
05:30 PM	10	99	17	8	126	11	28	7	3	46	16	152	23	10	191	20	41	10	5	71	26	434	460
05:45 PM	12	95	19	10	126	16	24	12	4	52	21	172	51	23	244	18	38	11	2	67	39	489	528
Total	39	414	78	32	531	67	105	41	14	213	70	645	142	63	857	76	171	46	23	293	132	1894	2026
Grand Total	66	827	170	77	1063	119	214	74	27	407	147	1263	278	121	1688	164	334	103	51	601	276	3759	4035
Apprch %	6.2	77.8	16			29.2	52.6	18.2			8.7	74.8	16.5			27.3	55.6	17.1					
Total %	1.8	22	4.5		28.3	3.2	5.7	2		10.8	3.9	33.6	7.4		44.9	4.4	8.9	2.7		16	6.8	93.2	
Passenger Vehicles	66	812	169		1123	116	208	73		424	146	1230	270		1765	163	327	102		643	0	0	3955
% Passenger Vehicles	100	98.2	99.4	98.7	98.5	97.5	97.2	98.6	100	97.7	99.3	97.4	97.1	98.3	97.6	99.4	97.9	99	100	98.6	0	0	98
Large 2 Axle Vehicles	0	10	1		12	3	3	1		7	1	21	8		32	1	7	1		9	0	0	60
% Large 2 Axle Vehicles	0	1.2	0.6	1.3	1.1	2.5	1.4	1.4	0	1.6	0.7	1.7	2.9	1.7	1.8	0.6	2.1	1	0	1.4	0	0	1.5
3 Axle Vehicles	0	1	0		1	0	3	0		3	0	6	0		6	0	0	0		0	0	0	10
% 3 Axle Vehicles	0	0.1	0	0	0.1	0	1.4	0	0	0.7	0	0.5	0	0	0.3	0	0	0	0	0	0	0	0.2
4+ Axle Trucks	0	4	0		4	0	0	0		0	0	6	0		6	0	0	0		0	0	0	10
% 4+ Axle Trucks	0	0.5	0	0	0.4	0	0	0	0	0	0	0.5	0	0	0.3	0	0	0	0	0	0	0	0.2

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	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	8	129	20	157	7	35	8	50	18	165	37	220	22	34	10	66	493
04:45 PM	6	76	27	109	18	22	3	43	20	143	43	206	24	46	12	82	440
05:00 PM	10	109	18	137	16	27	17	60	11	140	25	176	21	48	12	81	454
05:15 PM	7	111	24	142	24	26	5	55	22	181	43	246	17	44	13	74	517
Total Volume	31	425	89	545	65	110	33	208	71	629	148	848	84	172	47	303	1904
% App. Total	5.7	78	16.3		31.2	52.9	15.9		8.4	74.2	17.5		27.7	56.8	15.5		
PHF	.775	.824	.824	.868	.677	.786	.485	.867	.807	.869	.860	.862	.875	.896	.904	.924	.921

County of Riverside
 N/S: Winchester Road (SR-79)
 E/W: Simpson Road
 Weather: Clear

File Name : 12_CRV_SR79_Simpson PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



County of Riverside
N/S: Winchester Road (SR-79)
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File Name : 12_CRV_SR79_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				05:00 PM				05:00 PM				04:00 PM				
+0 mins.	8	107	29	144	16	27	17	60	11	140	25	176	23	53	16	92	
+15 mins.	8	129	20	157	24	26	5	55	22	181	43	246	19	30	19	68	
+30 mins.	6	76	27	109	11	28	7	46	16	152	23	191	22	34	10	66	
+45 mins.	10	109	18	137	16	24	12	52	21	172	51	244	24	46	12	82	
Total Volume	32	421	94	547	67	105	41	213	70	645	142	857	88	163	57	308	
% App. Total	5.9	77	17.2		31.5	49.3	19.2		8.2	75.3	16.6		28.6	52.9	18.5		
PHF	.800	.816	.810	.871	.698	.938	.603	.888	.795	.891	.696	.871	.917	.769	.750	.837	

County of Riverside
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File Name : 12_CRV_SR79_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

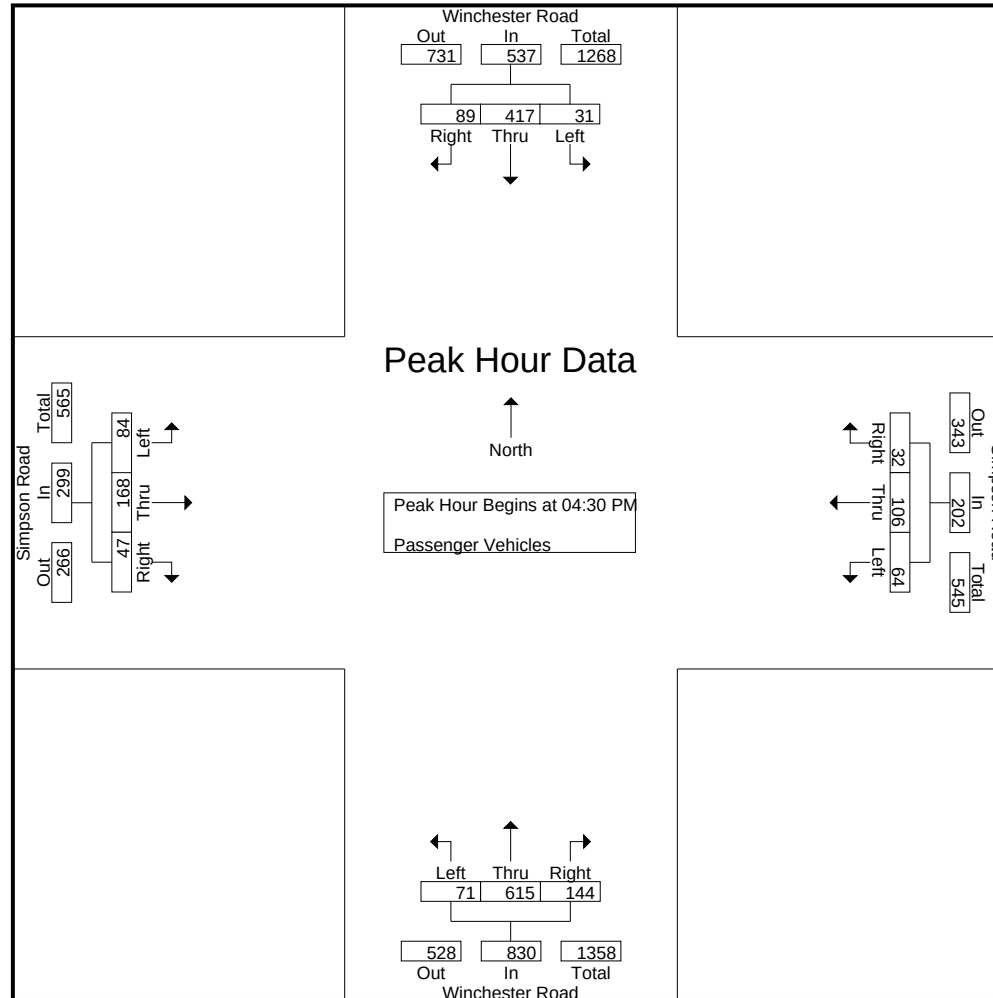
Groups Printed- Passenger Vehicles

	Winchester Road Southbound					Simpson Road Westbound					Winchester Road Northbound					Simpson Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	5	97	15	7	117	15	25	8	4	48	19	141	21	9	181	23	51	16	7	90	27	436	463
04:15 PM	8	106	29	13	143	10	25	14	5	49	19	160	33	11	212	19	30	19	7	68	36	472	508
04:30 PM	8	125	20	10	153	6	34	7	3	47	18	159	36	19	213	22	34	10	6	66	38	479	517
04:45 PM	6	75	27	14	108	18	22	3	1	43	20	140	42	19	202	24	43	12	8	79	42	432	474
Total	27	403	91	44	521	49	106	32	13	187	76	600	132	58	808	88	158	57	28	303	143	1819	1962
05:00 PM	10	107	18	5	135	16	25	17	5	58	11	139	24	10	174	21	47	12	7	80	27	447	474
05:15 PM	7	110	24	9	141	24	25	5	2	54	22	177	42	19	241	17	44	13	9	74	39	510	549
05:30 PM	10	97	17	8	124	11	28	7	3	46	16	148	23	10	187	20	40	9	5	69	26	426	452
05:45 PM	12	95	19	10	126	16	24	12	4	52	21	166	49	22	236	17	38	11	2	66	38	480	518
Total	39	409	78	32	526	67	102	41	14	210	70	630	138	61	838	75	169	45	23	289	130	1863	1993
Grand Total	66	812	169	76	1047	116	208	73	27	397	146	1230	270	119	1646	163	327	102	51	592	273	3682	3955
Apprch %	6.3	77.6	16.1			29.2	52.4	18.4			8.9	74.7	16.4			27.5	55.2	17.2					
Total %	1.8	22.1	4.6		28.4	3.2	5.6	2		10.8	4	33.4	7.3		44.7	4.4	8.9	2.8		16.1	6.9	93.1	

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	8	125	20	153	6	34	7	47	18	159	36	213	22	34	10	66	479
04:45 PM	6	75	27	108	18	22	3	43	20	140	42	202	24	43	12	79	432
05:00 PM	10	107	18	135	16	25	17	58	11	139	24	174	21	47	12	80	447
05:15 PM	7	110	24	141	24	25	5	54	22	177	42	241	17	44	13	74	510
Total Volume	31	417	89	537	64	106	32	202	71	615	144	830	84	168	47	299	1868
% App. Total	5.8	77.7	16.6		31.7	52.5	15.8		8.6	74.1	17.3		28.1	56.2	15.7		
PHF	.775	.834	.824	.877	.667	.779	.471	.871	.807	.869	.857	.861	.875	.894	.904	.934	.916

County of Riverside
 N/S: Winchester Road (SR-79)
 E/W: Simpson Road
 Weather: Clear

File Name : 12_CRV_SR79_Simpson PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



County of Riverside
N/S: Winchester Road (SR-79)
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File Name : 12_CRV_SR79_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 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.	8	125	20	153	6	34	7	47	18	159	36	213	22	34	10	66	
+15 mins.	6	75	27	108	18	22	3	43	20	140	42	202	24	43	12	79	
+30 mins.	10	107	18	135	16	25	17	58	11	139	24	174	21	47	12	80	
+45 mins.	7	110	24	141	24	25	5	54	22	177	42	241	17	44	13	74	
Total Volume	31	417	89	537	64	106	32	202	71	615	144	830	84	168	47	299	
% App. Total	5.8	77.7	16.6		31.7	52.5	15.8		8.6	74.1	17.3		28.1	56.2	15.7		
PHF	.775	.834	.824	.877	.667	.779	.471	.871	.807	.869	.857	.861	.875	.894	.904	.934	

County of Riverside
N/S: Winchester Road (SR-79)
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File Name : 12_CRV_SR79_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

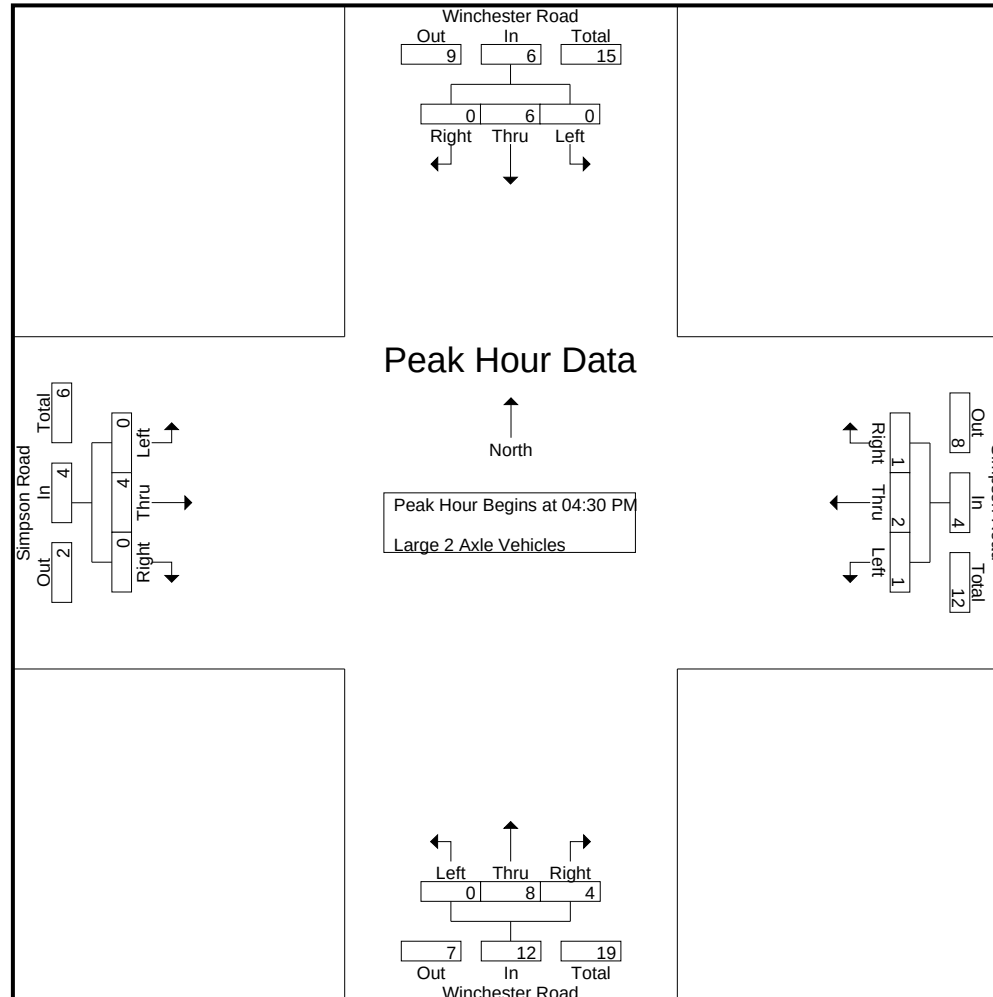
Groups Printed- Large 2 Axle Vehicles

	Winchester Road Southbound					Simpson Road Westbound					Winchester Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	4	1	1	5	1	0	0	0	1	0	4	0	0	4	0	2	0	0	2	1	12	13
04:15 PM	0	0	0	0	0	1	1	0	0	2	1	2	2	0	5	0	0	0	0	0	0	7	7
04:30 PM	0	3	0	0	3	1	0	1	0	2	0	4	1	0	5	0	0	0	0	0	0	10	10
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	3	0	0	3	0	6	6
Total	0	8	1	1	9	3	1	1	0	5	1	11	4	0	16	0	5	0	0	5	1	35	36
05:00 PM	0	1	0	0	1	0	2	0	0	2	0	1	1	0	2	0	1	0	0	1	0	6	6
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	2	1	1	3	0	0	0	0	0	1	4	5
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	1	1	0	2	0	5	5
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	4	2	1	6	1	0	0	0	1	1	7	8
Total	0	2	0	0	2	0	2	0	0	2	0	10	4	2	14	1	2	1	0	4	2	22	24
Grand Total	0	10	1	1	11	3	3	1	0	7	1	21	8	2	30	1	7	1	0	9	3	57	60
Apprch %	0	90.9	9.1			42.9	42.9	14.3			3.3	70	26.7			11.1	77.8	11.1					
Total %	0	17.5	1.8		19.3	5.3	5.3	1.8		12.3	1.8	36.8	14		52.6	1.8	12.3	1.8		15.8	5	95	

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	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	3	0	3	1	0	1	2	0	4	1	5	0	0	0	0	10
04:45 PM	0	1	0	1	0	0	0	0	0	1	1	2	0	3	0	3	6
05:00 PM	0	1	0	1	0	2	0	2	0	1	1	2	0	1	0	1	6
05:15 PM	0	1	0	1	0	0	0	0	0	2	1	3	0	0	0	0	4
Total Volume	0	6	0	6	1	2	1	4	0	8	4	12	0	4	0	4	26
% App. Total	0	100	0		25	50	25		0	66.7	33.3		0	100	0		
PHF	.000	.500	.000	.500	.250	.250	.250	.500	.000	.500	1.00	.600	.000	.333	.000	.333	.650

County of Riverside
 N/S: Winchester Road (SR-79)
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File Name : 12_CRV_SR79_Simpson PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



County of Riverside
N/S: Winchester Road (SR-79)
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File Name : 12_CRV_SR79_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 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	3	0	3	1	0	1	2	0	4	1	5	0	0	0	0	
+15 mins.	0	1	0	1	0	0	0	0	0	1	1	2	0	3	0	3	
+30 mins.	0	1	0	1	0	2	0	2	0	1	1	2	0	1	0	1	
+45 mins.	0	1	0	1	0	0	0	0	0	2	1	3	0	0	0	0	
Total Volume	0	6	0	6	1	2	1	4	0	8	4	12	0	4	0	4	
% App. Total	0	100	0		25	50	25		0	66.7	33.3		0	100	0		
PHF	.000	.500	.000	.500	.250	.250	.250	.500	.000	.500	1.000	.600	.000	.333	.000	.333	

County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

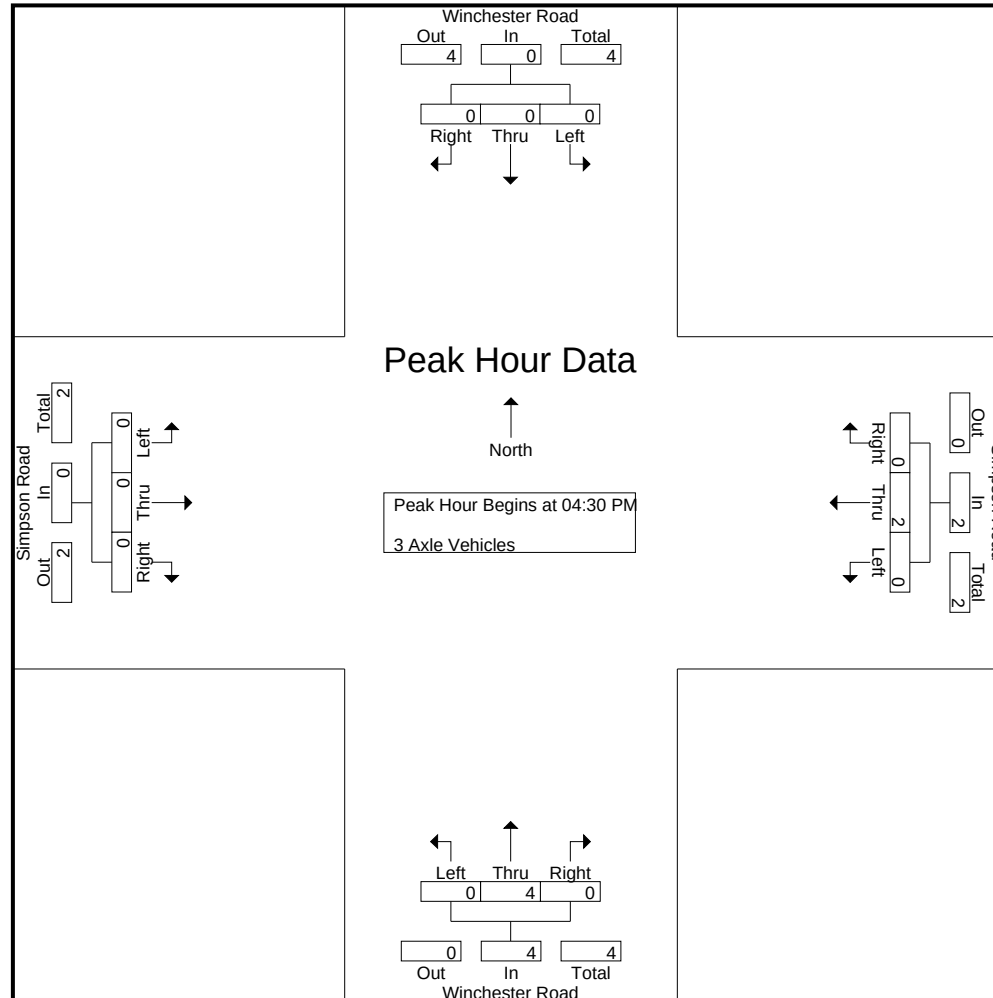
Groups Printed- 3 Axle Vehicles

	Winchester Road Southbound					Simpson Road Westbound					Winchester Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	0	4	4
05:00 PM	0	0	0	0	0	0	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	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	3	3
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
Total	0	1	0	0	1	0	1	0	0	1	0	4	0	0	4	0	0	0	0	0	0	6	6
Grand Total	0	1	0	0	1	0	3	0	0	3	0	6	0	0	6	0	0	0	0	0	0	10	10
Apprch %	0	100	0			0	100	0			0	100	0			0	0	0			0		
Total %	0	10	0		10	0	30	0		30	0	60	0		60	0	0	0		0	0	100	

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	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	1	0	1	0	0	0	0	2
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	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	0	3
Total Volume	0	0	0	0	0	2	0	2	0	4	0	4	0	0	0	0	6
% App. Total	0	0	0		0	100	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.500	.000	.500	.000	.000	.000	.000	.500

County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 2



County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 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	1	0	1	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	2	0	2	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	4	0	4	0	0	0	0	0
% App. Total	0	0	0		0	100	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.500	.000	.500	.000	.000	.000	.000	.000

County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 1

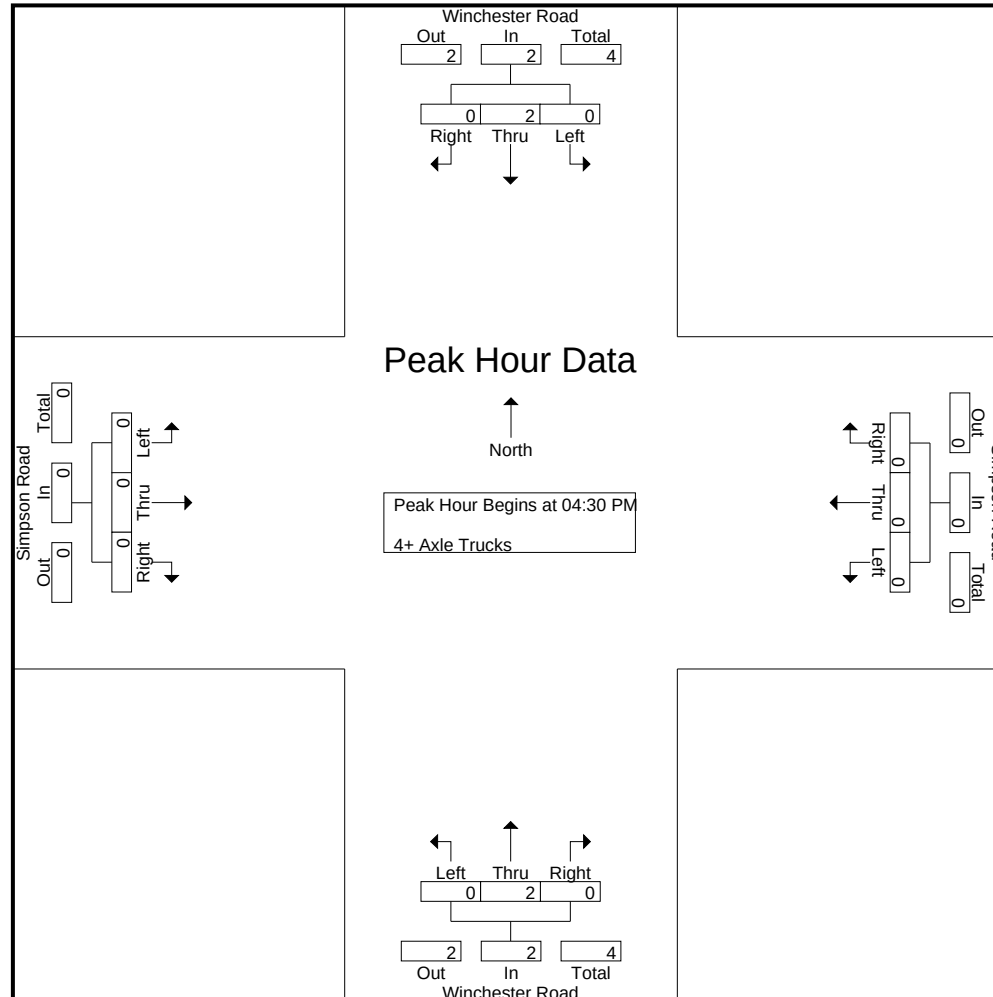
Groups Printed- 4+ Axle Trucks

	Winchester Road Southbound					Simpson Road Westbound					Winchester Road Northbound					Simpson Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
Start Time	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	0	1	0	0	1	0	0	0	0	0	0	1	1
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	3
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
Total	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	7	7
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
Total	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	3
Grand Total	0	4	0	0	4	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	10	10
Apprch %	0	100	0			0	0	0			0	100	0			0	0	0			0		
Total %	0	40	0		40	0	0	0		0	0	60	0		60	0	0	0		0	0	100	

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				Int. Total
Start Time	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	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.500

County of Riverside
 N/S: Winchester Road (SR-79)
 E/W: Simpson Road
 Weather: Clear

File Name : 12_CRV_SR79_Simpson PM
 Site Code : 05123548
 Start Date : 5/25/2023
 Page No : 2



County of Riverside
N/S: Winchester Road (SR-79)
E/W: Simpson Road
Weather: Clear

File Name : 12_CRV_SR79_Simpson PM
Site Code : 05123548
Start Date : 5/25/2023
Page No : 3

	Winchester Road Southbound				Simpson Road Westbound				Winchester Road Northbound				Simpson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 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	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
+30 mins.	0	1	0	1	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	0
Total Volume	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000

Location: County of Riverside
 N/S: Winchester Road
 E/W: Simpson Road



Date: 5/25/2023
 Day: Thursday

PEDESTRIANS

	North Leg Winchester Road Pedestrians	East Leg Simpson Road Pedestrians	South Leg Winchester Road Pedestrians	West Leg Simpson Road Pedestrians	
7:00 AM	1	0	0	2	3
7:15 AM	0	1	0	0	1
7:30 AM	2	1	2	1	6
7:45 AM	0	1	2	2	5
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	1	2	0	0	3
8:45 AM	0	1	0	1	2
TOTAL VOLUMES:	4	6	4	6	20

	North Leg Winchester Road Pedestrians	East Leg Simpson Road Pedestrians	South Leg Winchester Road Pedestrians	West Leg Simpson Road Pedestrians	
4:00 PM	3	1	0	1	5
4:15 PM	2	0	1	4	7
4:30 PM	1	0	0	1	2
4:45 PM	0	0	0	0	0
5:00 PM	0	0	2	2	4
5:15 PM	2	0	0	0	2
5:30 PM	0	1	2	0	3
5:45 PM	1	0	2	1	4
TOTAL VOLUMES:	9	2	7	9	27

Location: County of Riverside
 N/S: Winchester Road
 E/W: Simpson Road



Date: 5/25/2023
 Day: Thursday

BICYCLES

		Southbound Winchester Road			Westbound Simpson Road			Northbound Winchester Road			Eastbound Simpson 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	1	0	1
	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	1	0	0	0	0	0	0	0	0	1
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	1	0	0	0	0	0	0	1	0	2

		Southbound Winchester Road			Westbound Simpson Road			Northbound Winchester Road			Eastbound Simpson 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	1	0	0	0	1	0	0	0	0	2
	5:15 PM	0	1	0	0	0	0	0	1	0	0	1	0	3
	5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	1	0	1	2	0	0	2	0	0	1	0	7

Counts Unlimited, Inc.

Page 1

City of Menifee
McCall Boulevard
W/ Menifee Road
24 Hour Directional Volume Count

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

MEN002
Site Code: 051-23548

Start Time	5/25/23 Thu	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		22	107			11	111				
12:15		17	103			17	118				
12:30		15	101			9	105				
12:45		29	110	83	421	4	98	41	432	124	853
01:00		14	112			4	97				
01:15		14	127			7	92				
01:30		11	110			4	126				
01:45		5	143	44	492	5	117	20	432	64	924
02:00		9	192			7	100				
02:15		6	231			6	185				
02:30		10	153			6	203				
02:45		5	158	30	734	3	219	22	707	52	1441
03:00		7	216			8	190				
03:15		5	185			11	119				
03:30		6	164			18	163				
03:45		6	177	24	742	28	179	65	651	89	1393
04:00		7	198			24	173				
04:15		11	187			35	118				
04:30		9	191			50	119				
04:45		15	162	42	738	37	140	146	550	188	1288
05:00		16	170			37	110				
05:15		25	198			46	136				
05:30		27	194			73	103				
05:45		32	181	100	743	73	130	229	479	329	1222
06:00		38	174			97	94				
06:15		50	179			96	94				
06:30		70	149			97	96				
06:45		95	110	253	612	120	91	410	375	663	987
07:00		102	124			140	82				
07:15		148	123			162	89				
07:30		221	124			245	66				
07:45		224	88	695	459	256	81	803	318	1498	777
08:00		171	100			202	66				
08:15		144	79			173	67				
08:30		133	98			152	51				
08:45		72	63	520	340	119	47	646	231	1166	571
09:00		62	79			112	41				
09:15		70	62			99	35				
09:30		81	57			114	38				
09:45		67	48	280	246	103	27	428	141	708	387
10:00		84	43			91	27				
10:15		86	46			88	15				
10:30		83	48			104	23				
10:45		80	41	333	178	101	25	384	90	717	268
11:00		77	29			106	15				
11:15		114	23			101	11				
11:30		77	23			121	18				
11:45		114	36	382	111	108	9	436	53	818	164
Total		2786	5816	2786	5816	3630	4459	3630	4459	6416	10275
Combined Total		8602		8602		8089		8089		16691	
AM Peak	-	07:15	-	-	-	07:30	-	-	-	-	-
Vol.	-	764	-	-	-	876	-	-	-	-	-
P.H.F.		0.853				0.855					
PM Peak	-	-	02:15	-	-	-	02:15	-	-	-	-
Vol.	-	-	758	-	-	-	797	-	-	-	-
P.H.F.			0.820				0.910				
Percentage		32.4%	67.6%			44.9%	55.1%				
ADT/AADT		ADT 16,691	AADT 16,691								

Counts Unlimited, Inc.

City of Menifee
Menifee Road
N/ Simpson Road
24 Hour Directional Volume Count

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

MEN003
Site Code: 051-23548

Start Time	5/25/23 Thu	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		7	73			10	76				
12:15		15	96			8	84				
12:30		7	83			8	81				
12:45		9	89	38	341	11	79	37	320	75	661
01:00		7	92			3	75				
01:15		7	116			5	74				
01:30		5	97			10	87				
01:45		6	114	25	419	2	111	20	347	45	766
02:00		2	98			4	119				
02:15		6	168			8	153				
02:30		5	199			4	122				
02:45		8	143	21	608	2	98	18	492	39	1100
03:00		7	171			5	155				
03:15		8	163			4	134				
03:30		10	129			7	124				
03:45		12	151	37	614	8	150	24	563	61	1177
04:00		14	149			4	142				
04:15		14	122			10	136				
04:30		19	106			15	118				
04:45		14	144	61	521	21	105	50	501	111	1022
05:00		16	133			12	118				
05:15		21	128			22	126				
05:30		20	114			34	126				
05:45		37	128	94	503	42	110	110	480	204	983
06:00		49	104			59	131				
06:15		56	109			60	134				
06:30		55	87			87	95				
06:45		70	112	230	412	76	87	282	447	512	859
07:00		66	110			108	78				
07:15		106	74			162	69				
07:30		186	87			180	81				
07:45		160	86	518	357	172	56	622	284	1140	641
08:00		138	96			127	69				
08:15		108	74			124	70				
08:30		85	66			100	72				
08:45		91	58	422	294	83	48	434	259	856	553
09:00		75	68			44	52				
09:15		67	56			66	39				
09:30		72	52			73	33				
09:45		56	44	270	220	70	27	253	151	523	371
10:00		60	50			70	35				
10:15		67	35			86	29				
10:30		79	38			77	27				
10:45		72	27	278	150	76	25	309	116	587	266
11:00		98	22			76	24				
11:15		81	22			104	15				
11:30		97	19			71	16				
11:45		84	16	360	79	69	12	320	67	680	146
Total		2354	4518	2354	4518	2479	4027	2479	4027	4833	8545
Combined Total		6872		6872		6506		6506		13378	
AM Peak	-	07:30	-	-	-	07:15	-	-	-	-	-
Vol.	-	592	-	-	-	641	-	-	-	-	-
P.H.F.		0.796				0.890					
PM Peak	-	-	02:15	-	-	-	03:00	-	-	-	-
Vol.	-	-	681	-	-	-	563	-	-	-	-
P.H.F.			0.856				0.908				
Percentage		34.3%	65.7%			38.1%	61.9%				
ADT/AADT		ADT 13,378	AADT 13,378								

Counts Unlimited, Inc.

City of Menifee
Newport Road
E/ Menifee Road
24 Hour Directional Volume Count

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

MEN004
Site Code: 051-23548

Start Time	5/25/23 Thu	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		43	302			42	287				
12:15		62	322			36	268				
12:30		67	301			27	325				
12:45		46	327	218	1252	25	303	130	1183	348	2435
01:00		48	381			26	319				
01:15		40	332			23	286				
01:30		47	359			25	351				
01:45		31	370	166	1442	19	338	93	1294	259	2736
02:00		32	420			30	333				
02:15		31	384			35	332				
02:30		30	387			28	314				
02:45		30	419	123	1610	42	361	135	1340	258	2950
03:00		36	385			41	358				
03:15		21	435			53	372				
03:30		29	370			82	325				
03:45		25	389	111	1579	99	311	275	1366	386	2945
04:00		25	493			137	363				
04:15		36	385			197	296				
04:30		49	404			195	354				
04:45		53	368	163	1650	189	324	718	1337	881	2987
05:00		64	410			162	285				
05:15		94	395			208	326				
05:30		126	413			241	324				
05:45		141	415	425	1633	230	272	841	1207	1266	2840
06:00		200	387			264	280				
06:15		224	384			332	253				
06:30		299	452			362	291				
06:45		290	382	1013	1605	333	204	1291	1028	2304	2633
07:00		277	330			320	228				
07:15		333	280			398	247				
07:30		343	315			414	197				
07:45		389	318	1342	1243	327	168	1459	840	2801	2083
08:00		309	320			287	198				
08:15		319	260			317	216				
08:30		279	300			323	151				
08:45		265	274	1172	1154	330	179	1257	744	2429	1898
09:00		258	217			320	136				
09:15		261	227			319	188				
09:30		219	203			309	121				
09:45		262	211	1000	858	316	131	1264	576	2264	1434
10:00		268	188			264	100				
10:15		268	167			307	80				
10:30		319	148			284	75				
10:45		252	130	1107	633	257	78	1112	333	2219	966
11:00		269	110			309	52				
11:15		298	88			287	57				
11:30		303	94			342	38				
11:45		300	87	1170	379	283	38	1221	185	2391	564
Total		8010	15038	8010	15038	9796	11433	9796	11433	17806	26471
Combined Total		23048		23048		21229		21229		44277	
AM Peak	-	07:15	-	-	-	06:45	-	-	-	-	-
Vol.	-	1374	-	-	-	1465	-	-	-	-	-
P.H.F.		0.883				0.885					
PM Peak	-	-	03:15	-	-	-	02:45	-	-	-	-
Vol.	-	-	1687	-	-	-	1416	-	-	-	-
P.H.F.			0.855				0.952				
Percentage		34.8%	65.2%			46.1%	53.9%				
ADT/AADT		ADT 44,277	AADT 44,277								

Counts Unlimited, Inc.

City of Menifee
Simpson Road
W/ Briggs Road
24 Hour Directional Volume Count

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

MEN005
Site Code: 051-23548

Start Time	5/25/23 Thu	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		7	34			4	54				
12:15		4	51			2	58				
12:30		12	43			2	57				
12:45		10	52	33	180	3	55	11	224	44	404
01:00		4	42			4	70				
01:15		5	48			4	74				
01:30		5	64			1	53				
01:45		1	58	15	212	3	97	12	294	27	506
02:00		3	40			1	64				
02:15		3	56			4	84				
02:30		1	76			2	93				
02:45		2	88	9	260	3	126	10	367	19	627
03:00		3	72			1	114				
03:15		2	101			6	121				
03:30		1	97			8	152				
03:45		1	94	7	364	10	131	25	518	32	882
04:00		5	91			8	77				
04:15		7	81			19	81				
04:30		5	72			23	84				
04:45		8	70	25	314	12	71	62	313	87	627
05:00		10	85			20	81				
05:15		11	80			20	62				
05:30		15	78			23	69				
05:45		20	69	56	312	31	61	94	273	150	585
06:00		35	66			40	74				
06:15		41	53			51	66				
06:30		61	54			42	150				
06:45		60	59	197	232	57	54	190	344	387	576
07:00		65	47			76	43				
07:15		68	43			72	35				
07:30		90	48			89	26				
07:45		107	35	330	173	96	32	333	136	663	309
08:00		125	38			88	40				
08:15		91	36			75	43				
08:30		57	40			98	23				
08:45		64	41	337	155	62	28	323	134	660	289
09:00		35	23			56	33				
09:15		39	25			52	30				
09:30		38	28			48	13				
09:45		40	25	152	101	54	12	210	88	362	189
10:00		41	29			41	15				
10:15		43	24			48	7				
10:30		39	15			52	12				
10:45		40	14	163	82	55	6	196	40	359	122
11:00		46	18			51	15				
11:15		42	14			45	13				
11:30		47	10			54	5				
11:45		51	7	186	49	51	8	201	41	387	90
Total		1510	2434	1510	2434	1667	2772	1667	2772	3177	5206
Combined Total		3944		3944		4439		4439		8383	
AM Peak	-	07:30	-	-	-	07:45	-	-	-	-	-
Vol.	-	413	-	-	-	357	-	-	-	-	-
P.H.F.		0.826				0.911					
PM Peak	-	-	03:15	-	-	-	03:00	-	-	-	-
Vol.	-	-	383	-	-	-	518	-	-	-	-
P.H.F.			0.948				0.852				
Percentage		38.3%	61.7%			37.6%	62.4%				
ADT/AADT		ADT 8,383	AADT 8,383								

Counts Unlimited, Inc.

City of Menifee
Winchester Road
N/ Simpson Road
24 Hour Directional Classification Count
Northbound

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

MEN001
Site Code: 051-23548

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
05/25/23	0	54	0	0	0	0	0	0	1	0	0	0	0	55
01:00	0	32	1	0	0	0	0	0	1	0	0	0	0	34
02:00	0	29	1	0	1	0	0	0	1	0	0	0	0	32
03:00	0	21	0	0	3	1	0	0	0	0	1	0	0	26
04:00	0	48	4	0	4	0	0	0	0	0	0	0	0	56
05:00	0	119	7	1	2	0	0	0	1	0	2	0	0	132
06:00	0	295	12	1	1	1	3	0	3	0	0	0	0	316
07:00	0	490	17	4	3	2	1	0	10	0	0	0	0	527
08:00	0	357	16	1	6	2	4	0	4	0	0	0	0	390
09:00	0	256	8	0	9	0	0	2	8	0	0	0	0	283
10:00	0	278	12	1	9	1	1	1	2	0	0	0	0	305
11:00	0	331	13	3	8	2	1	0	3	0	0	0	0	361
12 PM	0	317	113	0	14	3	2	0	2	0	0	0	0	451
13:00	3	358	102	1	7	3	3	1	3	1	4	0	0	486
14:00	3	483	147	3	13	6	1	1	4	0	1	0	0	662
15:00	3	551	174	2	5	0	0	0	4	0	0	2	0	741
16:00	1	550	174	2	7	2	0	0	5	0	0	0	0	741
17:00	3	596	157	3	4	3	0	1	1	0	0	0	0	768
18:00	1	464	132	0	1	0	0	0	2	0	0	2	0	602
19:00	1	398	80	0	1	0	0	1	1	0	0	2	0	484
20:00	0	312	62	0	0	0	0	0	1	0	2	1	0	378
21:00	1	243	49	0	3	0	0	1	2	0	0	0	0	299
22:00	2	147	32	0	0	0	0	0	3	0	5	0	0	189
23:00	0	86	23	0	0	0	0	0	2	0	1	0	0	112
Total	18	6815	1336	22	101	26	16	8	64	1	16	7	0	8430
Percent	0.2%	80.8%	15.8%	0.3%	1.2%	0.3%	0.2%	0.1%	0.8%	0.0%	0.2%	0.1%	0.0%	
AM Peak		07:00	07:00	07:00	09:00	07:00	08:00	09:00	07:00		05:00			07:00
Vol.		490	17	4	9	2	4	2	10		2			527
PM Peak	13:00	17:00	15:00	14:00	12:00	14:00	13:00	13:00	16:00	13:00	22:00	15:00		17:00
Vol.	3	596	174	3	14	6	3	1	5	1	5	2		768
Grand Total	18	6815	1336	22	101	26	16	8	64	1	16	7	0	8430
Percent	0.2%	80.8%	15.8%	0.3%	1.2%	0.3%	0.2%	0.1%	0.8%	0.0%	0.2%	0.1%	0.0%	

Counts Unlimited, Inc.

City of Menifee
Winchester Road
N/ Simpson Road
24 Hour Directional Classification Count
Southbound

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

MEN001
Site Code: 051-23548

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
05/25/23	0	26	4	0	0	0	0	0	0	0	0	0	0	30
01:00	1	25	1	0	0	0	0	0	2	0	0	0	0	29
02:00	0	34	3	0	0	0	0	0	1	0	0	0	0	38
03:00	1	62	10	0	1	0	0	0	2	0	0	0	0	76
04:00	1	139	40	0	0	1	0	0	4	0	2	0	0	187
05:00	0	296	64	0	3	1	0	0	2	1	0	0	0	367
06:00	1	439	150	6	2	7	2	0	2	0	0	0	0	609
07:00	3	590	150	2	9	1	1	0	6	0	0	0	0	762
08:00	4	486	97	0	9	4	3	1	4	0	0	0	0	608
09:00	1	397	90	2	6	3	3	0	3	0	0	0	0	505
10:00	3	384	82	0	5	4	2	1	4	0	0	0	0	485
11:00	1	346	84	4	7	2	1	1	6	0	0	0	0	452
12 PM	0	424	25	1	8	6	0	0	2	3	0	0	0	469
13:00	0	567	28	3	10	2	2	1	2	1	0	0	0	616
14:00	1	461	61	8	12	1	0	0	4	0	0	0	0	548
15:00	0	514	37	3	3	0	0	0	3	0	1	0	0	561
16:00	1	498	41	4	4	0	0	0	0	0	2	0	0	550
17:00	3	502	34	0	2	0	0	1	0	0	2	0	0	544
18:00	1	356	17	0	3	0	0	1	1	0	0	0	0	379
19:00	4	268	40	0	3	0	0	0	2	0	0	0	0	317
20:00	5	207	7	0	2	0	0	0	1	0	1	0	0	223
21:00	0	164	19	0	0	0	0	0	1	0	3	1	0	188
22:00	1	95	15	0	1	0	0	0	2	0	1	0	0	115
23:00	0	75	6	0	0	0	0	0	3	0	0	0	0	84
Total	32	7355	1105	33	90	32	14	6	57	5	12	1	0	8742
Percent	0.4%	84.1%	12.6%	0.4%	1.0%	0.4%	0.2%	0.1%	0.7%	0.1%	0.1%	0.0%	0.0%	
AM Peak	08:00	07:00	06:00	06:00	07:00	06:00	08:00	08:00	07:00	05:00	04:00			07:00
Vol.	4	590	150	6	9	7	3	1	6	1	2			762
PM Peak	20:00	13:00	14:00	14:00	14:00	12:00	13:00	13:00	14:00	12:00	21:00	21:00		13:00
Vol.	5	567	61	8	12	6	2	1	4	3	3	1		616
Grand Total	32	7355	1105	33	90	32	14	6	57	5	12	1	0	8742
Percent	0.4%	84.1%	12.6%	0.4%	1.0%	0.4%	0.2%	0.1%	0.7%	0.1%	0.1%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Menifee
Winchester Road
N/ Simpson Road
24 Hour Directional Classification Count
Northbound, Southbound

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

MEN001
Site Code: 051-23548

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
05/25/23	0	80	4	0	0	0	0	0	1	0	0	0	0	85
01:00	1	57	2	0	0	0	0	0	3	0	0	0	0	63
02:00	0	63	4	0	1	0	0	0	2	0	0	0	0	70
03:00	1	83	10	0	4	1	0	0	2	0	1	0	0	102
04:00	1	187	44	0	4	1	0	0	4	0	2	0	0	243
05:00	0	415	71	1	5	1	0	0	3	1	2	0	0	499
06:00	1	734	162	7	3	8	5	0	5	0	0	0	0	925
07:00	3	1080	167	6	12	3	2	0	16	0	0	0	0	1289
08:00	4	843	113	1	15	6	7	1	8	0	0	0	0	998
09:00	1	653	98	2	15	3	3	2	11	0	0	0	0	788
10:00	3	662	94	1	14	5	3	2	6	0	0	0	0	790
11:00	1	677	97	7	15	4	2	1	9	0	0	0	0	813
12 PM	0	741	138	1	22	9	2	0	4	3	0	0	0	920
13:00	3	925	130	4	17	5	5	2	5	2	4	0	0	1102
14:00	4	944	208	11	25	7	1	1	8	0	1	0	0	1210
15:00	3	1065	211	5	8	0	0	0	7	0	1	2	0	1302
16:00	2	1048	215	6	11	2	0	0	5	0	2	0	0	1291
17:00	6	1098	191	3	6	3	0	2	1	0	2	0	0	1312
18:00	2	820	149	0	4	0	0	1	3	0	0	2	0	981
19:00	5	666	120	0	4	0	0	1	3	0	0	2	0	801
20:00	5	519	69	0	2	0	0	0	2	0	3	1	0	601
21:00	1	407	68	0	3	0	0	1	3	0	3	1	0	487
22:00	3	242	47	0	1	0	0	0	5	0	6	0	0	304
23:00	0	161	29	0	0	0	0	0	5	0	1	0	0	196
Total	50	14170	2441	55	191	58	30	14	121	6	28	8	0	17172
Percent	0.3%	82.5%	14.2%	0.3%	1.1%	0.3%	0.2%	0.1%	0.7%	0.0%	0.2%	0.0%	0.0%	
AM Peak	08:00	07:00	07:00	06:00	08:00	06:00	08:00	09:00	07:00	05:00	04:00			07:00
Vol.	4	1080	167	7	15	8	7	2	16	1	2			1289
PM Peak	17:00	17:00	16:00	14:00	14:00	12:00	13:00	13:00	14:00	12:00	22:00	15:00		17:00
Vol.	6	1098	215	11	25	9	5	2	8	3	6	2		1312
Grand Total	50	14170	2441	55	191	58	30	14	121	6	28	8	0	17172
Percent	0.3%	82.5%	14.2%	0.3%	1.1%	0.3%	0.2%	0.1%	0.7%	0.0%	0.2%	0.0%	0.0%	

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APPENDIX 3.2: EXISTING (2023) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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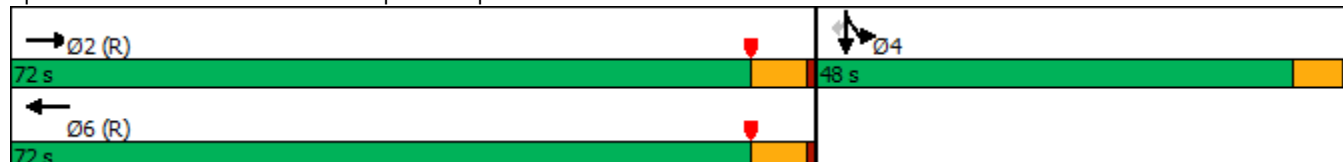
Timings
1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

	→	↘	←	↙	↓	↘
Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↗	↑↑↑	↘	↕	↗
Traffic Volume (vph)	1325	652	1676	332	0	497
Future Volume (vph)	1325	652	1676	332	0	497
Turn Type	NA	Free	NA	Split	NA	Perm
Protected Phases	2		6	4	4	
Permitted Phases		Free				4
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	30.0		33.0	20.0	20.0	20.0
Total Split (s)	72.0		72.0	48.0	48.0	48.0
Total Split (%)	60.0%		60.0%	40.0%	40.0%	40.0%
Yellow Time (s)	5.0		5.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min		C-Min	None	None	None
Act Effct Green (s)	82.9	120.0	82.9	25.6	25.6	25.6
Actuated g/C Ratio	0.69	1.00	0.69	0.21	0.21	0.21
v/c Ratio	0.27	0.37	0.46	0.77	0.69	0.68
Control Delay	7.8	0.6	9.6	57.0	47.2	46.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.8	0.6	9.6	57.0	47.2	46.8
LOS	A	A	A	E	D	D
Approach Delay	5.4		9.6		50.5	
Approach LOS	A		A		D	
Intersection Summary						
Cycle Length: 120						
Actuated Cycle Length: 120						
Offset: 68 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow						
Natural Cycle: 55						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.77						
Intersection Signal Delay: 15.3				Intersection LOS: B		
Intersection Capacity Utilization 62.5%				ICU Level of Service B		
Analysis Period (min) 15						

Splits and Phases: 1: I-215 SB Ramps & Newport Rd.



HCM 6th Signalized Intersection Summary
1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗		↑↑↑					↖	↔	↗
Traffic Volume (veh/h)	0	1325	652	0	1676	0	0	0	0	332	0	497
Future Volume (veh/h)	0	1325	652	0	1676	0	0	0	0	332	0	497
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1410	0	0	1783	0				473	0	247
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	5428		0	4071	0				637	0	283
Arrive On Green	0.00	0.73	0.00	0.00	0.73	0.00				0.18	0.00	0.18
Sat Flow, veh/h	0	7481	1585	0	5611	0				3563	0	1585
Grp Volume(v), veh/h	0	1410	0	0	1783	0				473	0	247
Grp Sat Flow(s),veh/h/ln	0	1870	1585	0	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	7.7	0.0	0.0	15.3	0.0				15.1	0.0	18.2
Cycle Q Clear(g_c), s	0.0	7.7	0.0	0.0	15.3	0.0				15.1	0.0	18.2
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	5428		0	4071	0				637	0	283
V/C Ratio(X)	0.00	0.26		0.00	0.44	0.00				0.74	0.00	0.87
Avail Cap(c_a), veh/h	0	5428		0	4071	0				1262	0	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	5.6	0.0	0.0	6.6	0.0				46.7	0.0	47.9
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.3	0.0				0.7	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	0.0	0.0	4.8	0.0				6.5	0.0	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.7	0.0	0.0	7.0	0.0				47.3	0.0	51.2
LnGrp LOS	A	A		A	A	A				D	A	D
Approach Vol, veh/h		1410			1783						720	
Approach Delay, s/veh		5.7			7.0						48.7	
Approach LOS		A			A						D	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		93.1		26.9		93.1						
Change Period (Y+Rc), s		6.0		5.5		6.0						
Max Green Setting (Gmax), s		66.0		42.5		66.0						
Max Q Clear Time (g_c+I1), s		9.7		20.2		17.3						
Green Ext Time (p_c), s		12.8		1.2		18.5						
Intersection Summary												
HCM 6th Ctrl Delay			14.2									
HCM 6th LOS			B									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Timings
2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

	→	←	↖	↗	↑	↘
Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations	↑↑↑	↑↑↑	↖	↗	↕	↖
Traffic Volume (vph)	1254	2302	484	357	0	579
Future Volume (vph)	1254	2302	484	357	0	579
Turn Type	NA	NA	Free	Split	NA	Perm
Protected Phases	2	6		8	8	
Permitted Phases			Free			8
Detector Phase	2	6		8	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	33.0	33.0		22.0	22.0	22.0
Total Split (s)	66.0	66.0		54.0	54.0	54.0
Total Split (%)	55.0%	55.0%		45.0%	45.0%	45.0%
Yellow Time (s)	5.0	5.0		4.5	4.5	4.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min	C-Min		None	None	None
Act Effect Green (s)	78.4	78.4	120.0	30.1	30.1	30.1
Actuated g/C Ratio	0.65	0.65	1.00	0.25	0.25	0.25
v/c Ratio	0.35	0.49	0.32	0.71	0.81	0.64
Control Delay	10.7	12.0	0.6	48.4	53.2	40.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.7	12.0	0.6	48.4	53.2	40.7
LOS	B	B	A	D	D	D
Approach Delay	10.7	10.0			47.4	
Approach LOS	B	B			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 17.2

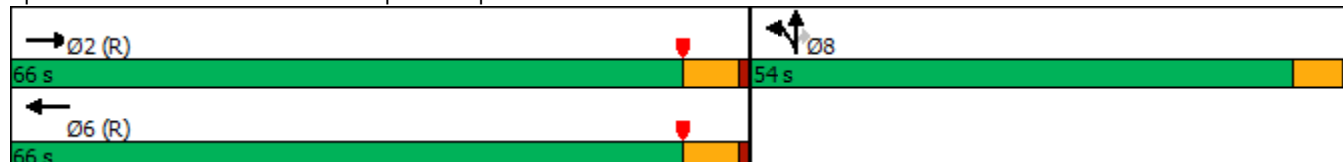
Intersection LOS: B

Intersection Capacity Utilization 58.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 2: I-215 NB Ramps & Newport Rd.



HCM 6th Signalized Intersection Summary

2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑	↑	↑	↑	↑			
Traffic Volume (veh/h)	0	1254	0	0	2302	484	357	0	579	0	0	0
Future Volume (veh/h)	0	1254	0	0	2302	484	357	0	579	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	0	1293	0	0	2373	0	476	0	231			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	2	0	0	2	2	2	2	2			
Cap, veh/h	0	4126	0	0	5502		601	0	268			
Arrive On Green	0.00	0.74	0.00	0.00	0.74	0.00	0.17	0.00	0.17			
Sat Flow, veh/h	0	5611	0	0	7481	1585	3563	0	1585			
Grp Volume(v), veh/h	0	1293	0	0	2373	0	476	0	231			
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	0.0	9.5	0.0	0.0	14.8	0.0	15.4	0.0	17.0			
Cycle Q Clear(g_c), s	0.0	9.5	0.0	0.0	14.8	0.0	15.4	0.0	17.0			
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	4126	0	0	5502		601	0	268			
V/C Ratio(X)	0.00	0.31	0.00	0.00	0.43		0.79	0.00	0.86			
Avail Cap(c_a), veh/h	0	4126	0	0	5502		1440	0	641			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.50	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	5.5	0.0	0.0	6.2	0.0	47.8	0.0	48.5			
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.1	0.0	0.9	0.0	3.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	2.9	0.0	0.0	4.4	0.0	6.7	0.0	6.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.7	0.0	0.0	6.3	0.0	48.8	0.0	51.8			
LnGrp LOS	A	A	A	A	A		D	A	D			
Approach Vol, veh/h		1293			2373			707				
Approach Delay, s/veh		5.7			6.3			49.7				
Approach LOS		A			A			D				
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		94.2				94.2		25.8				
Change Period (Y+Rc), s		6.0				6.0		5.5				
Max Green Setting (Gmax), s		60.0				60.0		48.5				
Max Q Clear Time (g_c+I1), s		11.5				16.8		19.0				
Green Ext Time (p_c), s		10.9				27.8		1.2				

Intersection Summary

HCM 6th Ctrl Delay	13.1
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.

Timings
3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  	 	  	 	 	 	 	 	 
Traffic Volume (vph)	157	1319	83	1924	558	62	83	94	85	304
Future Volume (vph)	157	1319	83	1924	558	62	83	94	85	304
Turn Type	Prot	NA	Prot	NA	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4	3	8	2	2		6	6	7
Permitted Phases							2			6
Detector Phase	7	4	3	8	2	2	2	6	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.2	9.6	34.8	36.8	36.8	36.8	15.8	15.8	9.6
Total Split (s)	13.6	64.1	11.7	62.2	38.1	38.1	38.1	16.1	16.1	13.6
Total Split (%)	10.5%	49.3%	9.0%	47.8%	29.3%	29.3%	29.3%	12.4%	12.4%	10.5%
Yellow Time (s)	3.6	5.2	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	4.6	5.8	5.8	5.8	5.8	5.8	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag						Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes						Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None	None
Act Effect Green (s)	8.5	58.9	6.6	55.1	22.2	22.2	22.2	10.2	10.2	24.6
Actuated g/C Ratio	0.07	0.50	0.06	0.47	0.19	0.19	0.19	0.09	0.09	0.21
v/c Ratio	0.65	0.65	0.44	0.87	0.69	0.68	0.22	0.32	0.53	0.48
Control Delay	67.7	24.1	63.7	34.0	51.1	56.7	4.2	56.1	67.0	34.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.7	24.1	63.7	34.0	51.1	56.7	4.2	56.1	67.0	34.6
LOS	E	C	E	C	D	E	A	E	E	C
Approach Delay		28.0		35.1		47.2			44.5	
Approach LOS		C		D		D			D	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 118.2

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 35.3

Intersection LOS: D

Intersection Capacity Utilization 75.5%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 3: Antelope Rd. & Newport Rd.

 Ø2	 Ø6	 Ø3	 Ø4
38.1 s	16.1 s	11.7 s	64.1 s
		 Ø7	 Ø8
		13.6 s	62.2 s

HCM 6th Signalized Intersection Summary

3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	1319	271	83	1924	105	558	62	83	94	85	304
Future Volume (veh/h)	157	1319	271	83	1924	105	558	62	83	94	85	304
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	159	1332	235	84	1943	102	491	165	23	95	86	50
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	2143	378	145	2330	122	614	323	270	314	170	430
Arrive On Green	0.06	0.49	0.49	0.04	0.47	0.47	0.17	0.17	0.17	0.09	0.09	0.09
Sat Flow, veh/h	3456	4366	770	3456	4964	260	3563	1870	1564	3456	1870	2790
Grp Volume(v), veh/h	159	1038	529	84	1331	714	491	165	23	95	86	50
Grp Sat Flow(s),veh/h/ln	1728	1702	1732	1728	1702	1820	1781	1870	1564	1728	1870	1395
Q Serve(g_s), s	5.0	24.6	24.6	2.6	37.4	37.7	14.5	8.8	1.4	2.8	4.8	1.7
Cycle Q Clear(g_c), s	5.0	24.6	24.6	2.6	37.4	37.7	14.5	8.8	1.4	2.8	4.8	1.7
Prop In Lane	1.00		0.44	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	219	1671	850	145	1598	854	614	323	270	314	170	430
V/C Ratio(X)	0.73	0.62	0.62	0.58	0.83	0.84	0.80	0.51	0.09	0.30	0.51	0.12
Avail Cap(c_a), veh/h	283	1793	912	223	1747	934	1047	550	460	324	175	438
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	20.5	20.5	51.7	25.4	25.5	43.6	41.3	38.2	46.7	47.6	40.0
Incr Delay (d2), s/veh	4.1	0.6	1.2	1.4	3.4	6.3	2.5	1.3	0.1	0.5	2.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	8.9	9.2	1.1	14.6	16.4	6.4	4.0	0.5	1.2	2.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.6	21.1	21.7	53.0	28.8	31.7	46.1	42.5	38.3	47.2	49.9	40.1
LnGrp LOS	D	C	C	D	C	C	D	D	D	D	D	D
Approach Vol, veh/h	1726				2129				679		231	
Approach Delay, s/veh	24.4				30.7				45.0		46.7	
Approach LOS	C				C				D		D	
Timer - Assigned Phs	2		3		4		6		7		8	
Phs Duration (G+Y+Rc), s	24.8		9.2		60.1		15.8		11.6		57.8	
Change Period (Y+Rc), s	5.8		4.6		6.2		5.8		4.6		* 6.2	
Max Green Setting (Gmax), s	32.3		7.1		57.9		10.3		9.0		* 56	
Max Q Clear Time (g_c+I1), s	16.5		4.6		26.6		6.8		7.0		39.7	
Green Ext Time (p_c), s	2.4		0.0		12.3		0.3		0.0		11.9	
Intersection Summary												
HCM 6th Ctrl Delay			31.2									
HCM 6th LOS			C									
Notes												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings

Salt Creek TA (JN:15470)

4: Meniffee Rd. & McCall Bl.

08/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	114	353	45	407	179	308	274	39	164	279
Future Volume (vph)	114	353	45	407	179	308	274	39	164	279
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4	3	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	7	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	9.6	30.8	30.8	9.6	39.5	39.5	9.6	16.5
Total Split (s)	20.0	41.0	9.8	30.8	30.8	39.0	44.2	44.2	25.0	30.2
Total Split (%)	16.7%	34.2%	8.2%	25.7%	25.7%	32.5%	36.8%	36.8%	20.8%	25.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effect Green (s)	11.8	29.1	5.4	19.9	19.9	25.3	28.7	28.7	15.4	18.8
Actuated g/C Ratio	0.12	0.30	0.05	0.20	0.20	0.26	0.29	0.29	0.16	0.19
v/c Ratio	0.66	0.71	0.29	0.69	0.44	0.83	0.32	0.08	0.72	0.75
Control Delay	60.5	29.4	55.9	43.9	8.5	52.1	29.4	0.3	58.2	40.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.5	29.4	55.9	43.9	8.5	52.1	29.4	0.3	58.2	40.9
LOS	E	C	E	D	A	D	C	A	E	D
Approach Delay		34.2		34.7			38.8			45.7
Approach LOS		C		C			D			D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 98.3

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 38.1

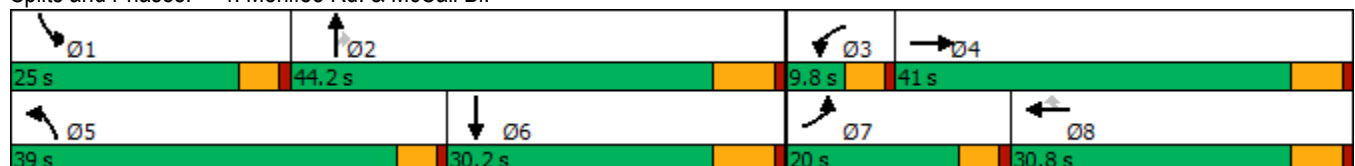
Intersection LOS: D

Intersection Capacity Utilization 70.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: Meniffee Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	353	284	45	407	179	308	274	39	164	279	157
Future Volume (veh/h)	114	353	284	45	407	179	308	274	39	164	279	157
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	139	430	268	55	496	96	376	334	15	200	340	84
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	564	349	157	763	340	422	943	421	242	467	114
Arrive On Green	0.10	0.27	0.27	0.05	0.21	0.21	0.24	0.27	0.27	0.14	0.16	0.16
Sat Flow, veh/h	1781	2109	1303	3456	3554	1585	1781	3554	1585	1781	2832	690
Grp Volume(v), veh/h	139	362	336	55	496	96	376	334	15	200	212	212
Grp Sat Flow(s),veh/h/ln	1781	1777	1636	1728	1777	1585	1781	1777	1585	1781	1777	1746
Q Serve(g_s), s	5.7	14.1	14.3	1.2	9.6	3.8	15.4	5.7	0.5	8.2	8.5	8.7
Cycle Q Clear(g_c), s	5.7	14.1	14.3	1.2	9.6	3.8	15.4	5.7	0.5	8.2	8.5	8.7
Prop In Lane	1.00		0.80	1.00		1.00	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	175	475	438	157	763	340	422	943	421	242	293	288
V/C Ratio(X)	0.79	0.76	0.77	0.35	0.65	0.28	0.89	0.35	0.04	0.83	0.72	0.74
Avail Cap(c_a), veh/h	364	831	765	239	1180	526	814	1779	793	483	559	550
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	25.4	25.4	34.9	27.0	24.7	27.8	22.4	20.5	31.7	29.8	29.9
Incr Delay (d2), s/veh	3.1	2.5	2.9	0.5	0.9	0.4	2.7	0.2	0.0	2.7	3.4	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	5.7	5.3	0.5	3.8	1.4	6.0	2.1	0.2	3.3	3.5	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.3	27.9	28.3	35.4	27.9	25.2	30.5	22.6	20.5	34.4	33.2	33.6
LnGrp LOS	D	C	C	D	C	C	C	C	C	C	C	C
Approach Vol, veh/h		837			647			725			624	
Approach Delay, s/veh		29.4			28.2			26.7			33.7	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.8	26.5	8.0	26.0	22.4	18.9	12.0	22.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	20.4	37.7	5.2	35.2	34.4	23.7	15.4	25.0				
Max Q Clear Time (g_c+I1), s	10.2	7.7	3.2	16.3	17.4	10.7	7.7	11.6				
Green Ext Time (p_c), s	0.2	1.9	0.0	3.9	0.5	1.7	0.1	2.7				
Intersection Summary												
HCM 6th Ctrl Delay			29.4									
HCM 6th LOS			C									

Timings

Salt Creek TA (JN:15470)

5: Meniffee Rd. & Simpson Rd.

08/23/2023

	←	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↑↑	↖	↖	↑↑
Traffic Volume (vph)	277	93	298	267	58	336
Future Volume (vph)	277	93	298	267	58	336
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0
Minimum Split (s)	26.5	26.5	27.5	27.5	9.0	16.5
Total Split (s)	54.0	54.0	48.0	48.0	18.0	66.0
Total Split (%)	45.0%	45.0%	40.0%	40.0%	15.0%	55.0%
Yellow Time (s)	5.5	5.5	5.5	5.5	3.0	5.5
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)	6.5	6.5	6.5	6.5	4.0	6.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min
Act Effect Green (s)	15.9	15.9	13.4	13.4	8.1	19.9
Actuated g/C Ratio	0.32	0.32	0.27	0.27	0.16	0.40
v/c Ratio	0.57	0.19	0.36	0.48	0.23	0.27
Control Delay	20.8	5.1	18.2	5.7	25.2	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.8	5.1	18.2	5.7	25.2	10.3
LOS	C	A	B	A	C	B
Approach Delay	16.9		12.3			12.5
Approach LOS	B		B			B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 50

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 13.6

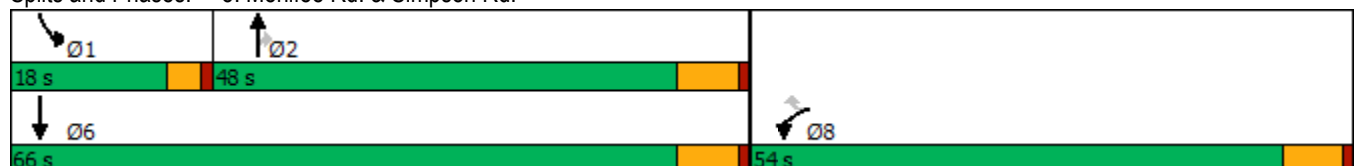
Intersection LOS: B

Intersection Capacity Utilization 42.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Meniffee Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
5: Menifee Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	277	93	298	267	58	336
Future Volume (veh/h)	277	93	298	267	58	336
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	318	46	343	205	67	386
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	442	393	910	395	117	1503
Arrive On Green	0.25	0.25	0.26	0.26	0.07	0.42
Sat Flow, veh/h	1781	1585	3647	1545	1781	3647
Grp Volume(v), veh/h	318	46	343	205	67	386
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1545	1781	1777
Q Serve(g_s), s	6.5	0.9	3.1	4.5	1.4	2.8
Cycle Q Clear(g_c), s	6.5	0.9	3.1	4.5	1.4	2.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	442	393	910	395	117	1503
V/C Ratio(X)	0.72	0.12	0.38	0.52	0.57	0.26
Avail Cap(c_a), veh/h	2140	1904	3729	1621	631	5347
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	13.6	11.5	12.1	12.6	17.9	7.4
Incr Delay (d2), s/veh	2.2	0.1	0.3	1.1	4.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.2	0.8	1.1	0.6	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.8	11.6	12.4	13.7	22.2	7.5
LnGrp LOS	B	B	B	B	C	A
Approach Vol, veh/h	364		548			453
Approach Delay, s/veh	15.3		12.9			9.7
Approach LOS	B		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.6	16.6			23.2	16.3
Change Period (Y+Rc), s	4.0	6.5			6.5	6.5
Max Green Setting (Gmax), s	14.0	41.5			59.5	47.5
Max Q Clear Time (g_c+I1), s	3.4	6.5			4.8	8.5
Green Ext Time (p_c), s	0.1	2.7			2.3	1.1
Intersection Summary						
HCM 6th Ctrl Delay			12.4			
HCM 6th LOS			B			

Timings

Salt Creek TA (JN:15470)

6: Meniffee Rd. & Newport Rd.

08/23/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	244	1172	113	1269	61	164	191	113	119	303	429
Future Volume (vph)	244	1172	113	1269	61	164	191	113	119	303	429
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0
Minimum Split (s)	9.6	34.8	9.6	32.8	32.8	9.6	39.8	9.6	9.6	35.8	9.6
Total Split (s)	24.0	50.6	13.5	40.1	40.1	16.0	41.4	13.5	14.5	39.9	24.0
Total Split (%)	20.0%	42.2%	11.3%	33.4%	33.4%	13.3%	34.5%	11.3%	12.1%	33.3%	20.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.8	3.6	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.8	4.6	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effect Green (s)	18.9	45.1	7.7	33.9	33.9	9.4	16.8	25.7	9.9	17.4	37.5
Actuated g/C Ratio	0.19	0.45	0.08	0.34	0.34	0.09	0.17	0.26	0.10	0.17	0.37
v/c Ratio	0.82	0.63	0.48	0.82	0.11	0.57	0.36	0.26	0.76	0.55	0.76
Control Delay	61.0	24.0	52.9	36.5	0.3	52.6	38.1	7.6	73.6	41.5	30.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.0	24.0	52.9	36.5	0.3	52.6	38.1	7.6	73.6	41.5	30.1
LOS	E	C	D	D	A	D	D	A	E	D	C
Approach Delay		29.9		36.3			35.8			40.2	
Approach LOS		C		D			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 100.5

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 34.7

Intersection LOS: C

Intersection Capacity Utilization 71.9%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 6: Meniffee Rd. & Newport Rd.

			
Ø1	Ø2	Ø3	Ø4
14.5 s	41.4 s	13.5 s	50.6 s
			
Ø5	Ø6	Ø7	Ø8
16 s	39.9 s	24 s	40.1 s

HCM 6th Signalized Intersection Summary
6: Menifee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Traffic Volume (veh/h)	244	1172	119	113	1269	61	164	191	113	119	303	429
Future Volume (veh/h)	244	1172	119	113	1269	61	164	191	113	119	303	429
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	271	1302	118	126	1410	42	182	212	36	132	337	216
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	307	2184	198	194	1747	535	257	570	342	163	631	547
Arrive On Green	0.17	0.46	0.46	0.06	0.34	0.34	0.07	0.16	0.16	0.09	0.18	0.18
Sat Flow, veh/h	1781	4765	432	3456	5106	1564	3456	3554	1579	1781	3554	1540
Grp Volume(v), veh/h	271	930	490	126	1410	42	182	212	36	132	337	216
Grp Sat Flow(s),veh/h/ln	1781	1702	1793	1728	1702	1564	1728	1777	1579	1781	1777	1540
Q Serve(g_s), s	13.2	18.2	18.2	3.2	22.4	1.6	4.6	4.8	1.6	6.5	7.7	9.5
Cycle Q Clear(g_c), s	13.2	18.2	18.2	3.2	22.4	1.6	4.6	4.8	1.6	6.5	7.7	9.5
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	307	1561	822	194	1747	535	257	570	342	163	631	547
V/C Ratio(X)	0.88	0.60	0.60	0.65	0.81	0.08	0.71	0.37	0.11	0.81	0.53	0.39
Avail Cap(c_a), veh/h	388	1710	901	345	1964	601	442	1419	719	198	1359	862
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.0	18.0	18.0	41.2	26.7	19.8	40.3	33.4	28.0	39.7	33.3	21.9
Incr Delay (d2), s/veh	15.2	0.5	0.9	1.4	2.3	0.1	1.3	0.4	0.1	15.3	0.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	6.4	6.8	1.3	8.7	0.6	1.9	2.0	0.6	3.4	3.2	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.2	18.5	18.9	42.6	29.0	19.9	41.7	33.8	28.1	55.0	34.0	22.4
LnGrp LOS	D	B	B	D	C	B	D	C	C	E	C	C
Approach Vol, veh/h		1691			1578			430			685	
Approach Delay, s/veh		23.9			29.8			36.7			34.4	
Approach LOS		C			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.8	20.1	9.6	46.7	11.2	21.6	20.0	36.3				
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8				
Max Green Setting (Gmax), s	9.9	35.6	8.9	44.8	11.4	34.1	19.4	34.3				
Max Q Clear Time (g_c+I1), s	8.5	6.8	5.2	20.2	6.6	11.5	15.2	24.4				
Green Ext Time (p_c), s	0.0	1.3	0.1	10.1	0.1	2.7	0.2	6.1				
Intersection Summary												
HCM 6th Ctrl Delay			28.9									
HCM 6th LOS			C									

Timings

Salt Creek TA (JN:15470)

7: Lindenberger Rd. & Simpson Rd.

08/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	52	204	29	95	205	48	57	111	50	190	55
Future Volume (vph)	52	204	29	95	205	48	57	111	50	190	55
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	26.2	26.2	9.6	28.2	28.2	9.6	30.2	9.6	26.2	26.2
Total Split (s)	17.0	39.0	39.0	24.0	46.0	46.0	18.0	40.0	17.0	39.0	39.0
Total Split (%)	14.2%	32.5%	32.5%	20.0%	38.3%	38.3%	15.0%	33.3%	14.2%	32.5%	32.5%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effect Green (s)	7.6	15.8	15.8	9.5	19.8	19.8	7.8	18.1	7.6	15.5	15.5
Actuated g/C Ratio	0.12	0.24	0.24	0.15	0.30	0.30	0.12	0.28	0.12	0.24	0.24
v/c Ratio	0.29	0.53	0.07	0.43	0.22	0.10	0.31	0.30	0.28	0.50	0.13
Control Delay	36.7	30.4	0.3	36.3	21.1	0.5	36.8	11.8	36.7	30.2	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.7	30.4	0.3	36.3	21.1	0.5	36.8	11.8	36.7	30.2	0.6
LOS	D	C	A	D	C	A	D	B	D	C	A
Approach Delay		28.5			22.4			16.3		25.7	
Approach LOS		C			C			B		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 65.2

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 23.1

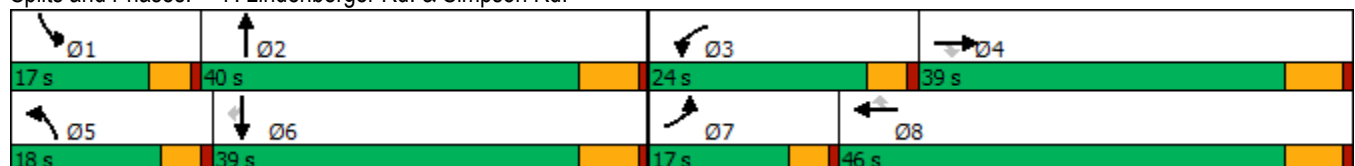
Intersection LOS: C

Intersection Capacity Utilization 48.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Lindenberger Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
7: Lindenberger Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	204	29	95	205	48	57	111	145	50	190	55
Future Volume (veh/h)	52	204	29	95	205	48	57	111	145	50	190	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	237	13	110	238	26	66	129	107	58	221	31
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	385	326	143	813	363	108	406	308	100	390	330
Arrive On Green	0.06	0.21	0.21	0.08	0.23	0.23	0.06	0.21	0.21	0.06	0.21	0.21
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	1781	1904	1443	1781	1870	1580
Grp Volume(v), veh/h	60	237	13	110	238	26	66	120	116	58	221	31
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1781	1777	1570	1781	1870	1580
Q Serve(g_s), s	1.6	5.6	0.3	2.9	2.7	0.6	1.8	2.8	3.1	1.5	5.2	0.8
Cycle Q Clear(g_c), s	1.6	5.6	0.3	2.9	2.7	0.6	1.8	2.8	3.1	1.5	5.2	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.92	1.00		1.00
Lane Grp Cap(c), veh/h	102	385	326	143	813	363	108	379	335	100	390	330
V/C Ratio(X)	0.59	0.62	0.04	0.77	0.29	0.07	0.61	0.32	0.35	0.58	0.57	0.09
Avail Cap(c_a), veh/h	455	1263	1070	711	2912	1299	491	1236	1092	455	1263	1067
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	17.5	15.4	21.9	15.5	14.7	22.3	16.1	16.2	22.4	17.2	15.5
Incr Delay (d2), s/veh	2.0	1.6	0.0	3.3	0.2	0.1	2.1	0.5	0.6	2.0	1.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.0	0.1	1.1	0.9	0.2	0.7	0.9	0.9	0.6	1.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	19.1	15.5	25.2	15.7	14.8	24.3	16.6	16.8	24.4	18.5	15.6
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h	310			374			302			310		
Approach Delay, s/veh	20.0			18.4			18.4			19.3		
Approach LOS	C			B			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	16.6	8.5	16.2	7.5	16.3	7.4	17.3				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	12.4	33.8	19.4	32.8	13.4	32.8	12.4	39.8				
Max Q Clear Time (g_c+I1), s	3.5	5.1	4.9	7.6	3.8	7.2	3.6	4.7				
Green Ext Time (p_c), s	0.0	1.2	0.1	1.2	0.0	1.2	0.0	1.4				
Intersection Summary												
HCM 6th Ctrl Delay	19.0											
HCM 6th LOS	B											

Timings
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

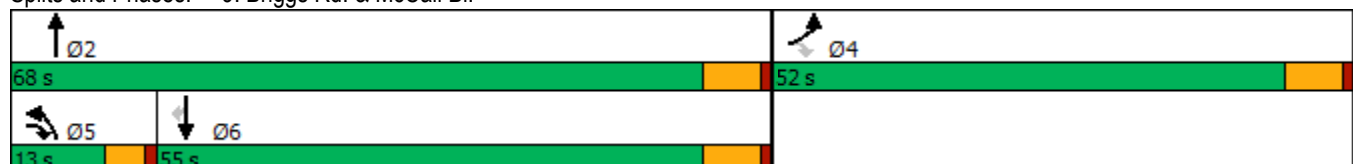
08/23/2023

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	274	91	59	337	286	255
Future Volume (vph)	274	91	59	337	286	255
Turn Type	Prot	pm+ov	Prot	NA	NA	Perm
Protected Phases	4	5	5	2	6	
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	6
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	16.2	9.6	9.6	16.2	43.2	43.2
Total Split (s)	52.0	13.0	13.0	68.0	55.0	55.0
Total Split (%)	43.3%	10.8%	10.8%	56.7%	45.8%	45.8%
Yellow Time (s)	5.2	3.6	3.6	5.2	5.2	5.2
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)	6.2	4.6	4.6	6.2	6.2	6.2
Lead/Lag		Lead	Lead		Lag	Lag
Lead-Lag Optimize?		Yes	Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
Act Effect Green (s)	14.8	23.7	7.2	24.0	15.1	15.1
Actuated g/C Ratio	0.28	0.45	0.14	0.46	0.29	0.29
v/c Ratio	0.61	0.08	0.14	0.44	0.31	0.43
Control Delay	24.9	3.0	26.8	11.1	16.2	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.9	3.0	26.8	11.1	16.2	4.6
LOS	C	A	C	B	B	A
Approach Delay	19.4			13.4	10.8	
Approach LOS	B			B	B	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 52.6
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 14.0
Intersection LOS: B
Intersection Capacity Utilization 43.3%
ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 9: Briggs Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	274	91	59	337	286	255
Future Volume (veh/h)	274	91	59	337	286	255
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	304	39	66	374	318	191
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	442	875	226	816	903	403
Arrive On Green	0.25	0.25	0.07	0.44	0.25	0.25
Sat Flow, veh/h	1781	2790	3456	1870	3647	1585
Grp Volume(v), veh/h	304	39	66	374	318	191
Grp Sat Flow(s),veh/h/ln	1781	1395	1728	1870	1777	1585
Q Serve(g_s), s	6.1	0.4	0.7	5.5	2.9	4.0
Cycle Q Clear(g_c), s	6.1	0.4	0.7	5.5	2.9	4.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	442	875	226	816	903	403
V/C Ratio(X)	0.69	0.04	0.29	0.46	0.35	0.47
Avail Cap(c_a), veh/h	2074	3431	738	2939	4409	1967
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	13.4	9.4	17.5	7.8	12.0	12.4
Incr Delay (d2), s/veh	0.7	0.0	0.7	0.4	0.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.2	1.2	0.8	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.1	9.4	18.2	8.2	12.2	13.3
LnGrp LOS	B	A	B	A	B	B
Approach Vol, veh/h	343			440	509	
Approach Delay, s/veh	13.6			9.7	12.6	
Approach LOS	B			A	B	
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	23.4		16.0		7.2	16.2
Change Period (Y+Rc), s	6.2		6.2		4.6	6.2
Max Green Setting (Gmax), s	61.8		45.8		8.4	48.8
Max Q Clear Time (g_c+I1), s	7.5		8.1		2.7	6.0
Green Ext Time (p_c), s	2.1		0.5		0.1	2.5
Intersection Summary						
HCM 6th Ctrl Delay			11.9			
HCM 6th LOS			B			

Intersection

Intersection Delay, s/veh 12.1

Intersection LOS B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	166	252	216	69	108	122
Future Vol, veh/h	166	252	216	69	108	122
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	177	268	230	73	115	130
Number of Lanes	1	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left SB			WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay	12.1	13.2	10.8
HCM LOS	B	B	B

Lane	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	76%	0%	0%
Vol Right, %	0%	0%	24%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	166	252	285	108	122
LT Vol	166	0	0	108	0
Through Vol	0	252	216	0	0
RT Vol	0	0	69	0	122
Lane Flow Rate	177	268	303	115	130
Geometry Grp	7	7	4	7	7
Degree of Util (X)	0.303	0.422	0.464	0.222	0.207
Departure Headway (Hd)	6.173	5.667	5.514	6.957	5.739
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	583	635	655	517	626
Service Time	3.898	3.392	3.539	4.688	3.47
HCM Lane V/C Ratio	0.304	0.422	0.463	0.222	0.208
HCM Control Delay	11.6	12.5	13.2	11.7	10
HCM Lane LOS	B	B	B	B	A
HCM 95th-tile Q	1.3	2.1	2.5	0.8	0.8

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔			↔			↔	
Traffic Vol, veh/h	0	314	46	12	250	0	35	0	17	0	0	0
Future Vol, veh/h	0	314	46	12	250	0	35	0	17	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	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	-	-	205	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	369	54	14	294	0	41	0	20	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	294	0	0	423	0	0	691	691	369	728	745	294
Stage 1	-	-	-	-	-	-	369	369	-	322	322	-
Stage 2	-	-	-	-	-	-	322	322	-	406	423	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1268	-	-	1136	-	-	359	368	677	339	342	745
Stage 1	-	-	-	-	-	-	651	621	-	690	651	-
Stage 2	-	-	-	-	-	-	690	651	-	622	588	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1268	-	-	1136	-	-	355	362	677	325	337	745
Mov Cap-2 Maneuver	-	-	-	-	-	-	355	362	-	325	337	-
Stage 1	-	-	-	-	-	-	651	621	-	690	641	-
Stage 2	-	-	-	-	-	-	680	641	-	604	588	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.4			15			0		
HCM LOS							C			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	420	1268	-	-	1136	-	-	-				
HCM Lane V/C Ratio	0.146	-	-	-	0.012	-	-	-				
HCM Control Delay (s)	15	0	-	-	8.2	0	-	0				
HCM Lane LOS	C	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	-				

Timings
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	173	155	82	184	201	19	37	340	16	584
Future Volume (vph)	173	155	82	184	201	19	37	340	16	584
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.2	29.2	9.6	29.2	29.2	9.6	29.2	9.6	27.2
Total Split (s)	28.0	32.0	32.0	28.0	32.0	32.0	12.0	50.0	10.0	48.0
Total Split (%)	23.3%	26.7%	26.7%	23.3%	26.7%	26.7%	10.0%	41.7%	8.3%	40.0%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	13.3	15.2	15.2	13.8	15.7	15.7	6.6	27.3	5.7	24.6
Actuated g/C Ratio	0.17	0.19	0.19	0.18	0.20	0.20	0.08	0.35	0.07	0.31
v/c Ratio	0.59	0.44	0.22	0.61	0.55	0.05	0.26	0.32	0.12	0.70
Control Delay	42.9	36.9	5.0	42.6	38.6	0.2	47.4	20.2	48.1	28.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.9	36.9	5.0	42.6	38.6	0.2	47.4	20.2	48.1	28.0
LOS	D	D	A	D	D	A	D	C	D	C
Approach Delay		33.1			38.6			22.5		28.4
Approach LOS		C			D			C		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 78.1

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 30.2

Intersection LOS: C

Intersection Capacity Utilization 64.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 12: Winchester Rd. (SR-79) & Simpson Rd.

			
10 s	50 s	28 s	32 s
			
12 s	48 s	28 s	32 s

HCM 6th Signalized Intersection Summary
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	155	82	184	201	19	37	340	44	16	584	157
Future Volume (veh/h)	173	155	82	184	201	19	37	340	44	16	584	157
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	178	160	51	190	207	7	38	351	32	16	602	92
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	339	285	239	353	298	70	989	90	35	866	132
Arrive On Green	0.13	0.18	0.18	0.13	0.19	0.19	0.04	0.30	0.30	0.02	0.28	0.28
Sat Flow, veh/h	1781	1870	1575	1781	1870	1577	1781	3293	298	1781	3087	471
Grp Volume(v), veh/h	178	160	51	190	207	7	38	188	195	16	346	348
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	1870	1577	1781	1777	1815	1781	1777	1781
Q Serve(g_s), s	5.7	4.5	1.6	6.1	6.0	0.2	1.2	4.9	5.0	0.5	10.3	10.4
Cycle Q Clear(g_c), s	5.7	4.5	1.6	6.1	6.0	0.2	1.2	4.9	5.0	0.5	10.3	10.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		0.26
Lane Grp Cap(c), veh/h	226	339	285	239	353	298	70	534	545	35	499	500
V/C Ratio(X)	0.79	0.47	0.18	0.79	0.59	0.02	0.54	0.35	0.36	0.46	0.69	0.70
Avail Cap(c_a), veh/h	704	814	686	704	814	687	222	1314	1342	162	1254	1256
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	21.7	20.5	24.9	21.9	19.6	27.9	16.2	16.2	28.7	19.0	19.1
Incr Delay (d2), s/veh	2.3	1.0	0.3	2.3	1.5	0.0	2.4	0.4	0.4	3.5	1.7	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	1.8	0.5	2.4	2.4	0.1	0.5	1.7	1.7	0.2	3.7	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	22.7	20.8	27.1	23.5	19.6	30.4	16.6	16.6	32.2	20.8	20.8
LnGrp LOS	C	C	C	C	C	B	C	B	B	C	C	C
Approach Vol, veh/h		389			404			421			710	
Approach Delay, s/veh		24.6			25.1			17.9			21.1	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.8	24.0	12.6	16.9	6.9	22.8	12.1	17.4				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	5.4	43.8	23.4	25.8	7.4	41.8	23.4	25.8				
Max Q Clear Time (g_c+I1), s	2.5	7.0	8.1	6.5	3.2	12.4	7.7	8.0				
Green Ext Time (p_c), s	0.0	2.0	0.2	0.8	0.0	4.0	0.2	0.9				
Intersection Summary												
HCM 6th Ctrl Delay			21.9									
HCM 6th LOS			C									

Timings
1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

	→	↘	←	↙	↓	↖
Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↑	↑↑↑↑	↑	↔	↑
Traffic Volume (vph)	2044	439	2073	559	0	734
Future Volume (vph)	2044	439	2073	559	0	734
Turn Type	NA	Free	NA	Split	NA	Perm
Protected Phases	2		6	4	4	
Permitted Phases		Free				4
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	30.0		33.0	20.0	20.0	20.0
Total Split (s)	68.0		68.0	52.0	52.0	52.0
Total Split (%)	56.7%		56.7%	43.3%	43.3%	43.3%
Yellow Time (s)	5.0		5.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min		C-Min	None	None	None
Act Effect Green (s)	72.1	120.0	72.1	36.4	36.4	36.4
Actuated g/C Ratio	0.60	1.00	0.60	0.30	0.30	0.30
v/c Ratio	0.47	0.24	0.63	0.81	0.75	0.73
Control Delay	14.6	0.3	17.6	49.5	42.8	41.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.6	0.3	17.6	49.5	42.8	41.9
LOS	B	A	B	D	D	D
Approach Delay	12.1		17.6		44.8	
Approach LOS	B		B		D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 68 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 21.2

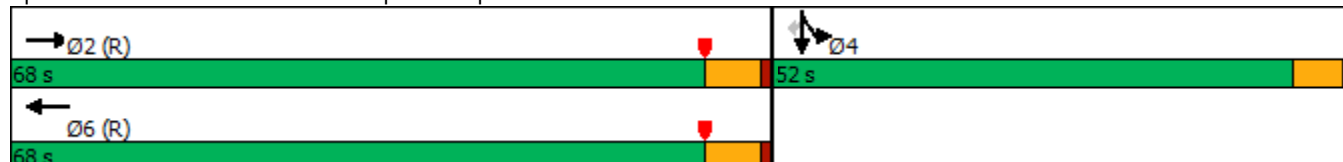
Intersection LOS: C

Intersection Capacity Utilization 79.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: I-215 SB Ramps & Newport Rd.



HCM 6th Signalized Intersection Summary

1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗		↑↑↑					↗	↕	↗
Traffic Volume (veh/h)	0	2044	439	0	2073	0	0	0	0	559	0	734
Future Volume (veh/h)	0	2044	439	0	2073	0	0	0	0	559	0	734
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	2086	0	0	2115	0				791	0	427
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	4560		0	3420	0				1050	0	467
Arrive On Green	0.00	0.61	0.00	0.00	0.61	0.00				0.29	0.00	0.29
Sat Flow, veh/h	0	7481	1585	0	5611	0				3563	0	1585
Grp Volume(v), veh/h	0	2086	0	0	2115	0				791	0	427
Grp Sat Flow(s),veh/h/ln	0	1870	1585	0	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	18.1	0.0	0.0	28.3	0.0				24.2	0.0	31.2
Cycle Q Clear(g_c), s	0.0	18.1	0.0	0.0	28.3	0.0				24.2	0.0	31.2
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	4560		0	3420	0				1050	0	467
V/C Ratio(X)	0.00	0.46		0.00	0.62	0.00				0.75	0.00	0.91
Avail Cap(c_a), veh/h	0	4560		0	3420	0				1381	0	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	12.7	0.0	0.0	14.7	0.0				38.4	0.0	40.9
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.8	0.0				1.1	0.0	13.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.8	0.0	0.0	10.7	0.0				10.3	0.0	13.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.0	0.0	0.0	15.5	0.0				39.5	0.0	54.3
LnGrp LOS	A	B		A	B	A				D	A	D
Approach Vol, veh/h		2086			2115						1218	
Approach Delay, s/veh		13.0			15.5						44.7	
Approach LOS		B			B						D	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		79.1		40.9		79.1						
Change Period (Y+Rc), s		6.0		5.5		6.0						
Max Green Setting (Gmax), s		62.0		46.5		62.0						
Max Q Clear Time (g_c+I1), s		20.1		33.2		30.3						
Green Ext Time (p_c), s		22.5		2.1		19.6						
Intersection Summary												
HCM 6th Ctrl Delay			21.1									
HCM 6th LOS			C									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

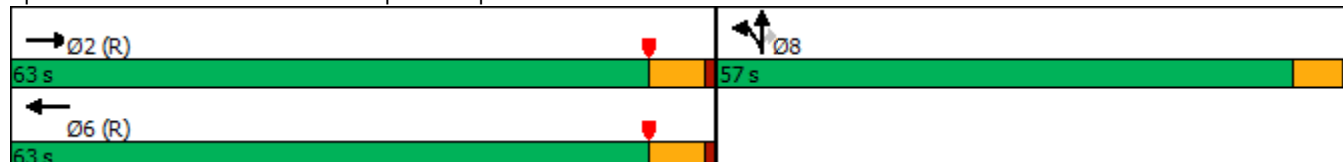
Timings
2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

	→	←	↖	↗	↑	↘
Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations	↑↑↑	↑↑↑	↗	↗	↕	↗
Traffic Volume (vph)	2123	2079	439	552	0	873
Future Volume (vph)	2123	2079	439	552	0	873
Turn Type	NA	NA	Free	Split	NA	Perm
Protected Phases	2	6		8	8	
Permitted Phases			Free			8
Detector Phase	2	6		8	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	33.0	33.0		22.0	22.0	22.0
Total Split (s)	63.0	63.0		57.0	57.0	57.0
Total Split (%)	52.5%	52.5%		47.5%	47.5%	47.5%
Yellow Time (s)	5.0	5.0		4.5	4.5	4.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min	C-Min		None	None	None
Act Effct Green (s)	64.1	64.1	120.0	44.4	44.4	44.4
Actuated g/C Ratio	0.53	0.53	1.00	0.37	0.37	0.37
v/c Ratio	0.74	0.54	0.30	0.75	0.87	0.68
Control Delay	24.7	19.9	0.5	39.7	49.3	34.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.7	19.9	0.5	39.7	49.3	34.5
LOS	C	B	A	D	D	C
Approach Delay	24.7	16.5			41.2	
Approach LOS	C	B			D	
Intersection Summary						
Cycle Length: 120						
Actuated Cycle Length: 120						
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection						
Natural Cycle: 60						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.87						
Intersection Signal Delay: 25.2				Intersection LOS: C		
Intersection Capacity Utilization 82.4%				ICU Level of Service E		
Analysis Period (min) 15						

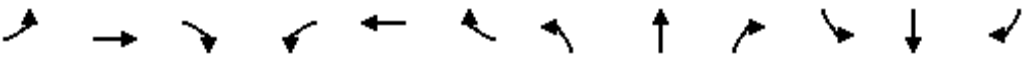
Splits and Phases: 2: I-215 NB Ramps & Newport Rd.



HCM 6th Signalized Intersection Summary 2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑	↑	↑	↑	↑			
Traffic Volume (veh/h)	0	2123	0	0	2079	439	552	0	873	0	0	0
Future Volume (veh/h)	0	2123	0	0	2079	439	552	0	873	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	0	2211	0	0	2166	0	383	0	1060			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	0	2	0	0	2	2	2	2	2			
Cap, veh/h	0	3050	0	0	4066		642	0	1143			
Arrive On Green	0.00	0.54	0.00	0.00	0.54	0.00	0.36	0.00	0.36			
Sat Flow, veh/h	0	5611	0	0	7481	1585	1781	0	3170			
Grp Volume(v), veh/h	0	2211	0	0	2166	0	383	0	1060			
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	0.0	35.6	0.0	0.0	22.3	0.0	21.0	0.0	38.5			
Cycle Q Clear(g_c), s	0.0	35.6	0.0	0.0	22.3	0.0	21.0	0.0	38.5			
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	3050	0	0	4066		642	0	1143			
V/C Ratio(X)	0.00	0.73	0.00	0.00	0.53		0.60	0.00	0.93			
Avail Cap(c_a), veh/h	0	3050	0	0	4066		764	0	1361			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.47	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	20.6	0.0	0.0	17.6	0.0	31.2	0.0	36.8			
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.0	0.2	0.0	0.3	0.0	9.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	14.3	0.0	0.0	8.8	0.0	8.7	0.0	15.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	22.2	0.0	0.0	17.8	0.0	31.6	0.0	46.1			
LnGrp LOS	A	C	A	A	B		C	A	D			
Approach Vol, veh/h		2211			2166			1443				
Approach Delay, s/veh		22.2			17.8			42.3				
Approach LOS		C			B			D				
Timer - Assigned Phs		2			6			8				
Phs Duration (G+Y+Rc), s		71.2			71.2			48.8				
Change Period (Y+Rc), s		6.0			6.0			5.5				
Max Green Setting (Gmax), s		57.0			57.0			51.5				
Max Q Clear Time (g_c+I1), s		37.6			24.3			40.5				
Green Ext Time (p_c), s		14.5			20.6			2.7				
Intersection Summary												
HCM 6th Ctrl Delay			25.5									
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.												

Timings
3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  	 	  	 	 	 	 	 	 
Traffic Volume (vph)	441	1926	125	1546	602	160	177	133	118	370
Future Volume (vph)	441	1926	125	1546	602	160	177	133	118	370
Turn Type	Prot	NA	Prot	NA	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4	3	8	2	2		6	6	7
Permitted Phases							2			6
Detector Phase	7	4	3	8	2	2	2	6	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.2	9.6	34.8	36.8	36.8	36.8	15.8	15.8	9.6
Total Split (s)	23.0	66.0	10.4	53.4	37.4	37.4	37.4	16.2	16.2	23.0
Total Split (%)	17.7%	50.8%	8.0%	41.1%	28.8%	28.8%	28.8%	12.5%	12.5%	17.7%
Yellow Time (s)	3.6	5.2	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	4.6	5.8	5.8	5.8	5.8	5.8	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag						Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes						Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None	None
Act Effect Green (s)	18.0	59.9	5.8	48.1	26.7	26.7	26.7	10.3	10.3	29.5
Actuated g/C Ratio	0.14	0.48	0.05	0.38	0.21	0.21	0.21	0.08	0.08	0.24
v/c Ratio	0.91	1.01	0.81	0.90	0.75	0.74	0.40	0.48	0.78	0.53
Control Delay	76.8	52.2	93.9	43.9	53.5	59.0	12.1	61.9	89.4	34.1
Queue Delay	0.0	14.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.8	66.4	93.9	43.9	53.5	59.0	12.1	61.9	89.4	34.1
LOS	E	E	F	D	D	E	B	E	F	C
Approach Delay		68.1		47.4		47.2			50.5	
Approach LOS		E		D		D			D	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 125.1

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 57.0

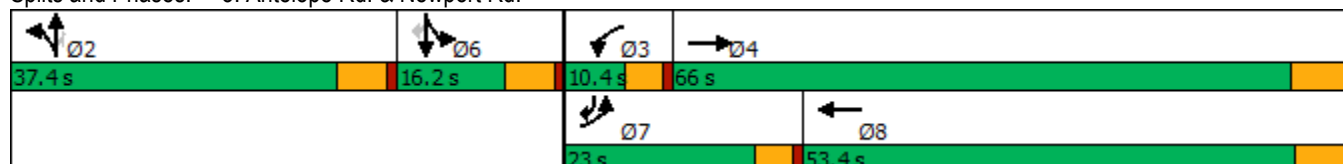
Intersection LOS: E

Intersection Capacity Utilization 94.4%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Antelope Rd. & Newport Rd.



HCM 6th Signalized Intersection Summary

3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	441	1926	422	125	1546	155	602	160	177	133	118	370
Future Volume (veh/h)	441	1926	422	125	1546	155	602	160	177	133	118	370
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	450	1965	309	128	1578	155	566	230	102	136	120	43
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	502	2161	334	165	1836	180	709	372	312	285	154	631
Arrive On Green	0.15	0.49	0.49	0.05	0.39	0.39	0.20	0.20	0.20	0.08	0.08	0.08
Sat Flow, veh/h	3456	4448	687	3456	4727	464	3563	1870	1568	3456	1870	2739
Grp Volume(v), veh/h	450	1495	779	128	1136	597	566	230	102	136	120	43
Grp Sat Flow(s),veh/h/ln	1728	1702	1732	1728	1702	1786	1781	1870	1568	1728	1870	1369
Q Serve(g_s), s	15.5	48.8	50.9	4.4	37.1	37.2	18.3	13.6	6.8	4.6	7.6	1.5
Cycle Q Clear(g_c), s	15.5	48.8	50.9	4.4	37.1	37.2	18.3	13.6	6.8	4.6	7.6	1.5
Prop In Lane	1.00		0.40	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	502	1654	841	165	1322	694	709	372	312	285	154	631
V/C Ratio(X)	0.90	0.90	0.93	0.77	0.86	0.86	0.80	0.62	0.33	0.48	0.78	0.07
Avail Cap(c_a), veh/h	525	1680	854	165	1337	702	929	488	409	297	161	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	28.6	29.1	57.0	34.0	34.0	46.2	44.3	41.6	53.1	54.5	36.7
Incr Delay (d2), s/veh	16.8	7.3	15.6	18.4	5.8	10.5	3.7	1.7	0.6	1.2	20.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	19.7	22.8	2.3	15.6	17.3	8.2	6.3	2.6	2.0	4.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.7	35.8	44.7	75.5	39.8	44.6	50.0	46.0	42.2	54.3	74.9	36.7
LnGrp LOS	E	D	D	E	D	D	D	D	D	D	E	D
Approach Vol, veh/h	2724				1861				898			
Approach Delay, s/veh	43.6				43.8				48.1			
Approach LOS	D				D				D			
Timer - Assigned Phs	2			3		4		6		7		8
Phs Duration (G+Y+Rc), s	29.9			10.4		65.1		15.8		22.2		53.3
Change Period (Y+Rc), s	5.8			4.6		6.2		5.8		4.6		* 6.2
Max Green Setting (Gmax), s	31.6			5.8		59.8		10.4		18.4		* 48
Max Q Clear Time (g_c+I1), s	20.3			6.4		52.9		9.6		17.5		39.2
Green Ext Time (p_c), s	2.9			0.0		6.0		0.1		0.1		6.1

Intersection Summary

HCM 6th Ctrl Delay 45.2

HCM 6th LOS D

Notes

User approved volume balancing among the lanes for turning movement.

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

Timings

4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	195	345	25	246	48	159	235	49	75	216
Future Volume (vph)	195	345	25	246	48	159	235	49	75	216
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4	3	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	7	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	9.6	30.8	30.8	9.6	39.5	39.5	9.6	16.5
Total Split (s)	30.0	51.4	9.6	31.0	31.0	26.0	42.0	42.0	17.0	33.0
Total Split (%)	25.0%	42.8%	8.0%	25.8%	25.8%	21.7%	35.0%	35.0%	14.2%	27.5%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effect Green (s)	15.0	30.5	5.3	13.7	13.7	13.0	21.3	21.3	8.5	14.0
Actuated g/C Ratio	0.19	0.39	0.07	0.17	0.17	0.17	0.27	0.27	0.11	0.18
v/c Ratio	0.66	0.45	0.12	0.45	0.13	0.62	0.28	0.11	0.45	0.59
Control Delay	41.9	17.4	44.6	33.9	0.6	43.4	26.6	0.4	46.1	25.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.9	17.4	44.6	33.9	0.6	43.4	26.6	0.4	46.1	25.3
LOS	D	B	D	C	A	D	C	A	D	C
Approach Delay		23.9		29.7			29.7			28.8
Approach LOS		C		C			C			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 78.7

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 27.3

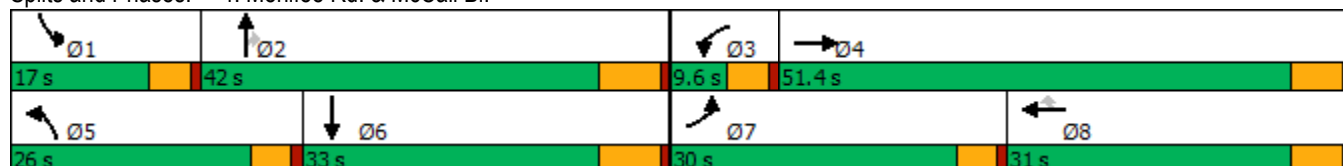
Intersection LOS: C

Intersection Capacity Utilization 57.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 4: Meniffee Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	345	194	25	246	48	159	235	49	75	216	148
Future Volume (veh/h)	195	345	194	25	246	48	159	235	49	75	216	148
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	222	392	173	28	280	20	181	267	26	85	245	51
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	721	314	108	625	278	229	839	372	114	504	103
Arrive On Green	0.15	0.30	0.30	0.03	0.18	0.18	0.13	0.24	0.24	0.06	0.17	0.17
Sat Flow, veh/h	1781	2409	1049	3456	3554	1580	1781	3554	1577	1781	2938	601
Grp Volume(v), veh/h	222	288	277	28	280	20	181	267	26	85	147	149
Grp Sat Flow(s),veh/h/ln	1781	1777	1681	1728	1777	1580	1781	1777	1577	1781	1777	1762
Q Serve(g_s), s	7.0	7.9	8.1	0.5	4.1	0.6	5.7	3.6	0.7	2.7	4.3	4.5
Cycle Q Clear(g_c), s	7.0	7.9	8.1	0.5	4.1	0.6	5.7	3.6	0.7	2.7	4.3	4.5
Prop In Lane	1.00		0.62	1.00		1.00	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	275	532	503	108	625	278	229	839	372	114	305	303
V/C Ratio(X)	0.81	0.54	0.55	0.26	0.45	0.07	0.79	0.32	0.07	0.74	0.48	0.49
Avail Cap(c_a), veh/h	777	1391	1317	297	1538	683	655	2166	961	379	808	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	17.1	17.1	27.6	21.5	20.0	24.6	18.4	17.3	26.8	21.8	21.8
Incr Delay (d2), s/veh	2.1	0.9	0.9	0.5	0.5	0.1	2.3	0.2	0.1	3.6	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	2.8	2.7	0.2	1.5	0.2	2.2	1.2	0.2	1.1	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.9	17.9	18.1	28.0	22.0	20.1	26.9	18.6	17.4	30.3	22.9	23.1
LnGrp LOS	C	B	B	C	C	C	C	B	B	C	C	C
Approach Vol, veh/h		787			328			474			381	
Approach Delay, s/veh		20.2			22.4			21.7			24.6	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.3	20.3	6.4	23.2	12.1	16.5	13.6	16.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	12.4	35.5	5.0	45.6	21.4	26.5	25.4	25.2				
Max Q Clear Time (g_c+I1), s	4.7	5.6	2.5	10.1	7.7	6.5	9.0	6.1				
Green Ext Time (p_c), s	0.0	1.5	0.0	3.4	0.2	1.3	0.3	1.5				
Intersection Summary												
HCM 6th Ctrl Delay			21.8									
HCM 6th LOS			C									

Timings
5: Meniffee Rd. & Simpson Rd.

Salt Creek TA (JN:15470)
08/23/2023

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	141	130	361	143	173	316
Future Volume (vph)	141	130	361	143	173	316
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0
Minimum Split (s)	26.5	26.5	27.5	27.5	9.0	16.5
Total Split (s)	39.0	39.0	43.0	43.0	38.0	81.0
Total Split (%)	32.5%	32.5%	35.8%	35.8%	31.7%	67.5%
Yellow Time (s)	5.5	5.5	5.5	5.5	3.0	5.5
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)	6.5	6.5	6.5	6.5	4.0	6.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min
Act Effect Green (s)	12.1	12.1	12.9	12.9	11.3	28.3
Actuated g/C Ratio	0.22	0.22	0.24	0.24	0.21	0.53
v/c Ratio	0.36	0.29	0.44	0.30	0.48	0.18
Control Delay	22.2	6.4	20.0	6.0	25.1	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.2	6.4	20.0	6.0	25.1	7.0
LOS	C	A	B	A	C	A
Approach Delay	14.6		16.0			13.4
Approach LOS	B		B			B

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 53.9
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.48
 Intersection Signal Delay: 14.7
 Intersection LOS: B
 Intersection Capacity Utilization 42.1%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Meniffee Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
5: Menifee Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	141	130	361	143	173	316
Future Volume (veh/h)	141	130	361	143	173	316
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	145	44	372	105	178	326
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	381	339	857	382	241	1680
Arrive On Green	0.21	0.21	0.24	0.24	0.14	0.47
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	145	44	372	105	178	326
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	2.9	0.9	3.7	2.2	4.0	2.2
Cycle Q Clear(g_c), s	2.9	0.9	3.7	2.2	4.0	2.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	381	339	857	382	241	1680
V/C Ratio(X)	0.38	0.13	0.43	0.27	0.74	0.19
Avail Cap(c_a), veh/h	1396	1242	3128	1395	1460	6384
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	14.0	13.2	13.3	12.8	17.2	6.3
Incr Delay (d2), s/veh	0.6	0.2	0.3	0.4	4.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.3	1.0	0.6	1.5	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.6	13.4	13.7	13.2	21.7	6.4
LnGrp LOS	B	B	B	B	C	A
Approach Vol, veh/h	189		477			504
Approach Delay, s/veh	14.3		13.6			11.8
Approach LOS	B		B			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.6	16.5			26.1	15.4
Change Period (Y+Rc), s	4.0	6.5			6.5	6.5
Max Green Setting (Gmax), s	34.0	36.5			74.5	32.5
Max Q Clear Time (g_c+I1), s	6.0	5.7			4.2	4.9
Green Ext Time (p_c), s	0.4	2.5			1.9	0.5
Intersection Summary						
HCM 6th Ctrl Delay			12.9			
HCM 6th LOS			B			

Timings

Salt Creek TA (JN:15470)

6: Meniffee Rd. & Newport Rd.

08/23/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	357	1501	108	1155	67	196	294	117	94	205	315
Future Volume (vph)	357	1501	108	1155	67	196	294	117	94	205	315
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0
Minimum Split (s)	9.6	34.8	9.6	32.8	32.8	9.6	39.8	9.6	9.6	35.8	9.6
Total Split (s)	31.0	55.7	11.3	36.0	36.0	14.8	40.8	11.3	12.2	38.2	31.0
Total Split (%)	25.8%	46.4%	9.4%	30.0%	30.0%	12.3%	34.0%	9.4%	10.2%	31.8%	25.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.8	3.6	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.8	4.6	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effect Green (s)	26.6	50.5	6.5	30.4	30.4	9.6	16.9	24.7	7.6	15.0	42.8
Actuated g/C Ratio	0.26	0.49	0.06	0.30	0.30	0.09	0.16	0.24	0.07	0.15	0.42
v/c Ratio	0.86	0.73	0.55	0.84	0.13	0.67	0.55	0.28	0.78	0.43	0.50
Control Delay	56.3	23.8	58.1	40.8	0.5	57.1	42.3	8.5	85.2	41.9	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.3	23.8	58.1	40.8	0.5	57.1	42.3	8.5	85.2	41.9	17.5
LOS	E	C	E	D	A	E	D	A	F	D	B
Approach Delay		29.6		40.2			40.5			36.0	
Approach LOS		C		D			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 102.5

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 35.0

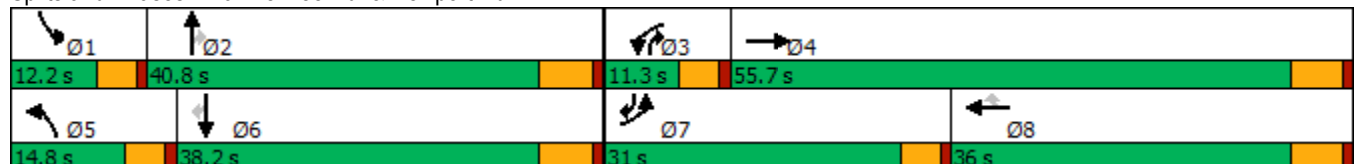
Intersection LOS: C

Intersection Capacity Utilization 74.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: Meniffee Rd. & Newport Rd.



HCM 6th Signalized Intersection Summary
6: Menifee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  		 	 			 	
Traffic Volume (veh/h)	357	1501	139	108	1155	67	196	294	117	94	205	315
Future Volume (veh/h)	357	1501	139	108	1155	67	196	294	117	94	205	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	392	1649	141	119	1269	39	215	323	59	103	225	160
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	429	2367	202	186	1568	480	291	503	305	131	464	588
Arrive On Green	0.24	0.49	0.49	0.05	0.31	0.31	0.08	0.14	0.14	0.07	0.13	0.13
Sat Flow, veh/h	1781	4791	409	3456	5106	1563	3456	3554	1547	1781	3554	1581
Grp Volume(v), veh/h	392	1171	619	119	1269	39	215	323	59	103	225	160
Grp Sat Flow(s),veh/h/ln	1781	1702	1796	1728	1702	1563	1728	1777	1547	1781	1777	1581
Q Serve(g_s), s	18.8	23.3	23.3	3.0	20.1	1.6	5.3	7.5	2.8	5.0	5.2	6.2
Cycle Q Clear(g_c), s	18.8	23.3	23.3	3.0	20.1	1.6	5.3	7.5	2.8	5.0	5.2	6.2
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	429	1681	887	186	1568	480	291	503	305	131	464	588
V/C Ratio(X)	0.91	0.70	0.70	0.64	0.81	0.08	0.74	0.64	0.19	0.79	0.48	0.27
Avail Cap(c_a), veh/h	536	1938	1023	264	1759	539	402	1419	703	154	1314	966
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	17.1	17.1	40.6	28.0	21.6	39.2	35.5	29.5	40.0	35.4	19.3
Incr Delay (d2), s/veh	16.0	0.9	1.8	1.4	2.7	0.1	2.5	1.4	0.3	17.0	0.8	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	9.4	8.0	8.7	1.2	7.9	0.5	2.2	3.2	1.0	2.7	2.2	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.4	18.0	18.9	42.0	30.7	21.7	41.6	36.9	29.8	56.9	36.2	19.5
LnGrp LOS	D	B	B	D	C	C	D	D	C	E	D	B
Approach Vol, veh/h		2182			1427			597			488	
Approach Delay, s/veh		23.7			31.4			37.9			35.1	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	18.2	9.3	49.1	12.0	17.2	25.7	32.7				
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8				
Max Green Setting (Gmax), s	7.6	35.0	6.7	49.9	10.2	32.4	26.4	30.2				
Max Q Clear Time (g_c+I1), s	7.0	9.5	5.0	25.3	7.3	8.2	20.8	22.1				
Green Ext Time (p_c), s	0.0	2.1	0.0	13.4	0.1	1.8	0.3	4.8				
Intersection Summary												
HCM 6th Ctrl Delay			29.0									
HCM 6th LOS			C									

Timings

Salt Creek TA (JN:15470)

7: Lindenberger Rd. & Simpson Rd.

08/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	49	195	33	55	234	31	35	114	16	86	43
Future Volume (vph)	49	195	33	55	234	31	35	114	16	86	43
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	26.2	26.2	9.6	28.2	28.2	9.6	30.2	9.6	26.2	26.2
Total Split (s)	20.0	44.0	44.0	21.0	45.0	45.0	17.0	40.0	15.0	38.0	38.0
Total Split (%)	16.7%	36.7%	36.7%	17.5%	37.5%	37.5%	14.2%	33.3%	12.5%	31.7%	31.7%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effect Green (s)	7.1	14.1	14.1	7.3	14.3	14.3	6.6	15.0	6.1	12.9	12.9
Actuated g/C Ratio	0.14	0.28	0.28	0.14	0.28	0.28	0.13	0.29	0.12	0.25	0.25
v/c Ratio	0.23	0.44	0.07	0.25	0.27	0.07	0.17	0.23	0.09	0.21	0.10
Control Delay	28.9	22.3	0.3	28.8	18.4	0.3	29.5	10.4	30.7	21.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.9	22.3	0.3	28.8	18.4	0.3	29.5	10.4	30.7	21.5	0.4
LOS	C	C	A	C	B	A	C	B	C	C	A
Approach Delay		20.8			18.4			13.1		16.3	
Approach LOS		C			B			B		B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 51.1

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 17.5

Intersection LOS: B

Intersection Capacity Utilization 42.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Lindenberger Rd. & Simpson Rd.

			
Ø1	Ø2	Ø3	Ø4
15 s	40 s	21 s	44 s
			
Ø5	Ø6	Ø7	Ø8
17 s	38 s	20 s	45 s

HCM 6th Signalized Intersection Summary
7: Lindenberger Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	195	33	55	234	31	35	114	94	16	86	43
Future Volume (veh/h)	49	195	33	55	234	31	35	114	94	16	86	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	224	23	63	269	29	40	131	65	18	99	26
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	401	339	107	777	347	77	561	262	40	411	342
Arrive On Green	0.06	0.21	0.21	0.06	0.22	0.22	0.04	0.24	0.24	0.02	0.22	0.22
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	1781	2330	1087	1781	1870	1556
Grp Volume(v), veh/h	56	224	23	63	269	29	40	98	98	18	99	26
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1781	1777	1640	1781	1870	1556
Q Serve(g_s), s	1.4	5.0	0.5	1.6	3.0	0.7	1.0	2.1	2.3	0.5	2.0	0.6
Cycle Q Clear(g_c), s	1.4	5.0	0.5	1.6	3.0	0.7	1.0	2.1	2.3	0.5	2.0	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.66	1.00		1.00
Lane Grp Cap(c), veh/h	99	401	339	107	777	347	77	428	395	40	411	342
V/C Ratio(X)	0.57	0.56	0.07	0.59	0.35	0.08	0.52	0.23	0.25	0.45	0.24	0.08
Avail Cap(c_a), veh/h	588	1515	1284	626	2954	1318	473	1287	1188	397	1274	1060
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	16.4	14.6	21.4	15.4	14.5	21.8	14.2	14.3	22.5	15.0	14.4
Incr Delay (d2), s/veh	1.9	1.2	0.1	1.9	0.3	0.1	2.0	0.3	0.3	3.0	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.8	0.2	0.6	0.9	0.2	0.4	0.7	0.7	0.2	0.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.4	17.6	14.7	23.3	15.7	14.6	23.8	14.5	14.6	25.5	15.3	14.5
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h	303			361			236			143		
Approach Delay, s/veh	18.5			16.9			16.1			16.4		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.6	17.4	7.4	16.2	6.6	16.5	7.2	16.4				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	10.4	33.8	16.4	37.8	12.4	31.8	15.4	38.8				
Max Q Clear Time (g_c+I1), s	2.5	4.3	3.6	7.0	3.0	4.0	3.4	5.0				
Green Ext Time (p_c), s	0.0	1.0	0.0	1.2	0.0	0.5	0.0	1.6				
Intersection Summary												
HCM 6th Ctrl Delay	17.1											
HCM 6th LOS	B											

Timings
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	150	56	49	109	94	114
Future Volume (vph)	150	56	49	109	94	114
Turn Type	Prot	pm+ov	Prot	NA	NA	Perm
Protected Phases	4	5	5	2	6	
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	6
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	16.2	9.6	9.6	16.2	43.2	43.2
Total Split (s)	46.0	17.0	17.0	74.0	57.0	57.0
Total Split (%)	38.3%	14.2%	14.2%	61.7%	47.5%	47.5%
Yellow Time (s)	5.2	3.6	3.6	5.2	5.2	5.2
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)	6.2	4.6	4.6	6.2	6.2	6.2
Lead/Lag		Lead	Lead		Lag	Lag
Lead-Lag Optimize?		Yes	Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
Act Effect Green (s)	11.3	24.5	6.6	25.9	16.7	16.7
Actuated g/C Ratio	0.22	0.49	0.13	0.51	0.33	0.33
v/c Ratio	0.43	0.05	0.12	0.13	0.09	0.22
Control Delay	22.9	3.9	23.6	6.4	12.7	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.9	3.9	23.6	6.4	12.7	3.8
LOS	C	A	C	A	B	A
Approach Delay	17.7			11.7	7.8	
Approach LOS	B			B	A	

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 50.3	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 30.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Briggs Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	150	56	49	109	94	114
Future Volume (veh/h)	150	56	49	109	94	114
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	172	64	56	125	108	131
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	419	819	201	840	972	430
Arrive On Green	0.24	0.24	0.06	0.45	0.27	0.27
Sat Flow, veh/h	1781	2790	3456	1870	3647	1571
Grp Volume(v), veh/h	172	64	56	125	108	131
Grp Sat Flow(s),veh/h/ln	1781	1395	1728	1870	1777	1571
Q Serve(g_s), s	3.2	0.7	0.6	1.5	0.9	2.6
Cycle Q Clear(g_c), s	3.2	0.7	0.6	1.5	0.9	2.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	419	819	201	840	972	430
V/C Ratio(X)	0.41	0.08	0.28	0.15	0.11	0.30
Avail Cap(c_a), veh/h	1806	2990	1091	3230	4598	2032
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	12.7	10.0	17.7	6.4	10.7	11.3
Incr Delay (d2), s/veh	0.2	0.0	0.7	0.1	0.1	0.4
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	0.6	0.2	0.3	0.2	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.9	10.0	18.4	6.5	10.7	11.7
LnGrp LOS	B	B	B	A	B	B
Approach Vol, veh/h	236			181	239	
Approach Delay, s/veh	12.2			10.2	11.3	
Approach LOS	B			B	B	
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	23.8		15.4		6.9	16.9
Change Period (Y+Rc), s	6.2		6.2		4.6	6.2
Max Green Setting (Gmax), s	67.8		39.8		12.4	50.8
Max Q Clear Time (g_c+I1), s	3.5		5.2		2.6	4.6
Green Ext Time (p_c), s	0.6		0.3		0.1	1.0
Intersection Summary						
HCM 6th Ctrl Delay			11.3			
HCM 6th LOS			B			

Intersection

Intersection Delay, s/veh 11.3

Intersection LOS B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	76	234	235	81	74	75
Future Vol, veh/h	76	234	235	81	74	75
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	82	252	253	87	80	81
Number of Lanes	1	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left SB			WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay	10.8	12.6	9.8
HCM LOS	B	B	A

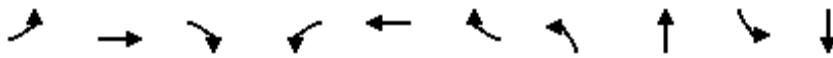
Lane	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	74%	0%	0%
Vol Right, %	0%	0%	26%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	76	234	316	74	75
LT Vol	76	0	0	74	0
Through Vol	0	234	235	0	0
RT Vol	0	0	81	0	75
Lane Flow Rate	82	252	340	80	81
Geometry Grp	7	7	4	7	7
Degree of Util (X)	0.132	0.371	0.475	0.147	0.121
Departure Headway (Hd)	5.813	5.309	5.033	6.637	5.423
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	613	672	710	536	654
Service Time	3.583	3.079	3.098	4.428	3.213
HCM Lane V/C Ratio	0.134	0.375	0.479	0.149	0.124
HCM Control Delay	9.5	11.2	12.6	10.6	9
HCM Lane LOS	A	B	B	B	A
HCM 95th-tile Q	0.5	1.7	2.6	0.5	0.4

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	278	30	12	266	0	50	0	16	1	0	0
Future Vol, veh/h	0	278	30	12	266	0	50	0	16	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	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	-	-	205	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	299	32	13	286	0	54	0	17	1	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	286	0	0	331	0	0	611	611	299	636	643	286
Stage 1	-	-	-	-	-	-	299	299	-	312	312	-
Stage 2	-	-	-	-	-	-	312	312	-	324	331	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1276	-	-	1228	-	-	406	409	741	391	392	753
Stage 1	-	-	-	-	-	-	710	666	-	699	658	-
Stage 2	-	-	-	-	-	-	699	658	-	688	645	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1276	-	-	1228	-	-	402	404	741	378	387	753
Mov Cap-2 Maneuver	-	-	-	-	-	-	402	404	-	378	387	-
Stage 1	-	-	-	-	-	-	710	666	-	699	649	-
Stage 2	-	-	-	-	-	-	690	649	-	672	645	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.3			14.4			14.6		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	452	1276	-	-	1228	-	-	378				
HCM Lane V/C Ratio	0.157	-	-	-	0.011	-	-	0.003				
HCM Control Delay (s)	14.4	0	-	-	8	0	-	14.6				
HCM Lane LOS	B	A	-	-	A	A	-	B				
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0				

Timings
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	84	172	47	65	110	33	71	629	31	425
Future Volume (vph)	84	172	47	65	110	33	71	629	31	425
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.2	29.2	9.6	29.2	29.2	9.6	29.2	9.6	27.2
Total Split (s)	20.0	35.0	35.0	17.0	32.0	32.0	19.0	55.0	13.0	49.0
Total Split (%)	16.7%	29.2%	29.2%	14.2%	26.7%	26.7%	15.8%	45.8%	10.8%	40.8%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	9.0	15.2	15.2	8.2	14.4	14.4	8.4	26.6	6.7	22.5
Actuated g/C Ratio	0.13	0.21	0.21	0.11	0.20	0.20	0.12	0.37	0.09	0.32
v/c Ratio	0.41	0.47	0.11	0.35	0.32	0.08	0.37	0.65	0.20	0.49
Control Delay	41.1	34.1	0.5	41.3	32.8	0.4	41.3	22.8	41.9	23.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.1	34.1	0.5	41.3	32.8	0.4	41.3	22.8	41.9	23.2
LOS	D	C	A	D	C	A	D	C	D	C
Approach Delay		30.8			30.3			24.4		24.3
Approach LOS		C			C			C		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 71.4

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 26.1

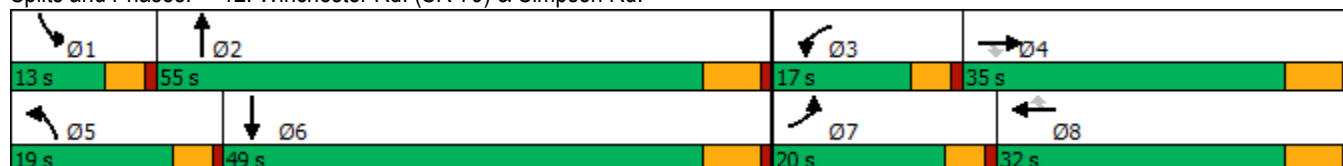
Intersection LOS: C

Intersection Capacity Utilization 58.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 12: Winchester Rd. (SR-79) & Simpson Rd.



HCM 6th Signalized Intersection Summary
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	172	47	65	110	33	71	629	148	31	425	69
Future Volume (veh/h)	84	172	47	65	110	33	71	629	148	31	425	69
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	187	18	71	120	24	77	684	87	34	462	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	369	312	107	354	298	112	991	126	66	961	70
Arrive On Green	0.07	0.20	0.20	0.06	0.19	0.19	0.06	0.31	0.31	0.04	0.29	0.29
Sat Flow, veh/h	1781	1870	1583	1781	1870	1578	1781	3172	403	1781	3355	246
Grp Volume(v), veh/h	91	187	18	71	120	24	77	383	388	34	244	252
Grp Sat Flow(s),veh/h/ln	1781	1870	1583	1781	1870	1578	1781	1777	1798	1781	1777	1825
Q Serve(g_s), s	2.8	4.9	0.5	2.1	3.1	0.7	2.3	10.4	10.4	1.0	6.2	6.3
Cycle Q Clear(g_c), s	2.8	4.9	0.5	2.1	3.1	0.7	2.3	10.4	10.4	1.0	6.2	6.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.13
Lane Grp Cap(c), veh/h	122	369	312	107	354	298	112	555	562	66	509	522
V/C Ratio(X)	0.75	0.51	0.06	0.66	0.34	0.08	0.69	0.69	0.69	0.52	0.48	0.48
Avail Cap(c_a), veh/h	500	981	830	402	879	741	467	1579	1598	272	1385	1422
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	19.7	17.9	25.3	19.3	18.3	25.2	16.5	16.6	26.0	16.2	16.2
Incr Delay (d2), s/veh	3.4	1.1	0.1	2.6	0.6	0.1	2.8	1.5	1.5	2.3	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.9	0.2	0.9	1.2	0.2	0.9	3.5	3.5	0.4	2.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.5	20.7	18.0	27.8	19.9	18.4	28.0	18.1	18.1	28.3	16.9	16.9
LnGrp LOS	C	C	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		296			215			848			530	
Approach Delay, s/veh		23.0			22.3			19.0			17.6	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	23.4	7.9	17.0	8.1	21.9	8.4	16.6				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	8.4	48.8	12.4	28.8	14.4	42.8	15.4	25.8				
Max Q Clear Time (g_c+I1), s	3.0	12.4	4.1	6.9	4.3	8.3	4.8	5.1				
Green Ext Time (p_c), s	0.0	4.6	0.0	0.9	0.0	2.7	0.1	0.5				
Intersection Summary												
HCM 6th Ctrl Delay			19.6									
HCM 6th LOS			B									

APPENDIX 3.3: EXISTING (2023) 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)

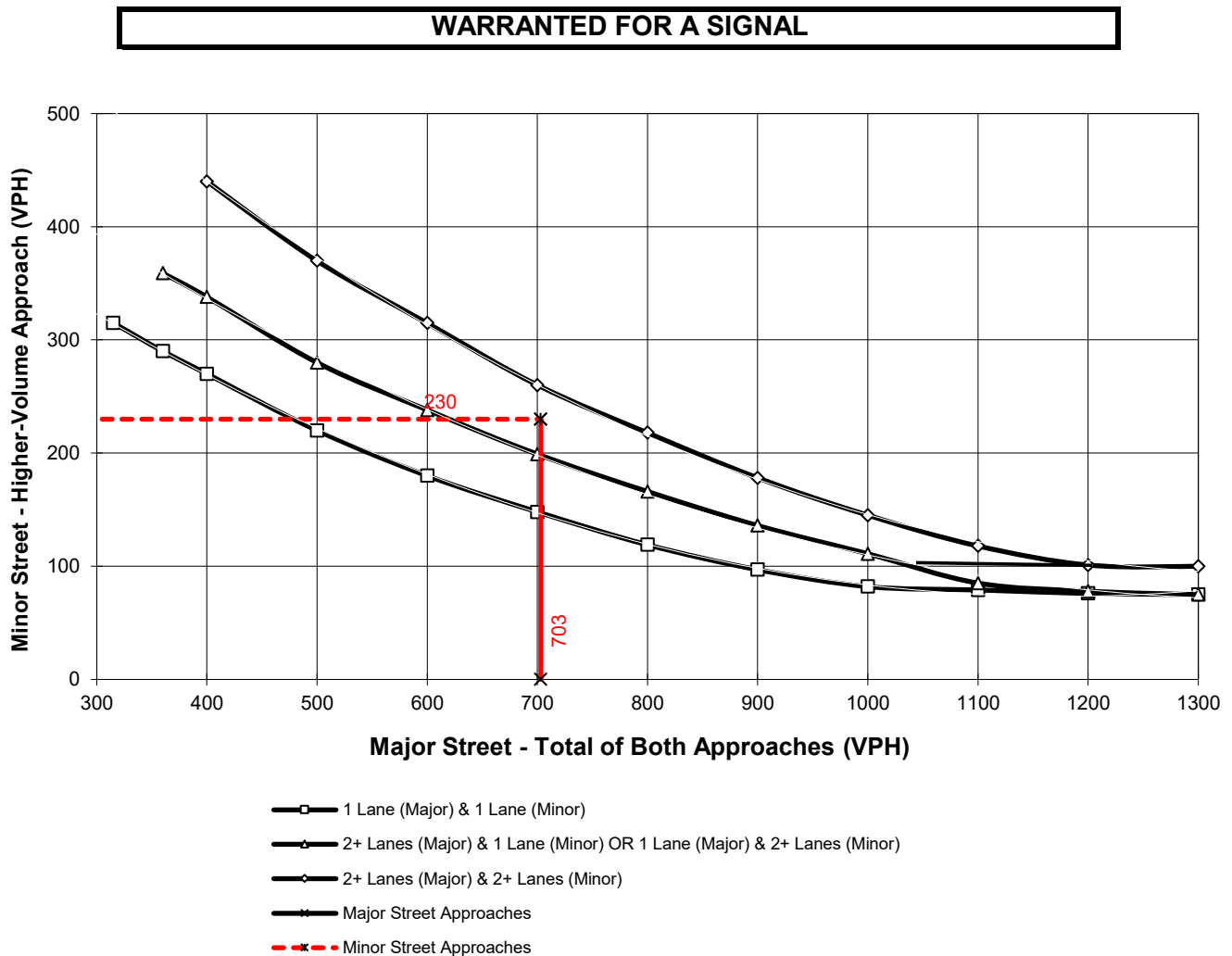
Traffic Conditions = **Existing (2023) Conditions - Weekday AM Peak Hour**

Major Street Name = **Simpson Rd.**

Total of Both Approaches (VPH) = **703**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Briggs Rd.**

High Volume Approach (VPH) = **230**
Number of Approach Lanes Minor Street = **1**



*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 (2023) Conditions - Weekday PM Peak Hour**

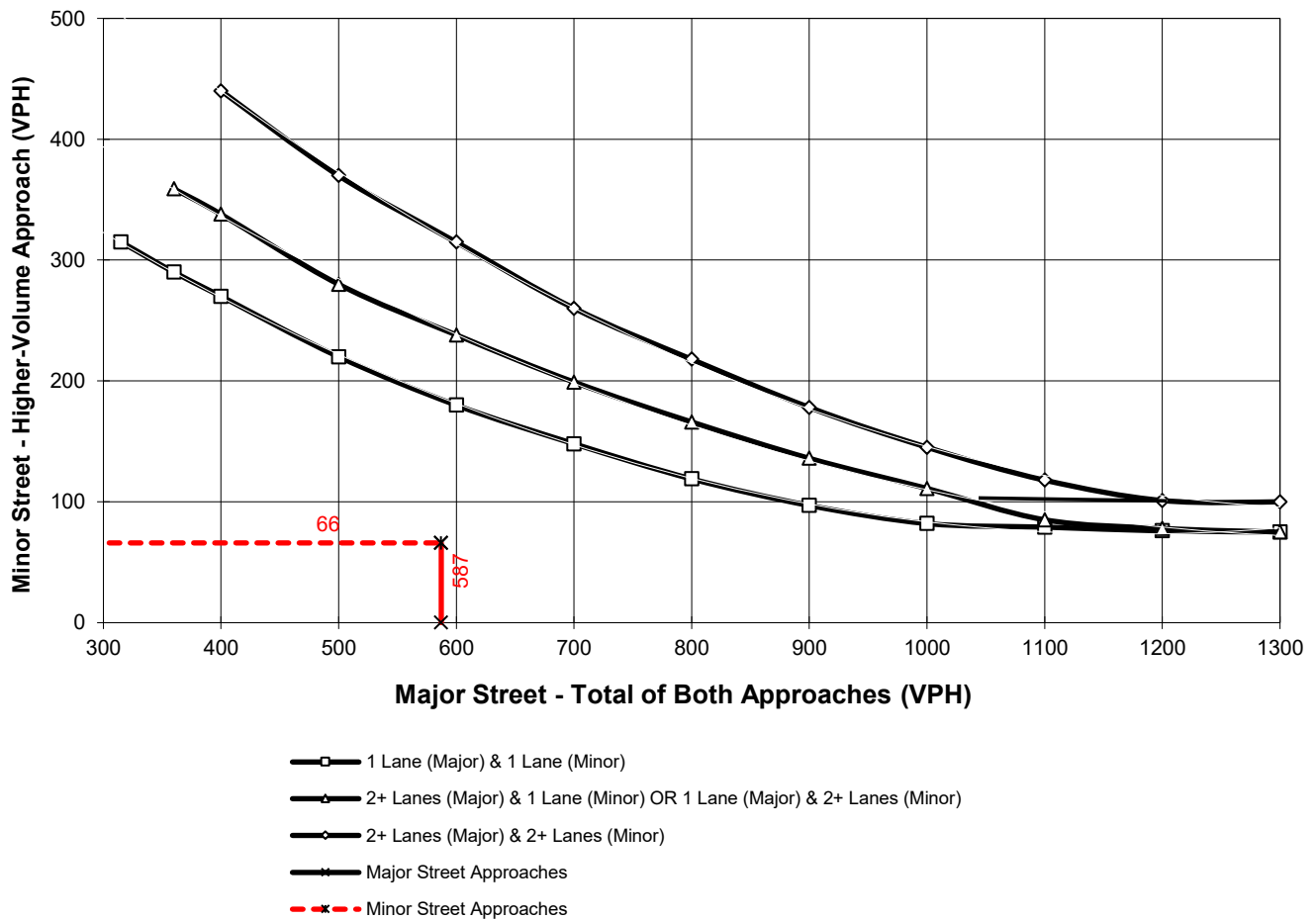
Major Street Name = **Simpson Rd.**

Total of Both Approaches (VPH) = **587**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Leon Rd.**

High Volume Approach (VPH) = **66**
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 (2023) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

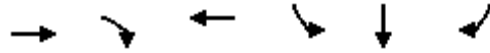
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Queues

Salt Creek TA (JN:15470)

08/23/2023

1: I-215 SB Ramps & Newport Rd.



Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1410	694	1783	307	289	286
v/c Ratio	0.27	0.37	0.46	0.77	0.69	0.68
Control Delay	7.8	0.6	9.6	57.0	47.2	46.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.8	0.6	9.6	57.0	47.2	46.8
Queue Length 50th (ft)	93	0	187	226	190	187
Queue Length 95th (ft)	139	0	278	298	258	255
Internal Link Dist (ft)	617		509		864	
Turn Bay Length (ft)						425
Base Capacity (vph)	5144	1863	3858	659	677	677
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.37	0.46	0.47	0.43	0.42
Intersection Summary						

Queues

Salt Creek TA (JN:15470)

2: I-215 NB Ramps & Newport Rd.

08/23/2023



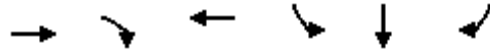
Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	1293	2373	499	331	318	316
v/c Ratio	0.35	0.49	0.32	0.71	0.81	0.64
Control Delay	10.7	12.0	0.6	48.4	53.2	40.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.7	12.0	0.6	48.4	53.2	40.7
Queue Length 50th (ft)	138	214	0	235	231	197
Queue Length 95th (ft)	215	314	0	294	308	255
Internal Link Dist (ft)	414	635			1057	
Turn Bay Length (ft)						475
Base Capacity (vph)	3648	4865	1548	752	610	772
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	0.35	0.49	0.32	0.44	0.52	0.41
Intersection Summary						

Queues

Salt Creek TA (JN:15470)

08/23/2023

1: I-215 SB Ramps & Newport Rd.



Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	2086	448	2115	456	436	427
v/c Ratio	0.47	0.24	0.63	0.81	0.75	0.73
Control Delay	14.6	0.3	17.6	49.5	42.8	41.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.6	0.3	17.6	49.5	42.8	41.9
Queue Length 50th (ft)	212	0	332	324	285	277
Queue Length 95th (ft)	291	0	462	398	358	348
Internal Link Dist (ft)	617		509		864	
Turn Bay Length (ft)						425
Base Capacity (vph)	4476	1863	3357	721	738	738
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.24	0.63	0.63	0.59	0.58
Intersection Summary						

Queues

Salt Creek TA (JN:15470)

2: I-215 NB Ramps & Newport Rd.

08/23/2023



Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	2211	2166	457	517	485	482
v/c Ratio	0.74	0.54	0.30	0.75	0.87	0.68
Control Delay	24.7	19.9	0.5	39.7	49.3	34.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.7	19.9	0.5	39.7	49.3	34.5
Queue Length 50th (ft)	439	274	0	337	352	287
Queue Length 95th (ft)	544	335	0	434	481	377
Internal Link Dist (ft)	414	635			1057	
Turn Bay Length (ft)						475
Base Capacity (vph)	2985	3981	1548	799	643	814
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.54	0.30	0.65	0.75	0.59
Intersection Summary						

APPENDIX 4.1: CUMULATIVE DEVELOPMENT PROJECTS TRIP GENERATION SUMMARY

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Cumulative Development Trip Generation Summary

Land Use	ITE Code	Units ¹	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
General Light Industrial	110	TSF	0.62	0.08	0.70	0.08	0.55	0.63	4.96
Mini-Warehouse	151	TSF	0.06	0.04	0.10	0.08	0.09	0.17	1.51
Singe Family Detached Residential	210	DU	0.19	0.55	0.74	0.62	0.37	0.99	9.44
Multifamily (Low-Rise) Residential	220	DU	0.11	0.35	0.46	0.35	0.21	0.56	7.32
Multifamily (Mid-Rise) Residential	221	DU	0.09	0.27	0.36	0.27	0.17	0.44	5.44
Senior Housing - Attached	252	DU	0.07	0.13	0.20	0.14	0.12	0.26	3.70
Assisted Living	254	Beds	0.12	0.07	0.19	0.10	0.16	0.26	2.60
Assisted Living	254	TSF	0.30	0.09	0.39	0.14	0.34	0.48	4.19
Continuing Care Retirement Community	255	Units	0.09	0.05	0.14	0.06	0.10	0.16	2.40
Hotel	310	Rooms	0.28	0.19	0.47	0.31	0.29	0.60	8.36
Motel	320	Rooms	0.14	0.24	0.38	0.21	0.17	0.38	3.35
Active Sports Park	SANDAG	AC	1.00	1.00	2.00	2.00	2.00	4.00	50.00
City Park		411	AC	0.01	0.01	0.02	0.06	0.05	0.11
Health/Fitness Center	492	TSF	0.67	0.64	1.31	1.97	1.48	3.45	34.50
General Office	710	TSF	1.00	0.16	1.16	0.18	0.97	1.15	9.74
Medical-Dental Office	720	TSF	2.17	0.61	2.78	0.97	2.49	3.46	34.80
Shopping Center	820	TSF	0.58	0.36	0.94	1.83	1.98	3.81	37.75
Tire Store	848	TSF	1.74	0.98	2.72	1.71	2.27	3.98	28.52
Supermarket	850	TSF	2.29	1.53	3.82	4.71	4.53	9.24	106.78
Pharmacy	881	TSF	2.04	1.80	3.84	5.15	5.14	10.29	109.16
High-Turnover Sit Down Restaurant	932	TSF	5.47	4.47	9.94	6.06	3.71	9.77	112.18
Fast-Food Restaurant with Drive-Thru	934	TSF	20.50	19.69	40.19	16.99	15.68	32.67	470.95
Quick Lubrication Vehicle Stop	941	TSF	4.35	1.45	5.80	3.65	5.05	8.70	69.57
Automated Car Wash	948	TUN	N/A	N/A	N/A	38.75	38.75	77.50	775.00
Gas Station with Market	945	VFP	6.36	6.11	12.47	7.13	6.86	13.99	198.16
Super Convenience Market/Gas Station	960	TSF	41.57	41.57	83.14	34.64	34.64	69.28	837.58
Super Convenience Market/Gas Station	960	VFP	14.04	14.04	28.08	11.48	11.48	22.96	230.52

Cumulative Development Trip Generation Summary

Land Use	Quantity Units ¹	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Cumulative Project Trip Generation Summary:								
M1: Shopping Center	138.091 TSF	80	49	130	253	274	526	5,214
Pass-By (34% PM/Daily):		0	0	0	-86	-86	-172	-1,774
Subtotal		80	49	130	167	188	354	3,440
M2: Shopping Center	55.212 TSF	32	20	52	101	109	210	2,086
Pass-By (34% PM/Daily):		0	0	0	-34	-34	-68	-710
Subtotal		32	20	52	67	75	142	1,376
M3:								
Senior Adult Housing - Attached	100 DU	7	13	20	14	12	26	370
Apartments	238 DU	22	63	85	64	41	105	1,296
Subtotal		29	76	105	78	53	131	1,666
M4: Single Family Detached Residential	71 DU	13	39	53	44	26	70	670
M5: Legado Specific Plan (from TIA)		376	699	1,075	858	642	1,500	1,538
M6A & 6B, M7 & M8: Single Family Detached Residential	1,255 DU	238	690	928	783	460	1,243	11,848
M9: Menifee North Shopping Center (from TIA)		343	276	619	529	535	1,064	12,242
M10: Single Family Detached Residential	807 DU	153	444	597	503	296	799	7,618
M11:								
Self-Storage	152.893 TSF	9	6	15	12	14	26	232
Grocery Store	45.000 TSF	103	69	172	212	204	416	4,806
Pharmacy	14.600 TSF	30	26	56	75	75	150	1,594
Shopping Center	11.500 TSF	7	4	11	21	23	44	434
Restaurants	6.100 TSF	33	27	60	37	23	60	684
Fast-Food with Drive-Thru	3.500 TSF	72	69	141	59	55	114	1,648
Gas Station & Market	16 VFP	225	225	450	184	184	368	3,688
Internal Capture (10%):		-48	-43	-91	-60	-58	-118	-1,310
Pass-By (Varies):		-184	-184	-369	-268	-268	-535	-5,958
Subtotal		247	199	446	272	253	525	5,818
M12 through M18:								
Single Family Detached Residential	1,448 DU	275	796	1,071	903	530	1,433	13,670
Senior Adult Housing - Attached	221 DU	15	29	44	32	26	58	818
Assisted Living	118 Rooms	14	8	22	12	19	31	308
Parks	10.2 Acres	0	0	0	1	1	2	8
Subtotal		304	833	1,137	948	576	1,524	14,804
M19:								
Shopping Center	120.848 TSF	70	43	113	221	239	460	4,562
Gas Station & Market	12 VFP	168	168	336	138	138	276	2,766
Hotel	71 Rooms	20	14	34	22	21	43	594
Internal Capture (10%):		-26	-23	-48	-38	-40	-78	-792
Pass-By (Varies):		-115	-115	-230	-162	-162	-324	-3,288
Subtotal		117	88	205	181	196	377	3,842
M20:								
Shopping Center	114.850 TSF	67	41	108	210	228	438	4,336
General Office	97.600 TSF	97	16	113	18	94	112	952
General Light Industrial	120.900 TSF	74	10	84	10	66	76	600
Motel	100 Rooms	14	24	38	21	17	38	336
Internal Capture (10%):		-25	-9	-34	-26	-41	-66	-622
Pass-By (Shopping Center Only 34% PM/Daily):		0	0	0	-64	-64	-128	-1,328
Subtotal		227	82	309	169	301	470	4,274
M21: Shopping Center	208.160 TSF	121	74	196	381	412	793	7,858
Pass-By (34% PM/Daily):		0	0	0	-129	-129	-258	-2,672
Subtotal		121	74	196	252	283	535	5,186

Cumulative Development Trip Generation Summary

Land Use	Quantity Units ¹	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
M22:								
Shopping Center	409.370 TSF	239	146	385	749	811	1,560	15,454
Hotel	99 Rooms	27	19	46	30	29	59	828
Single Family Detached Residential	277 DU	53	152	205	173	101	274	2,616
Condo/Townhomes	548 DU	58	194	252	193	114	307	4,012
Internal Capture (10%):		-38	-51	-89	-115	-106	-220	-2,292
Pass-By (Shopping Center Only 34% PM/Daily):		0	0	0	-229	-229	-458	-4,730
Subtotal		339	460	799	802	721	1,522	15,888
M23: Shopping Center	764.980 TSF	128	79	207	402	436	838	8,306
Pass-By (34% PM/Daily):		0	0	0	-137	-137	-274	-2,826
Subtotal		128	79	207	265	299	564	5,480
M24:								
Health/Fitness Club	21.312 TSF	14	14	28	42	32	74	736
Supermarket	25.428 TSF	58	39	97	120	115	235	2,716
Shopping Center	8.000 TSF	5	3	8	15	16	30	302
Fast-Food Restaurant with Drive-Thru	2.155 TSF	44	42	87	37	34	70	1,016
Automated Car Wash	1 TUN	0	0	0	39	39	78	776
Super Convenience Market/Gas Station	3.000 TSF	125	125	249	104	104	208	2,514
Quick Lubrication Vehicle Stop	3.297 TSF	14	5	19	12	17	29	230
Internal Capture (10%):		-24	-23	-47	-36	-36	-72	-834
Pass-By (Varies):		-104	-104	-208	-127	-127	-255	-3,150
Subtotal		133	101	233	204	193	397	4,306
M25: Fast-Food Restaurant with Drive-Thru	2.400 TSF	49	47	96	41	38	78	1,130
Pass-By (49% and 50% PM/Daily):		-23	-23	-46	-19	-19	-38	-566
Subtotal		26	24	50	22	19	40	564
M26: Shopping Center	138.091 TSF	80	49	130	253	274	526	5,214
Pass-By (34% PM/Daily):		0	0	0	-86	-86	-172	-1,774
Subtotal		80	49	130	167	188	354	3,440
M27: Single Family Detached Residential	82 DU	16	45	61	51	30	81	772
M28:								
Assisted Living	42.246 TSF	13	4	17	6	14	20	178
Mixed Office/Retail	10.368 TSF	6	4	10	19	21	40	392
Internal Capture (10%):		-2	-1	-3	-3	-4	-6	-58
Subtotal		17	7	24	23	32	54	512
M29 & M30: Single Family Detached Residential	242 DU	46	133	179	151	89	240	2,284
M31:								
Assisted Living	142 Rooms	17	10	27	14	23	37	370
Memory Care	36 Rooms	3	2	5	2	4	6	86
General Office	21.722 TSF	22	4	26	4	21	25	212
Subtotal		42	16	58	20	48	68	668
M32-M35, M38: Single Family Detached Residential	515 DU	98	283	381	321	189	510	4,862
M36: Tire Store	7.171 TSF	12	7	20	12	16	29	206
Pass-By (28% PM/Daily):		0	0	0	-3	-3	-6	-58
Subtotal		12	7	20	9	13	23	148
M40:								
Gas Station & Market	4 VFP	25	24	49	29	27	56	794
Fast-Food Restaurant with Drive-Thru	3.200 TSF	66	63	129	54	50	104	1,508
Retail	2.000 TSF	1	1	2	4	4	8	76
Internal Capture (10%):		-9	-9	-18	-9	-8	-17	-238
Pass-By (Varies):		-41	-41	-82	-36	-36	-72	-1,080
Subtotal		42	38	80	42	37	79	1,060
M41: Medical-Dental Office	6.229 TSF	14	4	17	6	16	22	218
Subtotal		14	4	17	6	16	22	218
M42:								
Gas Station & Market	12 VFP	168	168	336	138	138	276	2,766
Fast-Food Restaurant with Drive-Thru	6.200 TSF	127	122	249	105	97	202	2,920
Retail	1.000 TSF	1	0	1	2	2	4	38
Internal Capture (10%):		-30	-29	-59	-25	-24	-48	-572
Pass-By (Varies):		-169	-169	-337	-139	-139	-277	-3,218
Subtotal		98	92	190	82	75	156	1,934
TOTAL		3,372	4,907	8,280	7,015	5,830	12,845	116,457

¹ TSF = thousand square feet; DU = dwelling units; TUN = tunnel; VFP = vehicle fueling positions

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APPENDIX 5.1: E+P CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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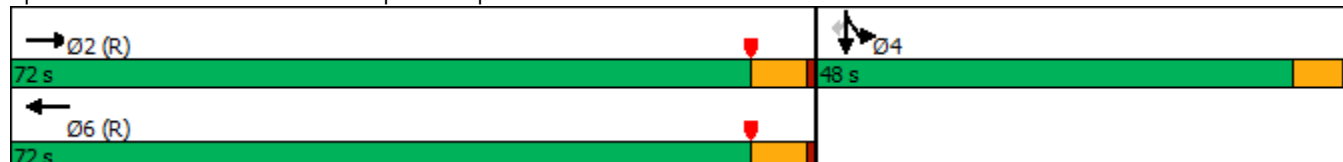
Timings
1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

	→	↘	←	↙	↓	↗
Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↗	↑↑↑	↘	↕	↗
Traffic Volume (vph)	1325	652	1676	332	0	497
Future Volume (vph)	1325	652	1676	332	0	497
Turn Type	NA	Free	NA	Split	NA	Perm
Protected Phases	2		6	4	4	
Permitted Phases		Free				4
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	30.0		33.0	20.0	20.0	20.0
Total Split (s)	72.0		72.0	48.0	48.0	48.0
Total Split (%)	60.0%		60.0%	40.0%	40.0%	40.0%
Yellow Time (s)	5.0		5.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min		C-Min	None	None	None
Act Effct Green (s)	82.9	120.0	82.9	25.6	25.6	25.6
Actuated g/C Ratio	0.69	1.00	0.69	0.21	0.21	0.21
v/c Ratio	0.27	0.37	0.46	0.77	0.69	0.68
Control Delay	7.8	0.6	9.6	57.0	47.2	46.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.8	0.6	9.6	57.0	47.2	46.8
LOS	A	A	A	E	D	D
Approach Delay	5.4		9.6		50.5	
Approach LOS	A		A		D	
Intersection Summary						
Cycle Length: 120						
Actuated Cycle Length: 120						
Offset: 68 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow						
Natural Cycle: 55						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.77						
Intersection Signal Delay: 15.3				Intersection LOS: B		
Intersection Capacity Utilization 62.5%				ICU Level of Service B		
Analysis Period (min) 15						

Splits and Phases: 1: I-215 SB Ramps & Newport Rd.



HCM 6th Signalized Intersection Summary

1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗		↑↑↑					↗	↕	↗
Traffic Volume (veh/h)	0	1325	652	0	1676	0	0	0	0	332	0	497
Future Volume (veh/h)	0	1325	652	0	1676	0	0	0	0	332	0	497
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1410	0	0	1783	0				473	0	247
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	5428		0	4071	0				637	0	283
Arrive On Green	0.00	0.73	0.00	0.00	0.73	0.00				0.18	0.00	0.18
Sat Flow, veh/h	0	7481	1585	0	5611	0				3563	0	1585
Grp Volume(v), veh/h	0	1410	0	0	1783	0				473	0	247
Grp Sat Flow(s),veh/h/ln	0	1870	1585	0	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	7.7	0.0	0.0	15.3	0.0				15.1	0.0	18.2
Cycle Q Clear(g_c), s	0.0	7.7	0.0	0.0	15.3	0.0				15.1	0.0	18.2
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	5428		0	4071	0				637	0	283
V/C Ratio(X)	0.00	0.26		0.00	0.44	0.00				0.74	0.00	0.87
Avail Cap(c_a), veh/h	0	5428		0	4071	0				1262	0	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	5.6	0.0	0.0	6.6	0.0				46.7	0.0	47.9
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.3	0.0				0.7	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	0.0	0.0	4.8	0.0				6.5	0.0	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	5.7	0.0	0.0	7.0	0.0				47.3	0.0	51.2
LnGrp LOS	A	A		A	A	A				D	A	D
Approach Vol, veh/h		1410			1783						720	
Approach Delay, s/veh		5.7			7.0						48.7	
Approach LOS		A			A						D	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		93.1		26.9		93.1						
Change Period (Y+Rc), s		6.0		5.5		6.0						
Max Green Setting (Gmax), s		66.0		42.5		66.0						
Max Q Clear Time (g_c+I1), s		9.7		20.2		17.3						
Green Ext Time (p_c), s		12.8		1.2		18.5						
Intersection Summary												
HCM 6th Ctrl Delay			14.2									
HCM 6th LOS			B									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Timings
2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

	→	←	↖	↗	↑	↘
Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations	↑↑↑	↑↑↑	↖	↗	↔	↖
Traffic Volume (vph)	1254	2362	484	357	0	600
Future Volume (vph)	1254	2362	484	357	0	600
Turn Type	NA	NA	Free	Split	NA	Perm
Protected Phases	2	6		8	8	
Permitted Phases			Free			8
Detector Phase	2	6		8	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	33.0	33.0		22.0	22.0	22.0
Total Split (s)	66.0	66.0		54.0	54.0	54.0
Total Split (%)	55.0%	55.0%		45.0%	45.0%	45.0%
Yellow Time (s)	5.0	5.0		4.5	4.5	4.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min	C-Min		None	None	None
Act Effect Green (s)	77.4	77.4	120.0	31.1	31.1	31.1
Actuated g/C Ratio	0.64	0.64	1.00	0.26	0.26	0.26
v/c Ratio	0.36	0.51	0.32	0.69	0.81	0.65
Control Delay	11.2	12.7	0.6	46.4	52.5	40.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.2	12.7	0.6	46.4	52.5	40.2
LOS	B	B	A	D	D	D
Approach Delay	11.2	10.7			46.4	
Approach LOS	B	B			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 17.6

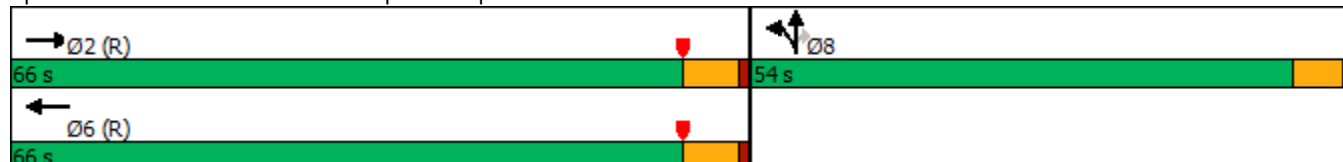
Intersection LOS: B

Intersection Capacity Utilization 59.8%

ICU Level of Service B

Analysis Period (min) 15

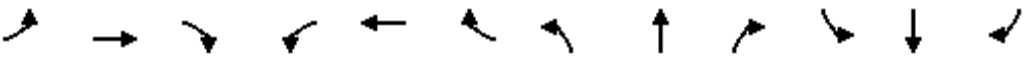
Splits and Phases: 2: I-215 NB Ramps & Newport Rd.



HCM 6th Signalized Intersection Summary 2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑	↑	↑	↑	↑			
Traffic Volume (veh/h)	0	1254	0	0	2362	484	357	0	600	0	0	0
Future Volume (veh/h)	0	1254	0	0	2362	484	357	0	600	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	0	1293	0	0	2435	0	483	0	246			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	2	0	0	2	2	2	2	2			
Cap, veh/h	0	4073	0	0	5431		635	0	283			
Arrive On Green	0.00	0.73	0.00	0.00	0.73	0.00	0.18	0.00	0.18			
Sat Flow, veh/h	0	5611	0	0	7481	1585	3563	0	1585			
Grp Volume(v), veh/h	0	1293	0	0	2435	0	483	0	246			
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	0.0	9.8	0.0	0.0	15.9	0.0	15.5	0.0	18.1			
Cycle Q Clear(g_c), s	0.0	9.8	0.0	0.0	15.9	0.0	15.5	0.0	18.1			
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	4073	0	0	5431		635	0	283			
V/C Ratio(X)	0.00	0.32	0.00	0.00	0.45		0.76	0.00	0.87			
Avail Cap(c_a), veh/h	0	4073	0	0	5431		1440	0	641			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.47	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	5.9	0.0	0.0	6.7	0.0	46.9	0.0	48.0			
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.1	0.0	0.7	0.0	3.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	3.1	0.0	0.0	4.9	0.0	6.7	0.0	7.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.1	0.0	0.0	6.8	0.0	47.6	0.0	51.2			
LnGrp LOS	A	A	A	A	A		D	A	D			
Approach Vol, veh/h		1293			2435			729				
Approach Delay, s/veh		6.1			6.8			48.8				
Approach LOS		A			A			D				
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		93.1				93.1		26.9				
Change Period (Y+Rc), s		6.0				6.0		5.5				
Max Green Setting (Gmax), s		60.0				60.0		48.5				
Max Q Clear Time (g_c+I1), s		11.8				17.9		20.1				
Green Ext Time (p_c), s		10.9				28.3		1.3				
Intersection Summary												
HCM 6th Ctrl Delay					13.5							
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.												

Timings 3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 	 	 	 	 	 	 	 	 
Traffic Volume (vph)	157	1340	83	1984	558	62	83	94	85	304
Future Volume (vph)	157	1340	83	1984	558	62	83	94	85	304
Turn Type	Prot	NA	Prot	NA	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4	3	8	2	2		6	6	7
Permitted Phases							2			6
Detector Phase	7	4	3	8	2	2	2	6	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.2	9.6	34.8	36.8	36.8	36.8	15.8	15.8	9.6
Total Split (s)	13.6	64.1	11.7	62.2	38.1	38.1	38.1	16.1	16.1	13.6
Total Split (%)	10.5%	49.3%	9.0%	47.8%	29.3%	29.3%	29.3%	12.4%	12.4%	10.5%
Yellow Time (s)	3.6	5.2	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	4.6	5.8	5.8	5.8	5.8	5.8	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag						Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes						Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None	None
Act Effect Green (s)	8.5	59.7	6.6	56.0	22.3	22.3	22.3	10.2	10.2	24.5
Actuated g/C Ratio	0.07	0.50	0.06	0.47	0.19	0.19	0.19	0.09	0.09	0.21
v/c Ratio	0.65	0.65	0.44	0.89	0.69	0.69	0.22	0.32	0.54	0.48
Control Delay	68.1	24.2	63.9	35.0	51.5	57.2	4.2	56.3	67.4	34.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.1	24.2	63.9	35.0	51.5	57.2	4.2	56.3	67.4	34.8
LOS	E	C	E	D	D	E	A	E	E	C
Approach Delay		28.1		36.1		47.6			44.7	
Approach LOS		C		D		D			D	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 119.1

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 35.8

Intersection LOS: D

Intersection Capacity Utilization 76.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 3: Antelope Rd. & Newport Rd.

 Ø2	 Ø6	 Ø3	 Ø4
38.1 s	16.1 s	11.7 s	64.1 s
		 Ø7	 Ø8
		13.6 s	62.2 s

HCM 6th Signalized Intersection Summary 3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	1340	271	83	1984	105	558	62	83	94	85	304
Future Volume (veh/h)	157	1340	271	83	1984	105	558	62	83	94	85	304
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	159	1354	235	84	2004	102	491	165	23	95	86	50
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	2169	376	144	2357	120	613	322	269	310	168	426
Arrive On Green	0.06	0.50	0.50	0.04	0.47	0.47	0.17	0.17	0.17	0.09	0.09	0.09
Sat Flow, veh/h	3456	4378	760	3456	4973	252	3563	1870	1564	3456	1870	2790
Grp Volume(v), veh/h	159	1053	536	84	1370	736	491	165	23	95	86	50
Grp Sat Flow(s),veh/h/ln	1728	1702	1734	1728	1702	1821	1781	1870	1564	1728	1870	1395
Q Serve(g_s), s	5.0	25.1	25.2	2.7	39.4	39.8	14.7	8.9	1.4	2.9	4.9	1.7
Cycle Q Clear(g_c), s	5.0	25.1	25.2	2.7	39.4	39.8	14.7	8.9	1.4	2.9	4.9	1.7
Prop In Lane	1.00		0.44	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	1687	859	144	1613	863	613	322	269	310	168	426
V/C Ratio(X)	0.73	0.62	0.62	0.58	0.85	0.85	0.80	0.51	0.09	0.31	0.51	0.12
Avail Cap(c_a), veh/h	279	1770	902	220	1724	923	1034	543	454	320	173	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	20.5	20.5	52.4	25.8	25.9	44.3	41.9	38.7	47.4	48.3	40.7
Incr Delay (d2), s/veh	4.4	0.6	1.3	1.4	4.0	7.4	2.5	1.3	0.1	0.6	2.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	9.1	9.5	1.2	15.4	17.5	6.5	4.1	0.5	1.2	2.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.7	21.2	21.8	53.8	29.8	33.3	46.8	43.1	38.9	48.0	50.8	40.8
LnGrp LOS	E	C	C	D	C	C	D	D	D	D	D	D
Approach Vol, veh/h	1748				2190				679		231	
Approach Delay, s/veh	24.5				31.9				45.6		47.5	
Approach LOS	C				C				D		D	
Timer - Assigned Phs	2		3		4		6		7		8	
Phs Duration (G+Y+Rc), s	24.9		9.2		61.4		15.8		11.6		59.0	
Change Period (Y+Rc), s	5.8		4.6		6.2		5.8		4.6		* 6.2	
Max Green Setting (Gmax), s	32.3		7.1		57.9		10.3		9.0		* 56	
Max Q Clear Time (g_c+I1), s	16.7		4.7		27.2		6.9		7.0		41.8	
Green Ext Time (p_c), s	2.4		0.0		12.5		0.3		0.0		11.0	
Intersection Summary												
HCM 6th Ctrl Delay			31.9									
HCM 6th LOS			C									
Notes												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings

4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	114	362	45	433	196	308	274	39	170	279
Future Volume (vph)	114	362	45	433	196	308	274	39	170	279
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4	3	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	7	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	9.6	30.8	30.8	9.6	39.5	39.5	9.6	16.5
Total Split (s)	20.0	41.0	9.8	30.8	30.8	39.0	44.2	44.2	25.0	30.2
Total Split (%)	16.7%	34.2%	8.2%	25.7%	25.7%	32.5%	36.8%	36.8%	20.8%	25.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effect Green (s)	11.9	30.0	5.4	20.6	20.6	25.5	28.6	28.6	15.8	18.9
Actuated g/C Ratio	0.12	0.30	0.05	0.21	0.21	0.26	0.29	0.29	0.16	0.19
v/c Ratio	0.66	0.71	0.30	0.72	0.46	0.83	0.33	0.09	0.74	0.76
Control Delay	61.1	29.8	56.5	44.8	8.3	52.8	29.9	0.3	59.2	41.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.1	29.8	56.5	44.8	8.3	52.8	29.9	0.3	59.2	41.5
LOS	E	C	E	D	A	D	C	A	E	D
Approach Delay		34.5		35.0			39.4			46.5
Approach LOS		C		C			D			D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 99.4

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 38.5

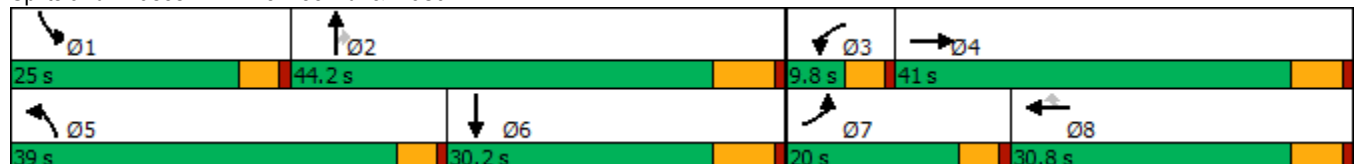
Intersection LOS: D

Intersection Capacity Utilization 71.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: Meniffee Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	362	284	45	433	196	308	274	39	170	279	157
Future Volume (veh/h)	114	362	284	45	433	196	308	274	39	170	279	157
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	139	441	268	55	528	117	376	334	15	207	340	84
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	175	576	347	156	772	344	421	927	414	249	466	114
Arrive On Green	0.10	0.27	0.27	0.05	0.22	0.22	0.24	0.26	0.26	0.14	0.16	0.16
Sat Flow, veh/h	1781	2131	1285	3456	3554	1585	1781	3554	1585	1781	2832	690
Grp Volume(v), veh/h	139	367	342	55	528	117	376	334	15	207	212	212
Grp Sat Flow(s),veh/h/ln	1781	1777	1639	1728	1777	1585	1781	1777	1585	1781	1777	1746
Q Serve(g_s), s	5.8	14.4	14.6	1.2	10.4	4.7	15.5	5.8	0.5	8.6	8.6	8.8
Cycle Q Clear(g_c), s	5.8	14.4	14.6	1.2	10.4	4.7	15.5	5.8	0.5	8.6	8.6	8.8
Prop In Lane	1.00		0.78	1.00		1.00	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	175	480	443	156	772	344	421	927	414	249	292	287
V/C Ratio(X)	0.79	0.76	0.77	0.35	0.68	0.34	0.89	0.36	0.04	0.83	0.72	0.74
Avail Cap(c_a), veh/h	362	825	761	237	1171	522	808	1766	788	479	555	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.4	25.5	25.5	35.1	27.3	25.1	28.0	22.9	20.9	31.7	30.1	30.1
Incr Delay (d2), s/veh	3.1	2.6	2.9	0.5	1.1	0.6	2.7	0.2	0.0	2.7	3.4	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	5.8	5.5	0.5	4.1	1.7	6.1	2.2	0.2	3.5	3.5	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	28.0	28.4	35.6	28.4	25.7	30.7	23.1	20.9	34.5	33.5	33.9
LnGrp LOS	D	C	C	D	C	C	C	C	C	C	C	C
Approach Vol, veh/h		848			700			725			631	
Approach Delay, s/veh		29.6			28.5			27.0			33.9	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.2	26.3	8.0	26.3	22.5	19.0	12.1	22.3				
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	20.4	37.7	5.2	35.2	34.4	23.7	15.4	25.0				
Max Q Clear Time (g_c+I1), s	10.6	7.8	3.2	16.6	17.5	10.8	7.8	12.4				
Green Ext Time (p_c), s	0.2	1.9	0.0	3.9	0.5	1.7	0.1	2.9				
Intersection Summary												
HCM 6th Ctrl Delay			29.6									
HCM 6th LOS			C									

Timings

Salt Creek TA (JN:15470)

08/23/2023

5: Meniffee Rd. & Simpson Rd.

	←	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↑↑	↖	↖	↑↑
Traffic Volume (vph)	354	93	298	294	58	336
Future Volume (vph)	354	93	298	294	58	336
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0
Minimum Split (s)	26.5	26.5	27.5	27.5	9.0	16.5
Total Split (s)	54.0	54.0	48.0	48.0	18.0	66.0
Total Split (%)	45.0%	45.0%	40.0%	40.0%	15.0%	55.0%
Yellow Time (s)	5.5	5.5	5.5	5.5	3.0	5.5
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)	6.5	6.5	6.5	6.5	4.0	6.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min
Act Effect Green (s)	19.1	19.1	13.9	13.9	8.4	20.5
Actuated g/C Ratio	0.35	0.35	0.26	0.26	0.16	0.38
v/c Ratio	0.65	0.17	0.38	0.52	0.24	0.29
Control Delay	22.0	4.6	20.6	6.3	27.9	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.0	4.6	20.6	6.3	27.9	12.1
LOS	C	A	C	A	C	B
Approach Delay	18.4		13.5			14.4
Approach LOS	B		B			B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 54

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 15.3

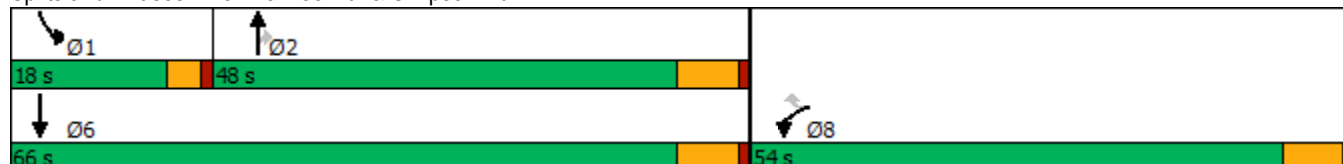
Intersection LOS: B

Intersection Capacity Utilization 46.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Meniffee Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
5: Menifee Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	354	93	298	294	58	336
Future Volume (veh/h)	354	93	298	294	58	336
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	407	46	343	236	67	386
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	513	457	889	386	114	1449
Arrive On Green	0.29	0.29	0.25	0.25	0.06	0.41
Sat Flow, veh/h	1781	1585	3647	1545	1781	3647
Grp Volume(v), veh/h	407	46	343	236	67	386
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1545	1781	1777
Q Serve(g_s), s	9.0	0.9	3.4	5.8	1.6	3.1
Cycle Q Clear(g_c), s	9.0	0.9	3.4	5.8	1.6	3.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	513	457	889	386	114	1449
V/C Ratio(X)	0.79	0.10	0.39	0.61	0.59	0.27
Avail Cap(c_a), veh/h	1979	1761	3450	1500	583	4946
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	14.0	11.2	13.3	14.2	19.4	8.4
Incr Delay (d2), s/veh	2.8	0.1	0.3	1.6	4.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.2	1.0	1.5	0.6	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.9	11.3	13.6	15.8	24.1	8.5
LnGrp LOS	B	B	B	B	C	A
Approach Vol, veh/h	453		579			453
Approach Delay, s/veh	16.3		14.5			10.8
Approach LOS	B		B			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.7	17.2			23.9	18.8
Change Period (Y+Rc), s	4.0	6.5			6.5	6.5
Max Green Setting (Gmax), s	14.0	41.5			59.5	47.5
Max Q Clear Time (g_c+I1), s	3.6	7.8			5.1	11.0
Green Ext Time (p_c), s	0.1	2.8			2.3	1.4
Intersection Summary						
HCM 6th Ctrl Delay			13.9			
HCM 6th LOS			B			

Timings
6: Meniffee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	265	1172	113	1269	61	164	197	113	119	320	489
Future Volume (vph)	265	1172	113	1269	61	164	197	113	119	320	489
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0
Minimum Split (s)	9.6	34.8	9.6	32.8	32.8	9.6	39.8	9.6	9.6	35.8	9.6
Total Split (s)	24.0	50.6	13.5	40.1	40.1	16.0	41.4	13.5	14.5	39.9	24.0
Total Split (%)	20.0%	42.2%	11.3%	33.4%	33.4%	13.3%	34.5%	11.3%	12.1%	33.3%	20.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.8	3.6	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.8	4.6	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effect Green (s)	19.5	45.8	7.7	33.9	33.9	9.4	17.2	26.1	9.9	17.7	38.5
Actuated g/C Ratio	0.19	0.45	0.08	0.33	0.33	0.09	0.17	0.26	0.10	0.17	0.38
v/c Ratio	0.86	0.63	0.48	0.83	0.11	0.58	0.36	0.26	0.77	0.58	0.86
Control Delay	66.2	24.1	53.3	37.3	0.4	53.1	38.2	7.5	75.1	42.1	37.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.2	24.1	53.3	37.3	0.4	53.1	38.2	7.5	75.1	42.1	37.5
LOS	E	C	D	D	A	D	D	A	E	D	D
Approach Delay		31.2		37.0			36.0			43.9	
Approach LOS		C		D			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 101.5

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 36.3

Intersection LOS: D

Intersection Capacity Utilization 73.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: Meniffee Rd. & Newport Rd.

			
14.5 s	41.4 s	13.5 s	50.6 s
			
16 s	39.9 s	24 s	40.1 s

HCM 6th Signalized Intersection Summary
6: Menifee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Traffic Volume (veh/h)	265	1172	119	113	1269	61	164	197	113	119	320	489
Future Volume (veh/h)	265	1172	119	113	1269	61	164	197	113	119	320	489
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	294	1302	118	126	1410	42	182	219	36	132	356	282
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	2170	197	190	1672	512	252	655	378	162	719	602
Arrive On Green	0.18	0.46	0.46	0.06	0.33	0.33	0.07	0.18	0.18	0.09	0.20	0.20
Sat Flow, veh/h	1781	4765	432	3456	5106	1564	3456	3554	1580	1781	3554	1543
Grp Volume(v), veh/h	294	930	490	126	1410	42	182	219	36	132	356	282
Grp Sat Flow(s),veh/h/ln	1781	1702	1793	1728	1702	1564	1728	1777	1580	1781	1777	1543
Q Serve(g_s), s	15.7	19.9	19.9	3.5	24.9	1.8	5.0	5.2	1.7	7.1	8.6	13.3
Cycle Q Clear(g_c), s	15.7	19.9	19.9	3.5	24.9	1.8	5.0	5.2	1.7	7.1	8.6	13.3
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	326	1550	816	190	1672	512	252	655	378	162	719	602
V/C Ratio(X)	0.90	0.60	0.60	0.66	0.84	0.08	0.72	0.33	0.10	0.82	0.50	0.47
Avail Cap(c_a), veh/h	356	1572	828	317	1805	553	406	1304	667	182	1249	832
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	19.8	19.8	45.0	30.3	22.5	44.0	34.4	28.7	43.3	34.3	22.4
Incr Delay (d2), s/veh	22.8	0.6	1.2	1.5	3.6	0.1	1.5	0.3	0.1	19.7	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	7.2	7.8	1.5	10.0	0.6	2.1	2.2	0.6	3.9	3.6	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	20.4	21.0	46.4	33.9	22.6	45.5	34.7	28.8	63.1	34.8	23.0
LnGrp LOS	E	C	C	D	C	C	D	C	C	E	C	C
Approach Vol, veh/h		1714			1578			437			770	
Approach Delay, s/veh		27.6			34.6			38.7			35.3	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.4	23.7	9.9	50.0	11.7	25.4	22.4	37.6				
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8				
Max Green Setting (Gmax), s	9.9	35.6	8.9	44.8	11.4	34.1	19.4	34.3				
Max Q Clear Time (g_c+I1), s	9.1	7.2	5.5	21.9	7.0	15.3	17.7	26.9				
Green Ext Time (p_c), s	0.0	1.4	0.1	9.7	0.1	2.9	0.1	4.9				
Intersection Summary												
HCM 6th Ctrl Delay			32.5									
HCM 6th LOS			C									

Timings

Salt Creek TA (JN:15470)

7: Lindenberger Rd. & Simpson Rd.

08/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	52	231	29	95	282	48	57	111	50	190	55
Future Volume (vph)	52	231	29	95	282	48	57	111	50	190	55
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	26.2	26.2	9.6	28.2	28.2	9.6	30.2	9.6	26.2	26.2
Total Split (s)	17.0	39.0	39.0	24.0	46.0	46.0	18.0	40.0	17.0	39.0	39.0
Total Split (%)	14.2%	32.5%	32.5%	20.0%	38.3%	38.3%	15.0%	33.3%	14.2%	32.5%	32.5%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effect Green (s)	7.7	17.0	17.0	9.7	21.2	21.2	8.0	18.3	7.7	15.7	15.7
Actuated g/C Ratio	0.11	0.25	0.25	0.14	0.32	0.32	0.12	0.27	0.11	0.23	0.23
v/c Ratio	0.29	0.57	0.07	0.43	0.29	0.10	0.31	0.30	0.29	0.51	0.13
Control Delay	38.1	31.0	0.2	37.5	21.1	0.4	37.9	12.3	38.0	31.4	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.1	31.0	0.2	37.5	21.1	0.4	37.9	12.3	38.0	31.4	0.6
LOS	D	C	A	D	C	A	D	B	D	C	A
Approach Delay		29.3			22.4			16.9		26.8	
Approach LOS		C			C			B		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 67

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 23.7

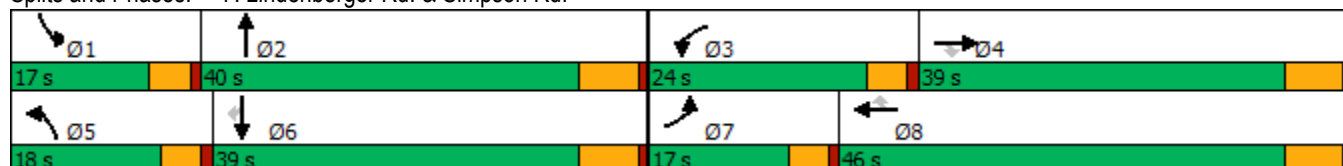
Intersection LOS: C

Intersection Capacity Utilization 50.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Lindenberger Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
7: Lindenberger Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	231	29	95	282	48	57	111	145	50	190	55
Future Volume (veh/h)	52	231	29	95	282	48	57	111	145	50	190	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	269	13	110	328	26	66	129	107	58	221	31
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	385	326	143	813	363	108	407	310	100	390	330
Arrive On Green	0.06	0.21	0.21	0.08	0.23	0.23	0.06	0.21	0.21	0.06	0.21	0.21
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	1781	1908	1453	1781	1870	1580
Grp Volume(v), veh/h	60	269	13	110	328	26	66	119	117	58	221	31
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1781	1777	1584	1781	1870	1580
Q Serve(g_s), s	1.6	6.5	0.3	2.9	3.8	0.6	1.8	2.8	3.0	1.5	5.2	0.8
Cycle Q Clear(g_c), s	1.6	6.5	0.3	2.9	3.8	0.6	1.8	2.8	3.0	1.5	5.2	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.92	1.00		1.00
Lane Grp Cap(c), veh/h	102	385	326	143	813	363	108	379	338	100	390	330
V/C Ratio(X)	0.59	0.70	0.04	0.77	0.40	0.07	0.61	0.31	0.34	0.58	0.57	0.09
Avail Cap(c_a), veh/h	455	1263	1070	711	2912	1299	491	1236	1102	455	1263	1067
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	17.9	15.4	21.9	15.9	14.7	22.3	16.1	16.2	22.4	17.2	15.5
Incr Delay (d2), s/veh	2.0	2.3	0.0	3.3	0.3	0.1	2.1	0.5	0.6	2.0	1.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.4	0.1	1.1	1.2	0.2	0.7	0.9	0.9	0.6	1.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	20.2	15.5	25.2	16.2	14.8	24.3	16.6	16.8	24.4	18.5	15.6
LnGrp LOS	C	C	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		342			464			302			310	
Approach Delay, s/veh		20.7			18.3			18.4			19.3	
Approach LOS		C			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	16.6	8.5	16.2	7.5	16.3	7.4	17.3				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	12.4	33.8	19.4	32.8	13.4	32.8	12.4	39.8				
Max Q Clear Time (g_c+I1), s	3.5	5.0	4.9	8.5	3.8	7.2	3.6	5.8				
Green Ext Time (p_c), s	0.0	1.2	0.1	1.3	0.0	1.2	0.0	2.0				
Intersection Summary												
HCM 6th Ctrl Delay			19.1									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Vol, veh/h	436	9	6	389	26	17
Future Vol, veh/h	436	9	6	389	26	17
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	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	474	10	7	423	28	18

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	484	0	705
Stage 1	-	-	-	-	479
Stage 2	-	-	-	-	226
Critical Hdwy	-	-	4.14	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	-	-	2.22	-	3.52
Pot Cap-1 Maneuver	-	-	1075	-	371
Stage 1	-	-	-	-	589
Stage 2	-	-	-	-	790
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1075	-	368
Mov Cap-2 Maneuver	-	-	-	-	526
Stage 1	-	-	-	-	589
Stage 2	-	-	-	-	784

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	599	-	-	1075	-
HCM Lane V/C Ratio	0.078	-	-	0.006	-
HCM Control Delay (s)	11.5	-	-	8.4	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Timings
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	274	106	102	354	292	255
Future Volume (vph)	274	106	102	354	292	255
Turn Type	Prot	pm+ov	Prot	NA	NA	Perm
Protected Phases	4	5	5	2	6	
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	6
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	16.2	9.6	9.6	16.2	43.2	43.2
Total Split (s)	52.0	13.0	13.0	68.0	55.0	55.0
Total Split (%)	43.3%	10.8%	10.8%	56.7%	45.8%	45.8%
Yellow Time (s)	5.2	3.6	3.6	5.2	5.2	5.2
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)	6.2	4.6	4.6	6.2	6.2	6.2
Lead/Lag		Lead	Lead		Lag	Lag
Lead-Lag Optimize?		Yes	Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
Act Effct Green (s)	14.6	23.9	7.6	27.4	14.9	14.9
Actuated g/C Ratio	0.26	0.43	0.14	0.50	0.27	0.27
v/c Ratio	0.65	0.09	0.24	0.43	0.34	0.45
Control Delay	26.9	2.8	27.1	10.7	17.0	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.9	2.8	27.1	10.7	17.0	4.8
LOS	C	A	C	B	B	A
Approach Delay	20.1			14.4	11.3	
Approach LOS	C			B	B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 55.3

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 14.7

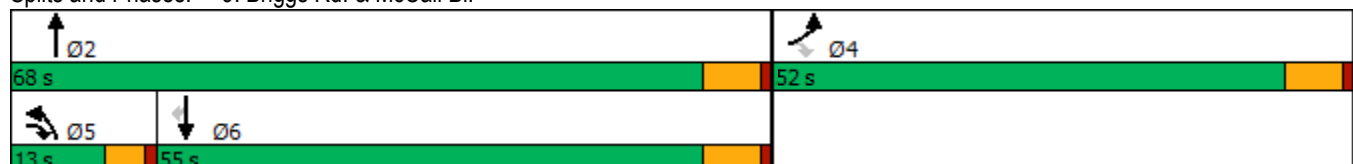
Intersection LOS: B

Intersection Capacity Utilization 44.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 9: Briggs Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	274	106	102	354	292	255
Future Volume (veh/h)	274	106	102	354	292	255
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	304	56	113	393	324	191
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	433	926	307	842	879	392
Arrive On Green	0.24	0.24	0.09	0.45	0.25	0.25
Sat Flow, veh/h	1781	2790	3456	1870	3647	1585
Grp Volume(v), veh/h	304	56	113	393	324	191
Grp Sat Flow(s),veh/h/ln	1781	1395	1728	1870	1777	1585
Q Serve(g_s), s	6.3	0.6	1.2	5.9	3.1	4.2
Cycle Q Clear(g_c), s	6.3	0.6	1.2	5.9	3.1	4.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	433	926	307	842	879	392
V/C Ratio(X)	0.70	0.06	0.37	0.47	0.37	0.49
Avail Cap(c_a), veh/h	2018	3409	718	2860	4291	1914
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	14.0	9.2	17.3	7.7	12.6	13.0
Incr Delay (d2), s/veh	0.8	0.0	0.7	0.4	0.3	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.4	1.3	0.9	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.7	9.2	18.1	8.1	12.9	14.0
LnGrp LOS	B	A	B	A	B	B
Approach Vol, veh/h	360			506	515	
Approach Delay, s/veh	13.9			10.4	13.3	
Approach LOS	B			B	B	
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	24.4		16.0		8.2	16.2
Change Period (Y+Rc), s	6.2		6.2		4.6	6.2
Max Green Setting (Gmax), s	61.8		45.8		8.4	48.8
Max Q Clear Time (g_c+I1), s	7.9		8.3		3.2	6.2
Green Ext Time (p_c), s	2.2		0.5		0.1	2.6
Intersection Summary						
HCM 6th Ctrl Delay			12.4			
HCM 6th LOS			B			

Intersection

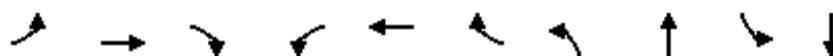
Intersection Delay, s/veh 16
Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	175	261	18	9	219	69	51	51	26	108	18	125
Future Vol, veh/h	175	261	18	9	219	69	51	51	26	108	18	125
Peak Hour Factor	0.94	0.94	0.92	0.92	0.94	0.94	0.92	0.92	0.92	0.94	0.92	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	186	278	20	10	233	73	55	55	28	115	20	133
Number of Lanes	1	1	1	0	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	3	3	2
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	3	2	3	1
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	2	3	1	3
HCM Control Delay	15	21.6	12.6	12.9
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	3%	100%	0%	0%
Vol Thru, %	0%	66%	0%	100%	0%	74%	0%	100%	0%
Vol Right, %	0%	34%	0%	0%	100%	23%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	51	77	175	261	18	297	108	18	125
LT Vol	51	0	175	0	0	9	108	0	0
Through Vol	0	51	0	261	0	219	0	18	0
RT Vol	0	26	0	0	18	69	0	0	125
Lane Flow Rate	55	84	186	278	20	316	115	20	133
Geometry Grp	8	8	7	7	7	8	8	8	8
Degree of Util (X)	0.133	0.184	0.369	0.511	0.032	0.632	0.264	0.042	0.26
Departure Headway (Hd)	8.663	7.904	7.135	6.627	5.916	7.193	8.278	7.766	7.049
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	414	453	505	544	605	503	434	461	509
Service Time	6.426	5.666	4.878	4.37	3.658	4.94	6.031	5.519	4.802
HCM Lane V/C Ratio	0.133	0.185	0.368	0.511	0.033	0.628	0.265	0.043	0.261
HCM Control Delay	12.8	12.5	14	16.1	8.9	21.6	14	10.9	12.3
HCM Lane LOS	B	B	B	C	A	C	B	B	B
HCM 95th-tile Q	0.5	0.7	1.7	2.9	0.1	4.3	1	0.1	1

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔			↔			↔	
Traffic Vol, veh/h	0	340	55	12	259	0	38	0	17	0	0	0
Future Vol, veh/h	0	340	55	12	259	0	38	0	17	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	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	-	-	205	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	400	65	14	305	0	45	0	20	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	305	0	0	465	0	0	733	733	400	776	798	305
Stage 1	-	-	-	-	-	-	400	400	-	333	333	-
Stage 2	-	-	-	-	-	-	333	333	-	443	465	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1256	-	-	1096	-	-	336	348	650	315	319	735
Stage 1	-	-	-	-	-	-	626	602	-	681	644	-
Stage 2	-	-	-	-	-	-	681	644	-	594	563	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1256	-	-	1096	-	-	332	343	650	302	314	735
Mov Cap-2 Maneuver	-	-	-	-	-	-	332	343	-	302	314	-
Stage 1	-	-	-	-	-	-	626	602	-	681	634	-
Stage 2	-	-	-	-	-	-	671	634	-	576	563	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.4			16			0		
HCM LOS							C			A		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	391	1256	-	-	1096	-	-	-				
HCM Lane V/C Ratio	0.165	-	-	-	0.013	-	-	-				
HCM Control Delay (s)	16	0	-	-	8.3	0	-	0				
HCM Lane LOS	C	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	-				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	182	164	91	184	204	19	40	340	16	584
Future Volume (vph)	182	164	91	184	204	19	40	340	16	584
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.2	29.2	9.6	29.2	29.2	9.6	29.2	9.6	27.2
Total Split (s)	28.0	32.0	32.0	28.0	32.0	32.0	12.0	50.0	10.0	48.0
Total Split (%)	23.3%	26.7%	26.7%	23.3%	26.7%	26.7%	10.0%	41.7%	8.3%	40.0%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	14.0	16.0	16.0	14.1	16.1	16.1	6.7	28.3	5.7	25.5
Actuated g/C Ratio	0.17	0.20	0.20	0.18	0.20	0.20	0.08	0.35	0.07	0.32
v/c Ratio	0.61	0.46	0.23	0.61	0.56	0.05	0.28	0.32	0.13	0.70
Control Delay	43.6	37.2	6.5	43.5	39.5	0.2	48.7	20.5	49.0	28.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.6	37.2	6.5	43.5	39.5	0.2	48.7	20.5	49.0	28.3
LOS	D	D	A	D	D	A	D	C	D	C
Approach Delay		33.5			39.4			23.2		28.7
Approach LOS		C			D			C		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 80.1

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 30.7

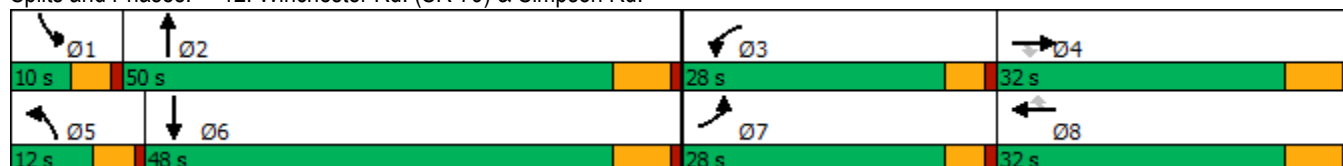
Intersection LOS: C

Intersection Capacity Utilization 65.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 12: Winchester Rd. (SR-79) & Simpson Rd.



HCM 6th Signalized Intersection Summary
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	164	91	184	204	19	40	340	44	16	584	160
Future Volume (veh/h)	182	164	91	184	204	19	40	340	44	16	584	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	169	60	190	210	7	41	351	32	16	602	95
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	337	284	239	340	287	74	998	90	35	864	136
Arrive On Green	0.13	0.18	0.18	0.13	0.18	0.18	0.04	0.30	0.30	0.02	0.28	0.28
Sat Flow, veh/h	1781	1870	1575	1781	1870	1577	1781	3293	298	1781	3071	484
Grp Volume(v), veh/h	188	169	60	190	210	7	41	188	195	16	348	349
Grp Sat Flow(s),veh/h/ln	1781	1870	1575	1781	1870	1577	1781	1777	1815	1781	1777	1778
Q Serve(g_s), s	6.1	4.8	1.9	6.2	6.2	0.2	1.3	4.9	5.0	0.5	10.4	10.5
Cycle Q Clear(g_c), s	6.1	4.8	1.9	6.2	6.2	0.2	1.3	4.9	5.0	0.5	10.4	10.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		0.27
Lane Grp Cap(c), veh/h	237	337	284	239	340	287	74	539	550	35	500	500
V/C Ratio(X)	0.79	0.50	0.21	0.79	0.62	0.02	0.56	0.35	0.35	0.46	0.70	0.70
Avail Cap(c_a), veh/h	700	810	682	700	810	683	221	1307	1335	162	1247	1248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	22.0	20.8	25.0	22.5	20.0	28.0	16.2	16.2	28.9	19.1	19.1
Incr Delay (d2), s/veh	2.3	1.1	0.4	2.3	1.8	0.0	2.4	0.4	0.4	3.5	1.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	1.9	0.6	2.4	2.5	0.1	0.6	1.7	1.7	0.2	3.7	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	23.1	21.2	27.3	24.3	20.1	30.4	16.6	16.6	32.4	20.9	20.9
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	C	C
Approach Vol, veh/h	417			407			424			713		
Approach Delay, s/veh	24.7			25.6			17.9			21.2		
Approach LOS	C			C			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.8	24.2	12.6	16.9	7.1	22.9	12.5	17.0				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	5.4	43.8	23.4	25.8	7.4	41.8	23.4	25.8				
Max Q Clear Time (g_c+I1), s	2.5	7.0	8.2	6.8	3.3	12.5	8.1	8.2				
Green Ext Time (p_c), s	0.0	2.0	0.2	0.9	0.0	4.0	0.2	0.9				
Intersection Summary												
HCM 6th Ctrl Delay	22.1											
HCM 6th LOS	C											

Timings
1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

	→	↘	←	↙	↓	↖
Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↑	↑↑↑↑	↑	↔	↑
Traffic Volume (vph)	2044	439	2073	559	0	734
Future Volume (vph)	2044	439	2073	559	0	734
Turn Type	NA	Free	NA	Split	NA	Perm
Protected Phases	2		6	4	4	
Permitted Phases		Free				4
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	30.0		33.0	20.0	20.0	20.0
Total Split (s)	68.0		68.0	52.0	52.0	52.0
Total Split (%)	56.7%		56.7%	43.3%	43.3%	43.3%
Yellow Time (s)	5.0		5.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min		C-Min	None	None	None
Act Effect Green (s)	72.1	120.0	72.1	36.4	36.4	36.4
Actuated g/C Ratio	0.60	1.00	0.60	0.30	0.30	0.30
v/c Ratio	0.47	0.24	0.63	0.81	0.75	0.73
Control Delay	14.6	0.3	17.6	49.5	42.8	41.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.6	0.3	17.6	49.5	42.8	41.9
LOS	B	A	B	D	D	D
Approach Delay	12.1		17.6		44.8	
Approach LOS	B		B		D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 68 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 21.2

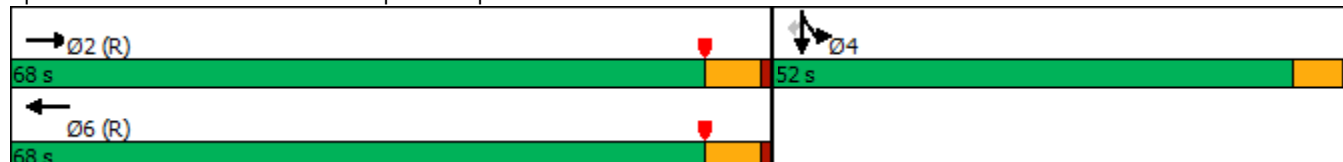
Intersection LOS: C

Intersection Capacity Utilization 79.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: I-215 SB Ramps & Newport Rd.



HCM 6th Signalized Intersection Summary

1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗		↑↑↑					↖	↔	↗
Traffic Volume (veh/h)	0	2044	439	0	2073	0	0	0	0	559	0	734
Future Volume (veh/h)	0	2044	439	0	2073	0	0	0	0	559	0	734
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	2086	0	0	2115	0				791	0	427
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	4560		0	3420	0				1050	0	467
Arrive On Green	0.00	0.61	0.00	0.00	0.61	0.00				0.29	0.00	0.29
Sat Flow, veh/h	0	7481	1585	0	5611	0				3563	0	1585
Grp Volume(v), veh/h	0	2086	0	0	2115	0				791	0	427
Grp Sat Flow(s),veh/h/ln	0	1870	1585	0	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	18.1	0.0	0.0	28.3	0.0				24.2	0.0	31.2
Cycle Q Clear(g_c), s	0.0	18.1	0.0	0.0	28.3	0.0				24.2	0.0	31.2
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	4560		0	3420	0				1050	0	467
V/C Ratio(X)	0.00	0.46		0.00	0.62	0.00				0.75	0.00	0.91
Avail Cap(c_a), veh/h	0	4560		0	3420	0				1381	0	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	12.7	0.0	0.0	14.7	0.0				38.4	0.0	40.9
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	0.8	0.0				1.1	0.0	13.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.8	0.0	0.0	10.7	0.0				10.3	0.0	13.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.0	0.0	0.0	15.5	0.0				39.5	0.0	54.3
LnGrp LOS	A	B		A	B	A				D	A	D
Approach Vol, veh/h		2086			2115						1218	
Approach Delay, s/veh		13.0			15.5						44.7	
Approach LOS		B			B						D	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		79.1		40.9		79.1						
Change Period (Y+Rc), s		6.0		5.5		6.0						
Max Green Setting (Gmax), s		62.0		46.5		62.0						
Max Q Clear Time (g_c+I1), s		20.1		33.2		30.3						
Green Ext Time (p_c), s		22.5		2.1		19.6						
Intersection Summary												
HCM 6th Ctrl Delay			21.1									
HCM 6th LOS			C									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Timings
2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

	→	←	↖	↗	↑	↘
Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations	↑↑↑	↑↑↑	↖	↗	↕	↖
Traffic Volume (vph)	2123	2119	439	552	0	941
Future Volume (vph)	2123	2119	439	552	0	941
Turn Type	NA	NA	Free	Split	NA	Perm
Protected Phases	2	6		8	8	
Permitted Phases			Free			8
Detector Phase	2	6		8	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	33.0	33.0		22.0	22.0	22.0
Total Split (s)	63.0	63.0		57.0	57.0	57.0
Total Split (%)	52.5%	52.5%		47.5%	47.5%	47.5%
Yellow Time (s)	5.0	5.0		4.5	4.5	4.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min	C-Min		None	None	None
Act Effect Green (s)	62.1	62.1	120.0	46.4	46.4	46.4
Actuated g/C Ratio	0.52	0.52	1.00	0.39	0.39	0.39
v/c Ratio	0.76	0.57	0.30	0.72	0.89	0.71
Control Delay	26.3	21.3	0.5	36.9	51.2	34.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.3	21.3	0.5	36.9	51.2	34.4
LOS	C	C	A	D	D	C
Approach Delay	26.3	17.7			40.8	
Approach LOS	C	B			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 26.3

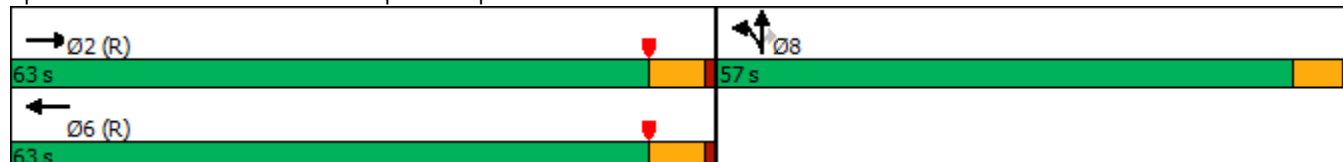
Intersection LOS: C

Intersection Capacity Utilization 85.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 2: I-215 NB Ramps & Newport Rd.



HCM 6th Signalized Intersection Summary 2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑			↑↑↑↑	↗	↖	↔	↗			
Traffic Volume (veh/h)	0	2123	0	0	2119	439	552	0	941	0	0	0
Future Volume (veh/h)	0	2123	0	0	2119	439	552	0	941	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	0	2211	0	0	2207	0	383	0	1131			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	0	2	0	0	2	2	2	2	2			
Cap, veh/h	0	2933	0	0	3911		679	0	1209			
Arrive On Green	0.00	0.52	0.00	0.00	0.52	0.00	0.38	0.00	0.38			
Sat Flow, veh/h	0	5611	0	0	7481	1585	1781	0	3170			
Grp Volume(v), veh/h	0	2211	0	0	2207	0	383	0	1131			
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	0.0	37.2	0.0	0.0	24.0	0.0	20.3	0.0	41.2			
Cycle Q Clear(g_c), s	0.0	37.2	0.0	0.0	24.0	0.0	20.3	0.0	41.2			
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2933	0	0	3911		679	0	1209			
V/C Ratio(X)	0.00	0.75	0.00	0.00	0.56		0.56	0.00	0.94			
Avail Cap(c_a), veh/h	0	2933	0	0	3911		764	0	1361			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.45	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	22.6	0.0	0.0	19.4	0.0	29.2	0.0	35.7			
Incr Delay (d2), s/veh	0.0	1.8	0.0	0.0	0.3	0.0	0.3	0.0	10.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	15.2	0.0	0.0	9.5	0.0	8.4	0.0	16.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	24.4	0.0	0.0	19.7	0.0	29.5	0.0	46.5			
LnGrp LOS	A	C	A	A	B		C	A	D			
Approach Vol, veh/h	2211				2207				1514			
Approach Delay, s/veh	24.4				19.7				42.2			
Approach LOS	C				B				D			
Timer - Assigned Phs	2				6				8			
Phs Duration (G+Y+Rc), s	68.7				68.7				51.3			
Change Period (Y+Rc), s	6.0				6.0				5.5			
Max Green Setting (Gmax), s	57.0				57.0				51.5			
Max Q Clear Time (g_c+I1), s	39.2				26.0				43.2			
Green Ext Time (p_c), s	13.5				20.4				2.6			
Intersection Summary												
HCM 6th Ctrl Delay	27.2											
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.												

Timings
3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 	 	 	 	 	 	 	 	 
Traffic Volume (vph)	441	1994	125	1586	602	160	177	133	118	370
Future Volume (vph)	441	1994	125	1586	602	160	177	133	118	370
Turn Type	Prot	NA	Prot	NA	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4	3	8	2	2		6	6	7
Permitted Phases							2			6
Detector Phase	7	4	3	8	2	2	2	6	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.2	9.6	34.8	36.8	36.8	36.8	15.8	15.8	9.6
Total Split (s)	23.0	66.0	10.4	53.4	37.4	37.4	37.4	16.2	16.2	23.0
Total Split (%)	17.7%	50.8%	8.0%	41.1%	28.8%	28.8%	28.8%	12.5%	12.5%	17.7%
Yellow Time (s)	3.6	5.2	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	4.6	5.8	5.8	5.8	5.8	5.8	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag						Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes						Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None	None
Act Effect Green (s)	18.0	59.9	5.8	48.1	26.7	26.7	26.7	10.3	10.3	29.5
Actuated g/C Ratio	0.14	0.48	0.05	0.38	0.21	0.21	0.21	0.08	0.08	0.24
v/c Ratio	0.91	1.03	0.81	0.92	0.75	0.74	0.40	0.48	0.78	0.53
Control Delay	76.8	60.1	93.9	45.6	53.5	59.0	12.1	61.9	89.4	34.1
Queue Delay	0.0	16.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.8	76.8	93.9	45.6	53.5	59.0	12.1	61.9	89.4	34.1
LOS	E	E	F	D	D	E	B	E	F	C
Approach Delay		76.8		48.9		47.2			50.5	
Approach LOS		E		D		D			D	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 125.1

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 61.5

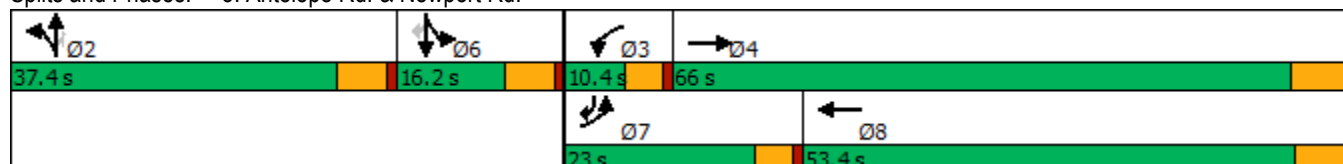
Intersection LOS: E

Intersection Capacity Utilization 95.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Antelope Rd. & Newport Rd.



HCM 6th Signalized Intersection Summary

3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	441	1994	422	125	1586	155	602	160	177	133	118	370
Future Volume (veh/h)	441	1994	422	125	1586	155	602	160	177	133	118	370
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	450	2035	309	128	1618	155	566	230	102	136	120	43
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	502	2183	325	164	1850	177	707	371	311	284	153	630
Arrive On Green	0.15	0.49	0.49	0.05	0.39	0.39	0.20	0.20	0.20	0.08	0.08	0.08
Sat Flow, veh/h	3456	4474	666	3456	4739	453	3563	1870	1568	3456	1870	2739
Grp Volume(v), veh/h	450	1538	806	128	1162	611	566	230	102	136	120	43
Grp Sat Flow(s),veh/h/ln	1728	1702	1736	1728	1702	1788	1781	1870	1568	1728	1870	1369
Q Serve(g_s), s	15.6	51.4	54.0	4.5	38.5	38.6	18.4	13.7	6.8	4.6	7.7	1.5
Cycle Q Clear(g_c), s	15.6	51.4	54.0	4.5	38.5	38.6	18.4	13.7	6.8	4.6	7.7	1.5
Prop In Lane	1.00		0.38	1.00		0.25	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	502	1661	847	164	1329	698	707	371	311	284	153	630
V/C Ratio(X)	0.90	0.93	0.95	0.78	0.87	0.88	0.80	0.62	0.33	0.48	0.78	0.07
Avail Cap(c_a), veh/h	522	1671	852	164	1330	699	924	485	407	295	160	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	29.1	29.8	57.4	34.4	34.4	46.5	44.6	41.9	53.4	54.9	37.0
Incr Delay (d2), s/veh	17.0	9.3	19.9	19.1	6.7	12.0	3.8	1.7	0.6	1.3	21.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	21.1	25.0	2.3	16.3	18.2	8.3	6.4	2.6	2.0	4.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.2	38.4	49.7	76.5	41.1	46.5	50.4	46.3	42.5	54.7	76.0	37.0
LnGrp LOS	E	D	D	E	D	D	D	D	D	D	E	D
Approach Vol, veh/h	2794				1901				898			
Approach Delay, s/veh	46.5				45.2				48.4			
Approach LOS	D				D				D			
Timer - Assigned Phs	2			3		4		6		7		8
Phs Duration (G+Y+Rc), s	30.0			10.4		65.7		15.8		22.3		53.8
Change Period (Y+Rc), s	5.8			4.6		6.2		5.8		4.6		* 6.2
Max Green Setting (Gmax), s	31.6			5.8		59.8		10.4		18.4		* 48
Max Q Clear Time (g_c+I1), s	20.4			6.5		56.0		9.7		17.6		40.6
Green Ext Time (p_c), s	2.9			0.0		3.4		0.1		0.1		5.3

Intersection Summary

HCM 6th Ctrl Delay	47.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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

Timings

4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	195	374	25	263	60	159	235	49	95	216
Future Volume (vph)	195	374	25	263	60	159	235	49	95	216
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4	3	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	7	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	9.6	30.8	30.8	9.6	39.5	39.5	9.6	16.5
Total Split (s)	30.0	51.4	9.6	31.0	31.0	26.0	42.0	42.0	17.0	33.0
Total Split (%)	25.0%	42.8%	8.0%	25.8%	25.8%	21.7%	35.0%	35.0%	14.2%	27.5%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effect Green (s)	15.0	30.9	5.3	14.0	14.0	13.1	20.7	20.7	9.3	14.1
Actuated g/C Ratio	0.19	0.39	0.07	0.18	0.18	0.17	0.26	0.26	0.12	0.18
v/c Ratio	0.66	0.47	0.12	0.48	0.15	0.62	0.29	0.11	0.52	0.59
Control Delay	42.3	18.3	44.9	34.1	0.8	43.7	27.4	0.4	47.5	25.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.3	18.3	44.9	34.1	0.8	43.7	27.4	0.4	47.5	25.4
LOS	D	B	D	C	A	D	C	A	D	C
Approach Delay		24.4		29.2			30.3			30.0
Approach LOS		C		C			C			C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 79.1

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 27.8

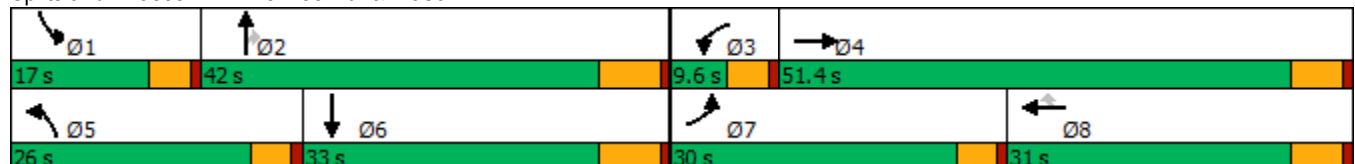
Intersection LOS: C

Intersection Capacity Utilization 58.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 4: Meniffee Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	374	194	25	263	60	159	235	49	95	216	148
Future Volume (veh/h)	195	374	194	25	263	60	159	235	49	95	216	148
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	222	425	173	28	299	33	181	267	26	108	245	51
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	740	298	108	625	278	229	789	350	139	504	103
Arrive On Green	0.15	0.30	0.30	0.03	0.18	0.18	0.13	0.22	0.22	0.08	0.17	0.17
Sat Flow, veh/h	1781	2472	996	3456	3554	1580	1781	3554	1576	1781	2938	601
Grp Volume(v), veh/h	222	304	294	28	299	33	181	267	26	108	147	149
Grp Sat Flow(s),veh/h/ln	1781	1777	1691	1728	1777	1580	1781	1777	1576	1781	1777	1762
Q Serve(g_s), s	7.0	8.4	8.6	0.5	4.4	1.0	5.7	3.7	0.8	3.5	4.3	4.5
Cycle Q Clear(g_c), s	7.0	8.4	8.6	0.5	4.4	1.0	5.7	3.7	0.8	3.5	4.3	4.5
Prop In Lane	1.00		0.59	1.00		1.00	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	275	532	506	108	625	278	229	789	350	139	305	303
V/C Ratio(X)	0.81	0.57	0.58	0.26	0.48	0.12	0.79	0.34	0.07	0.77	0.48	0.49
Avail Cap(c_a), veh/h	777	1391	1324	297	1538	683	655	2166	961	379	808	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	17.3	17.3	27.6	21.6	20.2	24.6	19.1	17.9	26.3	21.8	21.8
Incr Delay (d2), s/veh	2.1	1.0	1.1	0.5	0.6	0.2	2.3	0.3	0.1	3.4	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	3.0	2.9	0.2	1.6	0.3	2.2	1.3	0.2	1.4	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.9	18.2	18.4	28.0	22.2	20.4	26.9	19.3	18.0	29.8	22.9	23.1
LnGrp LOS	C	B	B	C	C	C	C	B	B	C	C	C
Approach Vol, veh/h		820			360			474			404	
Approach Delay, s/veh		20.4			22.5			22.1			24.8	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	19.4	6.4	23.2	12.1	16.5	13.6	16.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	12.4	35.5	5.0	45.6	21.4	26.5	25.4	25.2				
Max Q Clear Time (g_c+I1), s	5.5	5.7	2.5	10.6	7.7	6.5	9.0	6.4				
Green Ext Time (p_c), s	0.1	1.5	0.0	3.6	0.2	1.3	0.3	1.7				
Intersection Summary												
HCM 6th Ctrl Delay			22.0									
HCM 6th LOS			C									

Timings
5: Meniffee Rd. & Simpson Rd.

Salt Creek TA (JN:15470)
08/23/2023

	←	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↑↑	↖	↖	↑↑
Traffic Volume (vph)	193	130	361	231	173	316
Future Volume (vph)	193	130	361	231	173	316
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0
Minimum Split (s)	26.5	26.5	27.5	27.5	9.0	16.5
Total Split (s)	39.0	39.0	43.0	43.0	38.0	81.0
Total Split (%)	32.5%	32.5%	35.8%	35.8%	31.7%	67.5%
Yellow Time (s)	5.5	5.5	5.5	5.5	3.0	5.5
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)	6.5	6.5	6.5	6.5	4.0	6.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min
Act Effect Green (s)	13.0	13.0	13.3	13.3	11.6	29.1
Actuated g/C Ratio	0.23	0.23	0.24	0.24	0.21	0.52
v/c Ratio	0.48	0.28	0.44	0.42	0.48	0.18
Control Delay	24.2	6.4	20.6	5.9	25.8	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.2	6.4	20.6	5.9	25.8	7.3
LOS	C	A	C	A	C	A
Approach Delay	17.0		14.9			13.8
Approach LOS	B		B			B

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 55.6
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.48
 Intersection Signal Delay: 15.0
 Intersection LOS: B
 Intersection Capacity Utilization 44.4%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Meniffee Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
5: Menifee Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	193	130	361	231	173	316
Future Volume (veh/h)	193	130	361	231	173	316
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	199	44	372	196	178	326
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	398	355	844	377	240	1661
Arrive On Green	0.22	0.22	0.24	0.24	0.13	0.47
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	199	44	372	196	178	326
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	4.1	0.9	3.8	4.5	4.0	2.3
Cycle Q Clear(g_c), s	4.1	0.9	3.8	4.5	4.0	2.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	398	355	844	377	240	1661
V/C Ratio(X)	0.50	0.12	0.44	0.52	0.74	0.20
Avail Cap(c_a), veh/h	1375	1224	3081	1374	1439	6289
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	14.3	13.0	13.7	14.0	17.5	6.6
Incr Delay (d2), s/veh	1.0	0.2	0.4	1.1	4.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.3	1.1	1.2	1.5	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.3	13.2	14.0	15.1	21.9	6.6
LnGrp LOS	B	B	B	B	C	A
Approach Vol, veh/h	243		568			504
Approach Delay, s/veh	14.9		14.4			12.0
Approach LOS	B		B			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.7	16.5			26.2	15.9
Change Period (Y+Rc), s	4.0	6.5			6.5	6.5
Max Green Setting (Gmax), s	34.0	36.5			74.5	32.5
Max Q Clear Time (g_c+I1), s	6.0	6.5			4.3	6.1
Green Ext Time (p_c), s	0.4	2.8			1.9	0.7
Intersection Summary						
HCM 6th Ctrl Delay			13.6			
HCM 6th LOS			B			

Timings
6: Meniffee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	425	1501	108	1155	67	196	314	117	94	217	355
Future Volume (vph)	425	1501	108	1155	67	196	314	117	94	217	355
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0
Minimum Split (s)	9.6	34.8	9.6	32.8	32.8	9.6	39.8	9.6	9.6	35.8	9.6
Total Split (s)	31.0	55.7	11.3	36.0	36.0	14.8	40.8	11.3	12.2	38.2	31.0
Total Split (%)	25.8%	46.4%	9.4%	30.0%	30.0%	12.3%	34.0%	9.4%	10.2%	31.8%	25.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.8	3.6	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.8	4.6	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effect Green (s)	26.6	50.4	6.5	30.4	30.4	9.6	17.5	25.2	7.6	15.5	43.3
Actuated g/C Ratio	0.26	0.49	0.06	0.30	0.30	0.09	0.17	0.24	0.07	0.15	0.42
v/c Ratio	1.02	0.73	0.55	0.85	0.13	0.67	0.57	0.28	0.79	0.45	0.56
Control Delay	87.7	24.1	58.5	41.3	0.5	57.5	42.6	8.5	86.3	41.9	19.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.7	24.1	58.5	41.3	0.5	57.5	42.6	8.5	86.3	41.9	19.2
LOS	F	C	E	D	A	E	D	A	F	D	B
Approach Delay		37.2		40.6			40.9			36.0	
Approach LOS		D		D			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 38.5

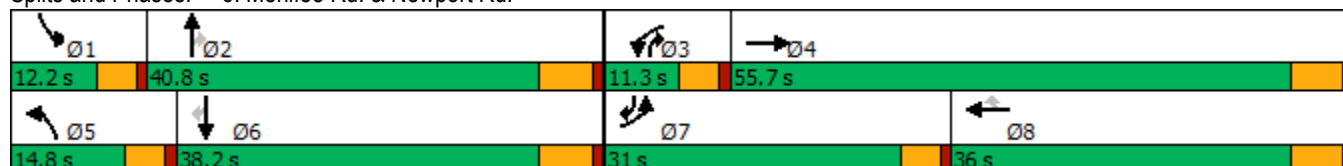
Intersection LOS: D

Intersection Capacity Utilization 78.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 6: Meniffee Rd. & Newport Rd.



HCM 6th Signalized Intersection Summary
6: Menifee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  		 	 			 	
Traffic Volume (veh/h)	425	1501	139	108	1155	67	196	314	117	94	217	355
Future Volume (veh/h)	425	1501	139	108	1155	67	196	314	117	94	217	355
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	467	1649	141	119	1269	39	215	345	59	103	238	204
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	488	2461	210	181	1492	457	284	517	308	130	483	649
Arrive On Green	0.27	0.51	0.51	0.05	0.29	0.29	0.08	0.15	0.15	0.07	0.14	0.14
Sat Flow, veh/h	1781	4791	409	3456	5106	1563	3456	3554	1548	1781	3554	1582
Grp Volume(v), veh/h	467	1171	619	119	1269	39	215	345	59	103	238	204
Grp Sat Flow(s),veh/h/ln	1781	1702	1796	1728	1702	1563	1728	1777	1548	1781	1777	1582
Q Serve(g_s), s	24.9	24.6	24.7	3.3	22.6	1.7	5.9	8.9	3.1	5.5	6.0	8.4
Cycle Q Clear(g_c), s	24.9	24.6	24.7	3.3	22.6	1.7	5.9	8.9	3.1	5.5	6.0	8.4
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	488	1748	923	181	1492	457	284	517	308	130	483	649
V/C Ratio(X)	0.96	0.67	0.67	0.66	0.85	0.09	0.76	0.67	0.19	0.79	0.49	0.31
Avail Cap(c_a), veh/h	488	1762	930	240	1599	490	366	1290	645	140	1194	966
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.5	17.4	17.4	44.8	32.1	24.8	43.3	39.0	32.2	44.0	38.6	19.3
Incr Delay (d2), s/veh	29.9	1.0	1.9	1.5	4.4	0.1	4.6	1.5	0.3	22.1	0.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.1	8.7	9.4	1.4	9.3	0.6	2.6	3.8	1.1	3.1	2.5	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.3	18.4	19.3	46.3	36.5	24.8	47.9	40.5	32.5	66.1	39.4	19.6
LnGrp LOS	E	B	B	D	D	C	D	D	C	E	D	B
Approach Vol, veh/h		2257			1427			619			545	
Approach Delay, s/veh		28.1			37.0			42.3			37.0	
Approach LOS		C			D			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.6	19.8	9.7	55.3	12.5	18.9	31.0	34.0				
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8				
Max Green Setting (Gmax), s	7.6	35.0	6.7	49.9	10.2	32.4	26.4	30.2				
Max Q Clear Time (g_c+I1), s	7.5	10.9	5.3	26.7	7.9	10.4	26.9	24.6				
Green Ext Time (p_c), s	0.0	2.2	0.0	13.0	0.1	2.0	0.0	3.6				
Intersection Summary												
HCM 6th Ctrl Delay			33.5									
HCM 6th LOS			C									

Timings

Salt Creek TA (JN:15470)

7: Lindenberger Rd. & Simpson Rd.

08/23/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	49	283	33	55	286	31	35	114	16	86	43
Future Volume (vph)	49	283	33	55	286	31	35	114	16	86	43
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	26.2	26.2	9.6	28.2	28.2	9.6	30.2	9.6	26.2	26.2
Total Split (s)	20.0	44.0	44.0	21.0	45.0	45.0	17.0	40.0	15.0	38.0	38.0
Total Split (%)	16.7%	36.7%	36.7%	17.5%	37.5%	37.5%	14.2%	33.3%	12.5%	31.7%	31.7%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effect Green (s)	7.4	17.1	17.1	7.6	17.3	17.3	6.9	17.5	6.2	13.3	13.3
Actuated g/C Ratio	0.13	0.30	0.30	0.13	0.30	0.30	0.12	0.31	0.11	0.23	0.23
v/c Ratio	0.24	0.58	0.07	0.26	0.31	0.06	0.19	0.22	0.09	0.23	0.11
Control Delay	32.7	25.0	0.2	32.6	18.8	0.2	33.3	11.3	34.4	25.4	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.7	25.0	0.2	32.6	18.8	0.2	33.3	11.3	34.4	25.4	0.5
LOS	C	C	A	C	B	A	C	B	C	C	A
Approach Delay		23.7			19.3			14.5		19.0	
Approach LOS		C			B			B		B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 56.8

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 19.7

Intersection LOS: B

Intersection Capacity Utilization 46.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Lindenberger Rd. & Simpson Rd.

			
Ø1	Ø2	Ø3	Ø4
15 s	40 s	21 s	44 s
			
Ø5	Ø6	Ø7	Ø8
17 s	38 s	20 s	45 s

HCM 6th Signalized Intersection Summary
7: Lindenberger Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	283	33	55	286	31	35	114	94	16	86	43
Future Volume (veh/h)	49	283	33	55	286	31	35	114	94	16	86	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	56	325	23	63	329	29	40	131	65	18	99	26
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	445	377	105	862	384	77	545	255	40	398	331
Arrive On Green	0.05	0.24	0.24	0.06	0.24	0.24	0.04	0.23	0.23	0.02	0.21	0.21
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	1781	2336	1094	1781	1870	1556
Grp Volume(v), veh/h	56	325	23	63	329	29	40	98	98	18	99	26
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1781	1777	1653	1781	1870	1556
Q Serve(g_s), s	1.5	7.7	0.5	1.7	3.7	0.7	1.1	2.2	2.3	0.5	2.1	0.6
Cycle Q Clear(g_c), s	1.5	7.7	0.5	1.7	3.7	0.7	1.1	2.2	2.3	0.5	2.1	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.66	1.00		1.00
Lane Grp Cap(c), veh/h	97	445	377	105	862	384	77	415	386	40	398	331
V/C Ratio(X)	0.57	0.73	0.06	0.60	0.38	0.08	0.52	0.24	0.25	0.45	0.25	0.08
Avail Cap(c_a), veh/h	568	1464	1241	605	2855	1273	457	1243	1157	384	1231	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	17.0	14.2	22.2	15.3	14.1	22.6	15.0	15.1	23.3	15.8	15.2
Incr Delay (d2), s/veh	2.0	2.3	0.1	2.0	0.3	0.1	2.0	0.3	0.3	3.0	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.8	0.2	0.6	1.2	0.2	0.4	0.7	0.7	0.2	0.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	19.3	14.3	24.2	15.6	14.2	24.7	15.3	15.4	26.3	16.1	15.3
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		404			421			236			143	
Approach Delay, s/veh		19.7			16.8			16.9			17.3	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.7	17.5	7.5	17.7	6.7	16.5	7.2	17.9				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	10.4	33.8	16.4	37.8	12.4	31.8	15.4	38.8				
Max Q Clear Time (g_c+I1), s	2.5	4.3	3.7	9.7	3.1	4.1	3.5	5.7				
Green Ext Time (p_c), s	0.0	1.0	0.0	1.8	0.0	0.5	0.0	2.0				
Intersection Summary												
HCM 6th Ctrl Delay				17.8								
HCM 6th LOS				B								

Intersection						
Int Delay, s/veh	0.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Vol, veh/h	368	29	20	344	17	12
Future Vol, veh/h	368	29	20	344	17	12
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	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	400	32	22	374	18	13
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	432	0	647	216
Stage 1	-	-	-	-	416	-
Stage 2	-	-	-	-	231	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1124	-	404	789
Stage 1	-	-	-	-	634	-
Stage 2	-	-	-	-	785	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1124	-	396	789
Mov Cap-2 Maneuver	-	-	-	-	557	-
Stage 1	-	-	-	-	634	-
Stage 2	-	-	-	-	769	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.5		11	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	634	-	-	1124	-	
HCM Lane V/C Ratio	0.05	-	-	0.019	-	
HCM Control Delay (s)	11	-	-	8.3	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-	

Timings
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	150	105	78	121	114	114
Future Volume (vph)	150	105	78	121	114	114
Turn Type	Prot	pm+ov	Prot	NA	NA	Perm
Protected Phases	4	5	5	2	6	
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	6
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	16.2	9.6	9.6	16.2	43.2	43.2
Total Split (s)	46.0	17.0	17.0	74.0	57.0	57.0
Total Split (%)	38.3%	14.2%	14.2%	61.7%	47.5%	47.5%
Yellow Time (s)	5.2	3.6	3.6	5.2	5.2	5.2
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)	6.2	4.6	4.6	6.2	6.2	6.2
Lead/Lag		Lead	Lead		Lag	Lag
Lead-Lag Optimize?		Yes	Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
Act Effect Green (s)	11.4	25.1	7.1	26.0	14.1	14.1
Actuated g/C Ratio	0.23	0.50	0.14	0.51	0.28	0.28
v/c Ratio	0.43	0.08	0.19	0.15	0.13	0.25
Control Delay	23.2	3.0	23.4	6.4	13.3	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.2	3.0	23.4	6.4	13.3	4.2
LOS	C	A	C	A	B	A
Approach Delay	14.9			13.1	8.8	
Approach LOS	B			B	A	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 50.6

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 12.3

Intersection LOS: B

Intersection Capacity Utilization 30.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 9: Briggs Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

08/23/2023

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	150	105	78	121	114	114
Future Volume (veh/h)	150	105	78	121	114	114
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	172	121	90	139	131	131
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	423	881	271	855	943	416
Arrive On Green	0.24	0.24	0.08	0.46	0.27	0.27
Sat Flow, veh/h	1781	2790	3456	1870	3647	1570
Grp Volume(v), veh/h	172	121	90	139	131	131
Grp Sat Flow(s),veh/h/ln	1781	1395	1728	1870	1777	1570
Q Serve(g_s), s	3.3	1.3	1.0	1.8	1.1	2.7
Cycle Q Clear(g_c), s	3.3	1.3	1.0	1.8	1.1	2.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	423	881	271	855	943	416
V/C Ratio(X)	0.41	0.14	0.33	0.16	0.14	0.31
Avail Cap(c_a), veh/h	1747	2955	1056	3125	4448	1965
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	13.1	9.9	17.7	6.5	11.4	12.0
Incr Delay (d2), s/veh	0.2	0.0	0.7	0.1	0.1	0.4
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	1.2	0.3	0.4	0.3	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.3	10.0	18.4	6.5	11.4	12.4
LnGrp LOS	B	A	B	A	B	B
Approach Vol, veh/h	293			229	262	
Approach Delay, s/veh	11.9			11.2	11.9	
Approach LOS	B			B	B	
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	24.8		15.8		7.8	17.0
Change Period (Y+Rc), s	6.2		6.2		4.6	6.2
Max Green Setting (Gmax), s	67.8		39.8		12.4	50.8
Max Q Clear Time (g_c+I1), s	3.8		5.3		3.0	4.7
Green Ext Time (p_c), s	0.7		0.4		0.1	1.2
Intersection Summary						
HCM 6th Ctrl Delay			11.7			
HCM 6th LOS			B			

Intersection

Intersection Delay, s/veh 16.3

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	82	240	58	29	245	81	34	35	17	74	59	85
Future Vol, veh/h	82	240	58	29	245	81	34	35	17	74	59	85
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	88	258	63	32	263	87	37	38	18	80	64	91
Number of Lanes	1	1	1	0	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	3	3	2
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	3	2	3	1
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	2	3	1	3
HCM Control Delay	12.8	24	11.7	11.5
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	8%	100%	0%	0%
Vol Thru, %	0%	67%	0%	100%	0%	69%	0%	100%	0%
Vol Right, %	0%	33%	0%	0%	100%	23%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	52	82	240	58	355	74	59	85
LT Vol	34	0	82	0	0	29	74	0	0
Through Vol	0	35	0	240	0	245	0	59	0
RT Vol	0	17	0	0	58	81	0	0	85
Lane Flow Rate	37	57	88	258	63	382	80	64	91
Geometry Grp	8	8	7	7	7	8	8	8	8
Degree of Util (X)	0.086	0.12	0.168	0.456	0.099	0.708	0.176	0.133	0.171
Departure Headway (Hd)	8.411	7.661	6.867	6.36	5.649	6.671	7.98	7.469	6.755
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	426	468	525	568	637	543	450	480	531
Service Time	6.16	5.41	4.578	4.071	3.36	4.386	5.723	5.212	4.497
HCM Lane V/C Ratio	0.087	0.122	0.168	0.454	0.099	0.703	0.178	0.133	0.171
HCM Control Delay	12	11.5	11	14.3	9	24	12.4	11.4	10.9
HCM Lane LOS	B	B	B	B	A	C	B	B	B
HCM 95th-tile Q	0.3	0.4	0.6	2.4	0.3	5.6	0.6	0.5	0.6

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	0	295	36	12	295	0	60	0	16	1	0	0
Future Vol, veh/h	0	295	36	12	295	0	60	0	16	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	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	-	-	205	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	317	39	13	317	0	65	0	17	1	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	317	0	0	356	0	0	660	660	317	688	699	317
Stage 1	-	-	-	-	-	-	317	317	-	343	343	-
Stage 2	-	-	-	-	-	-	343	343	-	345	356	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1243	-	-	1203	-	-	376	383	724	360	364	724
Stage 1	-	-	-	-	-	-	694	654	-	672	637	-
Stage 2	-	-	-	-	-	-	672	637	-	671	629	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1243	-	-	1203	-	-	372	378	724	348	359	724
Mov Cap-2 Maneuver	-	-	-	-	-	-	372	378	-	348	359	-
Stage 1	-	-	-	-	-	-	694	654	-	672	629	-
Stage 2	-	-	-	-	-	-	663	629	-	655	629	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.3			15.8			15.4		
HCM LOS							C			C		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	414	1243	-	-	1203	-	-	348				
HCM Lane V/C Ratio	0.197	-	-	-	0.011	-	-	0.003				
HCM Control Delay (s)	15.8	0	-	-	8	0	-	15.4				
HCM Lane LOS	C	A	-	-	A	A	-	C				
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	0				

Timings
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	90	178	53	65	120	33	81	629	31	425
Future Volume (vph)	90	178	53	65	120	33	81	629	31	425
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.2	29.2	9.6	29.2	29.2	9.6	29.2	9.6	27.2
Total Split (s)	20.0	35.0	35.0	17.0	32.0	32.0	19.0	55.0	13.0	49.0
Total Split (%)	16.7%	29.2%	29.2%	14.2%	26.7%	26.7%	15.8%	45.8%	10.8%	40.8%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	9.3	15.4	15.4	8.2	14.4	14.4	8.9	26.9	6.7	22.4
Actuated g/C Ratio	0.13	0.21	0.21	0.11	0.20	0.20	0.12	0.37	0.09	0.31
v/c Ratio	0.43	0.48	0.13	0.35	0.35	0.08	0.40	0.65	0.21	0.51
Control Delay	41.4	34.2	0.6	41.7	33.6	0.4	41.6	23.0	42.4	23.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.4	34.2	0.6	41.7	33.6	0.4	41.6	23.0	42.4	23.9
LOS	D	C	A	D	C	A	D	C	D	C
Approach Delay		30.7			31.0			24.7		25.0
Approach LOS		C			C			C		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 71.9

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 26.5

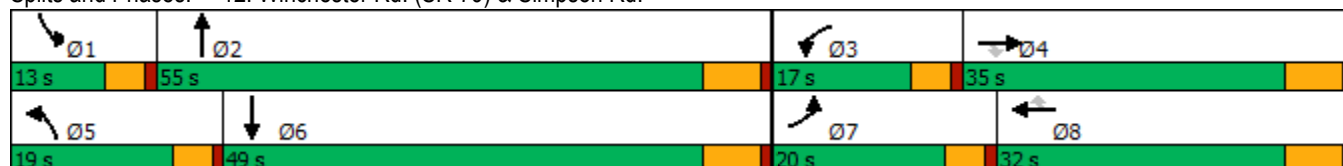
Intersection LOS: C

Intersection Capacity Utilization 58.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 12: Winchester Rd. (SR-79) & Simpson Rd.



HCM 6th Signalized Intersection Summary
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

08/23/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	178	53	65	120	33	81	629	148	31	425	79
Future Volume (veh/h)	90	178	53	65	120	33	81	629	148	31	425	79
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		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	193	25	71	130	24	88	684	87	34	462	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	373	316	107	352	297	120	989	126	66	921	89
Arrive On Green	0.07	0.20	0.20	0.06	0.19	0.19	0.07	0.31	0.31	0.04	0.28	0.28
Sat Flow, veh/h	1781	1870	1583	1781	1870	1577	1781	3172	403	1781	3271	317
Grp Volume(v), veh/h	98	193	25	71	130	24	88	383	388	34	250	257
Grp Sat Flow(s),veh/h/ln	1781	1870	1583	1781	1870	1577	1781	1777	1798	1781	1777	1811
Q Serve(g_s), s	3.0	5.1	0.7	2.2	3.3	0.7	2.7	10.4	10.4	1.0	6.5	6.5
Cycle Q Clear(g_c), s	3.0	5.1	0.7	2.2	3.3	0.7	2.7	10.4	10.4	1.0	6.5	6.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.18
Lane Grp Cap(c), veh/h	127	373	316	107	352	297	120	554	561	66	500	510
V/C Ratio(X)	0.77	0.52	0.08	0.66	0.37	0.08	0.74	0.69	0.69	0.52	0.50	0.50
Avail Cap(c_a), veh/h	497	977	827	401	875	738	465	1572	1591	271	1379	1406
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	19.7	18.0	25.4	19.5	18.4	25.2	16.6	16.6	26.1	16.6	16.6
Incr Delay (d2), s/veh	3.7	1.1	0.1	2.6	0.6	0.1	3.3	1.5	1.5	2.3	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.9	0.2	0.9	1.3	0.2	1.1	3.5	3.6	0.4	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	20.8	18.1	28.0	20.2	18.6	28.5	18.2	18.2	28.4	17.3	17.3
LnGrp LOS	C	C	B	C	C	B	C	B	B	C	B	B
Approach Vol, veh/h		316			225			859			541	
Approach Delay, s/veh		23.1			22.5			19.2			18.0	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.6	23.4	7.9	17.2	8.3	21.7	8.5	16.6				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	8.4	48.8	12.4	28.8	14.4	42.8	15.4	25.8				
Max Q Clear Time (g_c+I1), s	3.0	12.4	4.2	7.1	4.7	8.5	5.0	5.3				
Green Ext Time (p_c), s	0.0	4.6	0.0	0.9	0.1	2.8	0.1	0.6				
Intersection Summary												
HCM 6th Ctrl Delay			19.9									
HCM 6th LOS			B									

APPENDIX 5.2: E+P CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	CALC	CP	E+P
Jurisdiction: <u>City of Menifee</u>				DATE		<u>08/24/23</u>
Major Street: <u>Simpson Rd.</u>				CHK		<u>CP</u>
Minor Street: <u>Street A</u>				Critical Approach Speed (Major)		<u>45</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>9,767</u> vpd				Minor Street Future ADT = <u>389</u> vpd		
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);						☒
						or
In built up area of isolated community of < 10,000 population						☐

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>		<u>RURAL</u>		Minimum Requirements			
CONDITION A - Minimum Vehicular Volume		XX		EADT			
<u>Satisfied</u>		<u>Not Satisfied</u>		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
		XX		(Total of Both Approaches)		(One Direction Only)	
<u>Major Street</u>		<u>Minor Street</u>		<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1 9,767		1 389		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>		(Total of Both Approaches)		(One Direction Only)	
		XX					
Number of lanes for moving traffic on each approach		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 9,767		1 389		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%	
		XX					
No one condition satisfied, but following conditions fulfilled 80% of more							
		<u>A</u>		<u>B</u>			
		23%		46%			

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**

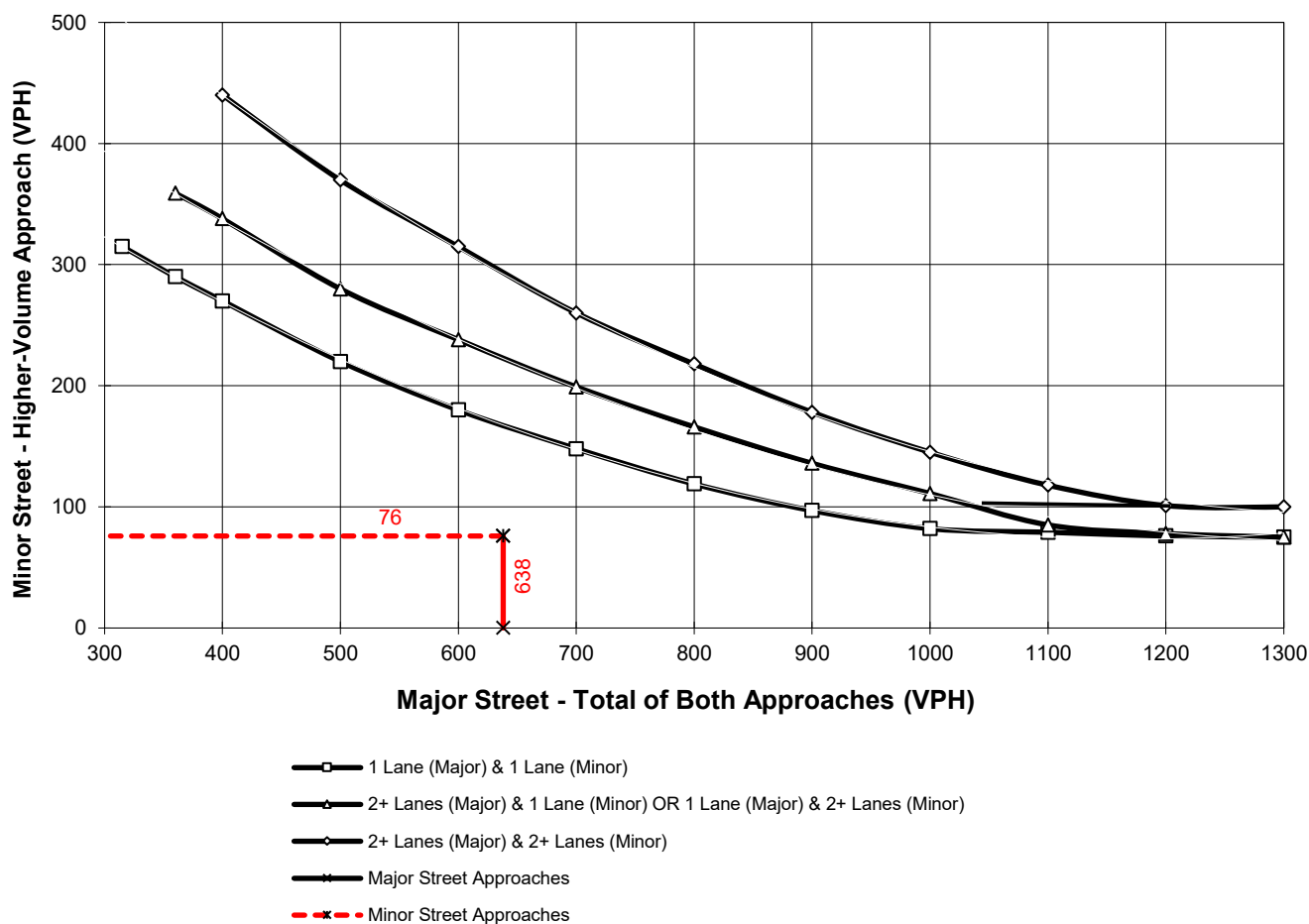
Major Street Name = **Simpson Rd.**

Total of Both Approaches (VPH) = **638**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Leon Rd.**

High Volume Approach (VPH) = **76**
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 5.3: E+P CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

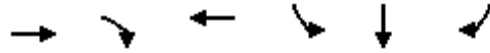
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Queues

Salt Creek TA (JN:15470)

08/23/2023

1: I-215 SB Ramps & Newport Rd.



Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1410	694	1783	307	289	286
v/c Ratio	0.27	0.37	0.46	0.77	0.69	0.68
Control Delay	7.8	0.6	9.6	57.0	47.2	46.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.8	0.6	9.6	57.0	47.2	46.8
Queue Length 50th (ft)	93	0	187	226	190	187
Queue Length 95th (ft)	139	0	278	298	258	255
Internal Link Dist (ft)	617		509		864	
Turn Bay Length (ft)						425
Base Capacity (vph)	5144	1863	3858	659	677	677
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.37	0.46	0.47	0.43	0.42
Intersection Summary						

Queues

Salt Creek TA (JN:15470)

2: I-215 NB Ramps & Newport Rd.

08/23/2023



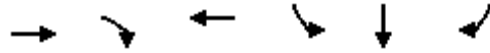
Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	1293	2435	499	331	328	328
v/c Ratio	0.36	0.51	0.32	0.69	0.81	0.65
Control Delay	11.2	12.7	0.6	46.4	52.5	40.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.2	12.7	0.6	46.4	52.5	40.2
Queue Length 50th (ft)	145	233	0	230	237	203
Queue Length 95th (ft)	219	332	0	290	317	264
Internal Link Dist (ft)	414	635			1057	
Turn Bay Length (ft)						475
Base Capacity (vph)	3602	4803	1548	752	610	772
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	0.36	0.51	0.32	0.44	0.54	0.42
Intersection Summary						

Queues

Salt Creek TA (JN:15470)

08/23/2023

1: I-215 SB Ramps & Newport Rd.



Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	2086	448	2115	456	436	427
v/c Ratio	0.47	0.24	0.63	0.81	0.75	0.73
Control Delay	14.6	0.3	17.6	49.5	42.8	41.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.6	0.3	17.6	49.5	42.8	41.9
Queue Length 50th (ft)	212	0	332	324	285	277
Queue Length 95th (ft)	291	0	462	398	358	348
Internal Link Dist (ft)	617		509		864	
Turn Bay Length (ft)						425
Base Capacity (vph)	4476	1863	3357	721	738	738
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.24	0.63	0.63	0.59	0.58
Intersection Summary						

Queues

Salt Creek TA (JN:15470)

2: I-215 NB Ramps & Newport Rd.

08/23/2023



Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	2211	2207	457	517	519	519
v/c Ratio	0.76	0.57	0.30	0.72	0.89	0.71
Control Delay	26.3	21.3	0.5	36.9	51.2	34.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.3	21.3	0.5	36.9	51.2	34.4
Queue Length 50th (ft)	463	298	0	322	375	306
Queue Length 95th (ft)	544	343	0	434	#551	416
Internal Link Dist (ft)	414	635			1057	
Turn Bay Length (ft)						475
Base Capacity (vph)	2892	3857	1548	799	642	814
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.57	0.30	0.65	0.81	0.64

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

APPENDIX 6.1: OPENING YEAR (2029) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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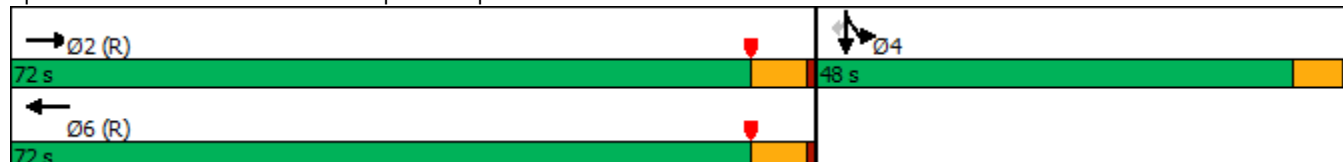
Timings
1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

	→	↘	←	↙	↓	↖
Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↗	↑↑↑↑	↘	↕	↗
Traffic Volume (vph)	1851	842	2303	426	0	744
Future Volume (vph)	1851	842	2303	426	0	744
Turn Type	NA	Free	NA	Split	NA	Perm
Protected Phases	2		6	4	4	
Permitted Phases		Free				4
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	30.0		33.0	20.0	20.0	20.0
Total Split (s)	72.0		72.0	48.0	48.0	48.0
Total Split (%)	60.0%		60.0%	40.0%	40.0%	40.0%
Yellow Time (s)	5.0		5.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min		C-Min	None	None	None
Act Effct Green (s)	75.5	120.0	75.5	33.0	33.0	33.0
Actuated g/C Ratio	0.63	1.00	0.63	0.28	0.28	0.28
v/c Ratio	0.42	0.48	0.70	0.80	0.78	0.79
Control Delay	12.3	0.9	17.2	51.6	47.6	47.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.3	0.9	17.2	51.6	47.6	47.8
LOS	B	A	B	D	D	D
Approach Delay	8.8		17.2		49.0	
Approach LOS	A		B		D	
Intersection Summary						
Cycle Length: 120						
Actuated Cycle Length: 120						
Offset: 68 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow						
Natural Cycle: 55						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.80						
Intersection Signal Delay: 19.5				Intersection LOS: B		
Intersection Capacity Utilization 84.8%				ICU Level of Service E		
Analysis Period (min) 15						

Splits and Phases: 1: I-215 SB Ramps & Newport Rd.



HCM 6th Signalized Intersection Summary
1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗		↑↑↑					↖	↔	↗
Traffic Volume (veh/h)	0	1851	842	0	2303	0	0	0	0	426	0	744
Future Volume (veh/h)	0	1851	842	0	2303	0	0	0	0	426	0	744
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1969	0	0	2450	0				680	0	394
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	4728		0	3546	0				970	0	432
Arrive On Green	0.00	0.63	0.00	0.00	0.63	0.00				0.27	0.00	0.27
Sat Flow, veh/h	0	7481	1585	0	5611	0				3563	0	1585
Grp Volume(v), veh/h	0	1969	0	0	2450	0				680	0	394
Grp Sat Flow(s),veh/h/ln	0	1870	1585	0	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	15.8	0.0	0.0	34.2	0.0				20.6	0.0	28.9
Cycle Q Clear(g_c), s	0.0	15.8	0.0	0.0	34.2	0.0				20.6	0.0	28.9
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	4728		0	3546	0				970	0	432
V/C Ratio(X)	0.00	0.42		0.00	0.69	0.00				0.70	0.00	0.91
Avail Cap(c_a), veh/h	0	4728		0	3546	0				1262	0	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.0	0.0	0.0	14.4	0.0				39.3	0.0	42.3
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	1.1	0.0				0.7	0.0	14.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.8	0.0	0.0	12.7	0.0				8.8	0.0	12.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	11.3	0.0	0.0	15.6	0.0				39.9	0.0	56.7
LnGrp LOS	A	B		A	B	A				D	A	E
Approach Vol, veh/h		1969			2450						1074	
Approach Delay, s/veh		11.3			15.6						46.1	
Approach LOS		B			B						D	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		81.8		38.2		81.8						
Change Period (Y+Rc), s		6.0		5.5		6.0						
Max Green Setting (Gmax), s		66.0		42.5		66.0						
Max Q Clear Time (g_c+I1), s		17.8		30.9		36.2						
Green Ext Time (p_c), s		21.9		1.8		22.2						
Intersection Summary												
HCM 6th Ctrl Delay			20.0									
HCM 6th LOS			C									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Timings
2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

	→	←	↖	↗	↑	↘
Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations	↑↑↑	↑↑↑	↖	↗	↔	↖
Traffic Volume (vph)	1671	3049	662	481	0	709
Future Volume (vph)	1671	3049	662	481	0	709
Turn Type	NA	NA	Free	Split	NA	Perm
Protected Phases	2	6		8	8	
Permitted Phases			Free			8
Detector Phase	2	6		8	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	33.0	33.0		22.0	22.0	22.0
Total Split (s)	66.0	66.0		54.0	54.0	54.0
Total Split (%)	55.0%	55.0%		45.0%	45.0%	45.0%
Yellow Time (s)	5.0	5.0		4.5	4.5	4.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min	C-Min		None	None	None
Act Effect Green (s)	70.6	70.6	120.0	37.9	37.9	37.9
Actuated g/C Ratio	0.59	0.59	1.00	0.32	0.32	0.32
v/c Ratio	0.52	0.72	0.44	0.73	0.84	0.65
Control Delay	16.6	20.1	0.9	43.0	50.4	37.0
Queue Delay	0.0	0.4	0.0	0.0	0.0	0.0
Total Delay	16.6	20.5	0.9	43.0	50.4	37.0
LOS	B	C	A	D	D	D
Approach Delay	16.6	17.0			43.5	
Approach LOS	B	B			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 21.7

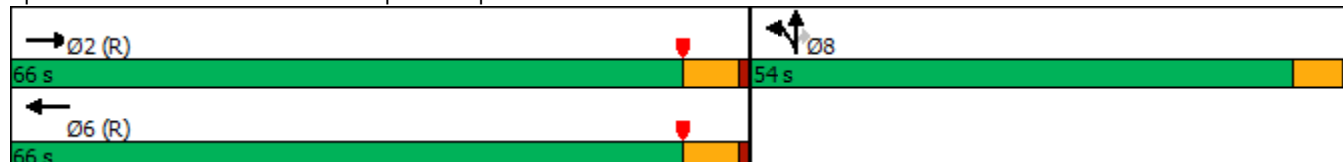
Intersection LOS: C

Intersection Capacity Utilization 74.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: I-215 NB Ramps & Newport Rd.



HCM 6th Signalized Intersection Summary 2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑			↑↑↑↑	↑	↑	↔	↑			
Traffic Volume (veh/h)	0	1671	0	0	3049	662	481	0	709	0	0	0
Future Volume (veh/h)	0	1671	0	0	3049	662	481	0	709	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	0	1723	0	0	3143	0	645	0	320			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	2	0	0	2	2	2	2	2			
Cap, veh/h	0	3801	0	0	5068		808	0	360			
Arrive On Green	0.00	0.68	0.00	0.00	0.68	0.00	0.23	0.00	0.23			
Sat Flow, veh/h	0	5611	0	0	7481	1585	3563	0	1585			
Grp Volume(v), veh/h	0	1723	0	0	3143	0	645	0	320			
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	0.0	17.2	0.0	0.0	28.0	0.0	20.5	0.0	23.5			
Cycle Q Clear(g_c), s	0.0	17.2	0.0	0.0	28.0	0.0	20.5	0.0	23.5			
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	3801	0	0	5068		808	0	360			
V/C Ratio(X)	0.00	0.45	0.00	0.00	0.62		0.80	0.00	0.89			
Avail Cap(c_a), veh/h	0	3801	0	0	5068		1440	0	641			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.09	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	9.0	0.0	0.0	10.8	0.0	43.8	0.0	44.9			
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.1	0.0	0.7	0.0	3.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	5.9	0.0	0.0	9.5	0.0	8.8	0.0	9.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.4	0.0	0.0	10.8	0.0	44.5	0.0	48.0			
LnGrp LOS	A	A	A	A	B		D	A	D			
Approach Vol, veh/h	1723			3143			965					
Approach Delay, s/veh	9.4			10.8			45.7					
Approach LOS	A			B			D					
Timer - Assigned Phs	2			6			8					
Phs Duration (G+Y+Rc), s	87.3			87.3			32.7					
Change Period (Y+Rc), s	6.0			6.0			5.5					
Max Green Setting (Gmax), s	60.0			60.0			48.5					
Max Q Clear Time (g_c+I1), s	19.2			30.0			25.5					
Green Ext Time (p_c), s	16.5			27.3			1.7					
Intersection Summary												
HCM 6th Ctrl Delay	16.2											
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.												

Timings
3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  	 	  	 	 	 	 	 	 
Traffic Volume (vph)	189	1776	95	2699	648	70	97	110	96	363
Future Volume (vph)	189	1776	95	2699	648	70	97	110	96	363
Turn Type	Prot	NA	Prot	NA	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4	3	8	2	2		6	6	7
Permitted Phases							2			6
Detector Phase	7	4	3	8	2	2	2	6	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.2	9.6	34.8	36.8	36.8	36.8	15.8	15.8	9.6
Total Split (s)	13.6	64.1	11.7	62.2	38.1	38.1	38.1	16.1	16.1	13.6
Total Split (%)	10.5%	49.3%	9.0%	47.8%	29.3%	29.3%	29.3%	12.4%	12.4%	10.5%
Yellow Time (s)	3.6	5.2	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	4.6	5.8	5.8	5.8	5.8	5.8	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag						Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes						Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None	None
Act Effect Green (s)	8.8	58.3	6.7	56.5	24.9	24.9	24.9	10.2	10.2	24.9
Actuated g/C Ratio	0.07	0.48	0.05	0.46	0.20	0.20	0.20	0.08	0.08	0.20
v/c Ratio	0.77	0.89	0.51	1.22	0.74	0.73	0.24	0.39	0.63	0.59
Control Delay	77.8	35.2	67.6	134.1	53.0	58.6	6.3	58.9	74.1	39.8
Queue Delay	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.8	35.9	67.6	134.1	53.0	58.6	6.3	58.9	74.1	39.8
LOS	E	D	E	F	D	E	A	E	E	D
Approach Delay		39.4		132.0		49.1			49.2	
Approach LOS		D		F		D			D	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 122.6

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.22

Intersection Signal Delay: 82.4

Intersection LOS: F

Intersection Capacity Utilization 94.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Antelope Rd. & Newport Rd.

 Ø2	 Ø6	 Ø3	 Ø4
38.1 s	16.1 s	11.7 s	64.1 s
		 Ø7	 Ø8
		13.6 s	62.2 s

HCM 6th Signalized Intersection Summary

3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	1776	317	95	2699	120	648	70	97	110	96	363
Future Volume (veh/h)	189	1776	317	95	2699	120	648	70	97	110	96	363
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	191	1794	281	96	2726	117	570	191	37	111	97	110
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	2214	344	146	2350	99	684	359	300	287	155	430
Arrive On Green	0.07	0.50	0.50	0.04	0.47	0.47	0.19	0.19	0.19	0.08	0.08	0.08
Sat Flow, veh/h	3456	4458	692	3456	5020	213	3563	1870	1564	3456	1870	2790
Grp Volume(v), veh/h	191	1366	709	96	1836	1007	570	191	37	111	97	110
Grp Sat Flow(s),veh/h/ln	1728	1702	1746	1728	1702	1829	1781	1870	1564	1728	1870	1395
Q Serve(g_s), s	6.5	40.6	41.5	3.3	56.4	56.4	18.5	11.1	2.4	3.7	6.0	4.2
Cycle Q Clear(g_c), s	6.5	40.6	41.5	3.3	56.4	56.4	18.5	11.1	2.4	3.7	6.0	4.2
Prop In Lane	1.00		0.40	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	1691	867	146	1593	856	684	359	300	287	155	430
V/C Ratio(X)	0.78	0.81	0.82	0.66	1.15	1.18	0.83	0.53	0.12	0.39	0.62	0.26
Avail Cap(c_a), veh/h	258	1691	867	204	1593	856	955	501	419	295	160	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.0	25.5	25.7	56.8	32.0	32.0	46.8	43.8	40.3	52.3	53.4	44.9
Incr Delay (d2), s/veh	12.0	3.0	6.2	1.9	76.3	91.3	4.6	1.2	0.2	0.9	7.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	15.6	17.1	1.4	38.2	44.6	8.4	5.1	0.9	1.6	3.1	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.1	28.5	31.9	58.7	108.3	123.4	51.4	45.0	40.5	53.2	60.5	45.2
LnGrp LOS	E	C	C	E	F	F	D	D	D	D	E	D
Approach Vol, veh/h	2266		2939				798		318			
Approach Delay, s/veh	32.8		111.8				49.4		52.7			
Approach LOS	C		F				D		D			
Timer - Assigned Phs	2		3		4		6		7		8	
Phs Duration (G+Y+Rc), s	28.9		9.7		66.0		15.8		13.1		62.6	
Change Period (Y+Rc), s	5.8		4.6		6.2		5.8		4.6		* 6.2	
Max Green Setting (Gmax), s	32.3		7.1		57.9		10.3		9.0		* 56	
Max Q Clear Time (g_c+I1), s	20.5		5.3		43.5		8.0		8.5		58.4	
Green Ext Time (p_c), s	2.6		0.0		10.6		0.3		0.0		0.0	
Intersection Summary												
HCM 6th Ctrl Delay	72.6											
HCM 6th LOS	E											
Notes												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings

Salt Creek TA (JN:15470)

4: Meniffee Rd. & McCall Bl.

09/07/2023

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	128	580	51	822	561	347	360	44	365	392
Future Volume (vph)	128	580	51	822	561	347	360	44	365	392
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4	3	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	7	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	9.6	30.8	30.8	9.6	39.5	39.5	9.6	16.5
Total Split (s)	20.0	41.0	9.8	30.8	30.8	39.0	44.2	44.2	25.0	30.2
Total Split (%)	16.7%	34.2%	8.2%	25.7%	25.7%	32.5%	36.8%	36.8%	20.8%	25.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effect Green (s)	13.2	36.1	5.2	25.8	25.8	30.1	33.4	33.4	20.5	23.8
Actuated g/C Ratio	0.12	0.32	0.05	0.23	0.23	0.26	0.29	0.29	0.18	0.21
v/c Ratio	0.76	0.98	0.40	1.26	0.95	0.91	0.43	0.10	1.41	0.94
Control Delay	73.9	60.3	63.4	163.6	37.3	65.7	34.2	0.3	237.1	62.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.9	60.3	63.4	163.6	37.3	65.7	34.2	0.3	237.1	62.8
LOS	E	E	E	F	D	E	C	A	F	E
Approach Delay		62.0		110.6			46.7			130.9
Approach LOS		E		F			D			F

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 114.5

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.41

Intersection Signal Delay: 91.6

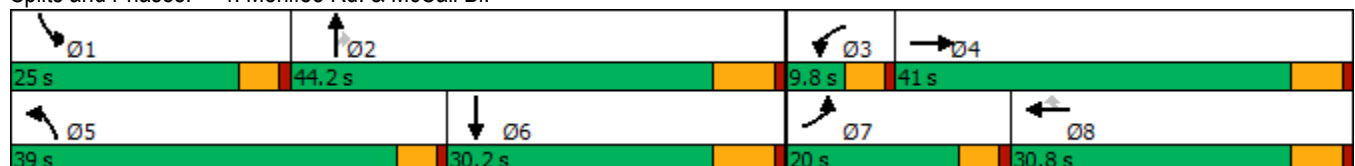
Intersection LOS: F

Intersection Capacity Utilization 84.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 4: Meniffee Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	580	320	51	822	561	347	360	44	365	392	177
Future Volume (veh/h)	128	580	320	51	822	561	347	360	44	365	392	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	156	707	312	62	1002	562	423	439	21	445	478	109
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	759	335	135	893	398	453	915	408	336	552	125
Arrive On Green	0.10	0.32	0.32	0.04	0.25	0.25	0.25	0.26	0.26	0.19	0.19	0.19
Sat Flow, veh/h	1781	2398	1058	3456	3554	1585	1781	3554	1585	1781	2878	652
Grp Volume(v), veh/h	156	524	495	62	1002	562	423	439	21	445	294	293
Grp Sat Flow(s),veh/h/ln	1781	1777	1680	1728	1777	1585	1781	1777	1585	1781	1777	1753
Q Serve(g_s), s	9.3	30.9	30.9	1.9	27.2	27.2	25.1	11.3	1.1	20.4	17.4	17.6
Cycle Q Clear(g_c), s	9.3	30.9	30.9	1.9	27.2	27.2	25.1	11.3	1.1	20.4	17.4	17.6
Prop In Lane	1.00		0.63	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	185	562	532	135	893	398	453	915	408	336	341	336
V/C Ratio(X)	0.84	0.93	0.93	0.46	1.12	1.41	0.93	0.48	0.05	1.33	0.86	0.87
Avail Cap(c_a), veh/h	253	578	546	166	893	398	566	1237	552	336	389	384
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	35.9	35.9	50.9	40.5	40.5	39.5	34.0	30.2	43.9	42.4	42.5
Incr Delay (d2), s/veh	12.8	21.8	22.7	0.9	69.5	199.3	18.5	0.4	0.1	166.0	16.3	17.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	16.0	15.3	0.8	19.9	32.1	12.5	4.6	0.4	23.9	8.7	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.4	57.7	58.6	51.8	110.1	239.8	58.0	34.4	30.3	209.9	58.7	60.1
LnGrp LOS	E	E	E	D	F	F	E	C	C	F	E	E
Approach Vol, veh/h		1175			1626			883			1032	
Approach Delay, s/veh		58.4			152.7			45.6			124.3	
Approach LOS		E			F			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.0	34.4	8.8	40.1	32.1	27.3	15.9	33.0				
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	20.4	37.7	5.2	35.2	34.4	23.7	15.4	25.0				
Max Q Clear Time (g_c+I1), s	22.4	13.3	3.9	32.9	27.1	19.6	11.3	29.2				
Green Ext Time (p_c), s	0.0	2.5	0.0	1.3	0.4	1.2	0.1	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				102.9								
HCM 6th LOS				F								

Timings
5: Meniffee Rd. & Simpson Rd.

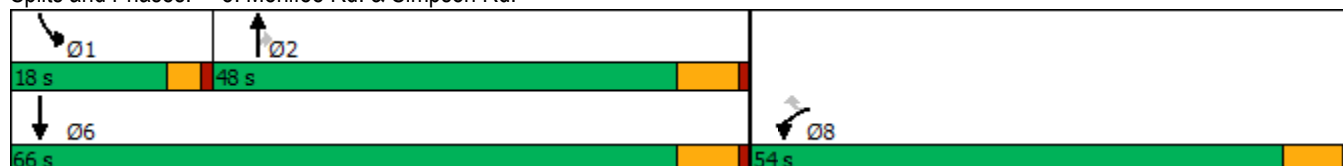
Salt Creek TA (JN:15470)
09/07/2023

	←	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↑↑	↖	↖	↑↑
Traffic Volume (vph)	312	146	394	301	86	470
Future Volume (vph)	312	146	394	301	86	470
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0
Minimum Split (s)	26.5	26.5	27.5	27.5	9.0	16.5
Total Split (s)	54.0	54.0	48.0	48.0	18.0	66.0
Total Split (%)	45.0%	45.0%	40.0%	40.0%	15.0%	55.0%
Yellow Time (s)	5.5	5.5	5.5	5.5	3.0	5.5
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)	6.5	6.5	6.5	6.5	4.0	6.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min
Act Effect Green (s)	18.8	18.8	15.6	15.6	9.6	26.0
Actuated g/C Ratio	0.32	0.32	0.26	0.26	0.16	0.44
v/c Ratio	0.64	0.27	0.48	0.52	0.34	0.35
Control Delay	24.9	4.8	22.2	6.1	29.7	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.9	4.8	22.2	6.1	29.7	11.3
LOS	C	A	C	A	C	B
Approach Delay	18.5		15.2			14.2
Approach LOS	B		B			B

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 58.9
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.64
 Intersection Signal Delay: 15.8
 Intersection LOS: B
 Intersection Capacity Utilization 47.5%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Meniffee Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
5: Menifee Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	312	146	394	301	86	470
Future Volume (veh/h)	312	146	394	301	86	470
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	359	107	453	244	99	540
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	468	417	950	413	143	1561
Arrive On Green	0.26	0.26	0.27	0.27	0.08	0.44
Sat Flow, veh/h	1781	1585	3647	1545	1781	3647
Grp Volume(v), veh/h	359	107	453	244	99	540
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1545	1781	1777
Q Serve(g_s), s	8.1	2.3	4.7	6.0	2.4	4.4
Cycle Q Clear(g_c), s	8.1	2.3	4.7	6.0	2.4	4.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	468	417	950	413	143	1561
V/C Ratio(X)	0.77	0.26	0.48	0.59	0.69	0.35
Avail Cap(c_a), veh/h	1939	1726	3380	1470	572	4847
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	14.8	12.7	13.4	13.9	19.5	8.1
Incr Delay (d2), s/veh	2.7	0.3	0.4	1.3	5.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.6	1.3	1.6	1.0	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.5	13.0	13.8	15.3	25.5	8.2
LnGrp LOS	B	B	B	B	C	A
Approach Vol, veh/h	466		697			639
Approach Delay, s/veh	16.5		14.3			10.9
Approach LOS	B		B			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.5	18.2			25.7	18.0
Change Period (Y+Rc), s	4.0	6.5			6.5	6.5
Max Green Setting (Gmax), s	14.0	41.5			59.5	47.5
Max Q Clear Time (g_c+I1), s	4.4	8.0			6.4	10.1
Green Ext Time (p_c), s	0.1	3.6			3.4	1.4
Intersection Summary						
HCM 6th Ctrl Delay			13.7			
HCM 6th LOS			B			

Timings

Salt Creek TA (JN:15470)

6: Meniffee Rd. & Newport Rd.

09/07/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	333	1511	472	1795	69	263	215	301	134	341	575
Future Volume (vph)	333	1511	472	1795	69	263	215	301	134	341	575
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0
Minimum Split (s)	9.6	34.8	9.6	32.8	32.8	9.6	39.8	9.6	9.6	35.8	9.6
Total Split (s)	24.0	50.6	13.5	40.1	40.1	16.0	41.4	13.5	14.5	39.9	24.0
Total Split (%)	20.0%	42.2%	11.3%	33.4%	33.4%	13.3%	34.5%	11.3%	12.1%	33.3%	20.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.8	3.6	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.8	4.6	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effect Green (s)	19.5	45.0	8.9	34.5	34.5	11.2	19.4	29.6	9.9	18.1	38.8
Actuated g/C Ratio	0.19	0.43	0.09	0.33	0.33	0.11	0.19	0.28	0.10	0.17	0.37
v/c Ratio	1.12	0.87	1.78	1.19	0.12	0.79	0.36	0.64	0.89	0.62	1.02
Control Delay	126.1	32.8	395.1	122.9	0.4	62.5	37.8	24.6	93.4	43.9	69.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	126.1	32.8	395.1	122.9	0.4	62.5	37.8	24.6	93.4	43.9	69.8
LOS	F	C	F	F	A	E	D	C	F	D	E
Approach Delay		48.1		174.2			41.1			64.4	
Approach LOS		D		F			D			E	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 104.2

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.78

Intersection Signal Delay: 97.6

Intersection LOS: F

Intersection Capacity Utilization 91.0%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 6: Meniffee Rd. & Newport Rd.

			
14.5 s	41.4 s	13.5 s	50.6 s
			
16 s	39.9 s	24 s	40.1 s

HCM 6th Signalized Intersection Summary
6: Menifee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Traffic Volume (veh/h)	333	1511	185	472	1795	69	263	215	301	134	341	575
Future Volume (veh/h)	333	1511	185	472	1795	69	263	215	301	134	341	575
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	370	1679	192	524	1994	51	292	239	244	149	379	378
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	307	1850	211	273	1556	476	348	890	521	157	844	640
Arrive On Green	0.17	0.40	0.40	0.08	0.30	0.30	0.10	0.25	0.25	0.09	0.24	0.24
Sat Flow, veh/h	1781	4649	530	3456	5106	1563	3456	3554	1581	1781	3554	1546
Grp Volume(v), veh/h	370	1228	643	524	1994	51	292	239	244	149	379	378
Grp Sat Flow(s),veh/h/ln	1781	1702	1775	1728	1702	1563	1728	1777	1581	1781	1777	1546
Q Serve(g_s), s	19.4	38.3	38.5	8.9	34.3	2.6	9.3	6.1	13.8	9.4	10.2	21.5
Cycle Q Clear(g_c), s	19.4	38.3	38.5	8.9	34.3	2.6	9.3	6.1	13.8	9.4	10.2	21.5
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	307	1355	706	273	1556	476	348	890	521	157	844	640
V/C Ratio(X)	1.21	0.91	0.91	1.92	1.28	0.11	0.84	0.27	0.47	0.95	0.45	0.59
Avail Cap(c_a), veh/h	307	1355	706	273	1556	476	350	1124	625	157	1076	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	31.9	32.0	51.8	39.1	28.1	49.7	33.9	29.9	51.1	36.6	26.0
Incr Delay (d2), s/veh	119.2	9.1	15.9	426.5	131.9	0.1	15.4	0.2	0.7	56.9	0.4	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.4	16.4	18.5	19.9	32.5	1.0	4.7	2.6	5.1	6.5	4.3	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	165.8	41.0	47.9	478.4	171.0	28.2	65.1	34.1	30.6	108.0	37.0	26.9
LnGrp LOS	F	D	D	F	F	C	E	C	C	F	D	C
Approach Vol, veh/h		2241			2569			775			906	
Approach Delay, s/veh		63.6			230.9			44.7			44.5	
Approach LOS		E			F			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.5	34.0	13.5	50.6	15.9	32.5	24.0	40.1				
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8				
Max Green Setting (Gmax), s	9.9	35.6	8.9	44.8	11.4	34.1	19.4	34.3				
Max Q Clear Time (g_c+I1), s	11.4	15.8	10.9	40.5	11.3	23.5	21.4	36.3				
Green Ext Time (p_c), s	0.0	2.1	0.0	3.5	0.0	2.7	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			124.9									
HCM 6th LOS			F									

Timings

Salt Creek TA (JN:15470)

7: Lindenberger Rd. & Simpson Rd.

09/07/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	59	251	33	107	272	54	64	125	56	214	62
Future Volume (vph)	59	251	33	107	272	54	64	125	56	214	62
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	26.2	26.2	9.6	28.2	28.2	9.6	30.2	9.6	26.2	26.2
Total Split (s)	17.0	39.0	39.0	24.0	46.0	46.0	18.0	40.0	17.0	39.0	39.0
Total Split (%)	14.2%	32.5%	32.5%	20.0%	38.3%	38.3%	15.0%	33.3%	14.2%	32.5%	32.5%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effect Green (s)	8.4	18.7	18.7	10.7	20.7	20.7	8.5	17.7	8.2	17.3	17.3
Actuated g/C Ratio	0.12	0.26	0.26	0.15	0.29	0.29	0.12	0.25	0.11	0.24	0.24
v/c Ratio	0.33	0.60	0.07	0.47	0.31	0.12	0.35	0.36	0.32	0.55	0.15
Control Delay	41.4	33.3	0.3	40.6	23.5	1.2	41.4	13.4	41.4	33.9	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.4	33.3	0.3	40.6	23.5	1.2	41.4	13.4	41.4	33.9	0.6
LOS	D	C	A	D	C	A	D	B	D	C	A
Approach Delay		31.6			24.9			18.5		29.0	
Approach LOS		C			C			B		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 71.8

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 25.9

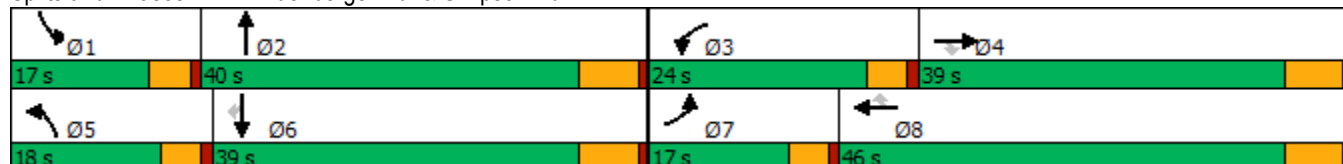
Intersection LOS: C

Intersection Capacity Utilization 52.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Lindenberger Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
7: Lindenberger Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	251	33	107	272	54	64	125	163	56	214	62
Future Volume (veh/h)	59	251	33	107	272	54	64	125	163	56	214	62
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		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	292	17	124	316	33	74	145	128	65	249	39
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	401	340	161	866	386	114	380	308	106	377	319
Arrive On Green	0.06	0.21	0.21	0.09	0.24	0.24	0.06	0.21	0.21	0.06	0.20	0.20
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	1781	1844	1492	1781	1870	1580
Grp Volume(v), veh/h	69	292	17	124	316	33	74	139	134	65	249	39
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1781	1777	1559	1781	1870	1580
Q Serve(g_s), s	1.9	7.3	0.4	3.4	3.7	0.8	2.0	3.4	3.7	1.8	6.2	1.0
Cycle Q Clear(g_c), s	1.9	7.3	0.4	3.4	3.7	0.8	2.0	3.4	3.7	1.8	6.2	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.96	1.00		1.00
Lane Grp Cap(c), veh/h	110	401	340	161	866	386	114	367	322	106	377	319
V/C Ratio(X)	0.63	0.73	0.05	0.77	0.37	0.09	0.65	0.38	0.42	0.62	0.66	0.12
Avail Cap(c_a), veh/h	439	1219	1033	687	2811	1254	474	1194	1047	439	1219	1030
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	18.4	15.7	22.4	15.8	14.7	23.0	17.2	17.3	23.1	18.5	16.4
Incr Delay (d2), s/veh	2.2	2.5	0.1	2.9	0.3	0.1	2.3	0.6	0.9	2.2	2.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.8	0.1	1.3	1.2	0.2	0.8	1.2	1.1	0.7	2.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	20.9	15.7	25.3	16.1	14.8	25.3	17.8	18.2	25.3	20.5	16.6
LnGrp LOS	C	C	B	C	B	B	C	B	B	C	C	B
Approach Vol, veh/h	378				473				347			
Approach Delay, s/veh	21.5				18.4				19.6			
Approach LOS	C				B				B			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.6	16.6	9.2	17.0	7.8	16.3	7.7	18.5				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	12.4	33.8	19.4	32.8	13.4	32.8	12.4	39.8				
Max Q Clear Time (g_c+I1), s	3.8	5.7	5.4	9.3	4.0	8.2	3.9	5.7				
Green Ext Time (p_c), s	0.0	1.4	0.1	1.5	0.0	1.3	0.0	2.0				
Intersection Summary												
HCM 6th Ctrl Delay	20.0											
HCM 6th LOS	B											

Timings
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	309	294	527	380	322	287
Future Volume (vph)	309	294	527	380	322	287
Turn Type	Prot	pm+ov	Prot	NA	NA	Perm
Protected Phases	4	5	5	2	6	
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	6
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	16.2	9.6	9.6	16.2	43.2	43.2
Total Split (s)	52.0	13.0	13.0	68.0	55.0	55.0
Total Split (%)	43.3%	10.8%	10.8%	56.7%	45.8%	45.8%
Yellow Time (s)	5.2	3.6	3.6	5.2	5.2	5.2
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)	6.2	4.6	4.6	6.2	6.2	6.2
Lead/Lag		Lead	Lead		Lag	Lag
Lead-Lag Optimize?		Yes	Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
Act Effect Green (s)	16.2	26.8	8.9	29.6	15.8	15.8
Actuated g/C Ratio	0.28	0.46	0.15	0.50	0.27	0.27
v/c Ratio	0.71	0.23	1.13	0.45	0.38	0.49
Control Delay	29.2	1.9	108.9	11.7	18.5	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.2	1.9	108.9	11.7	18.5	5.1
LOS	C	A	F	B	B	A
Approach Delay	15.9			68.2	12.2	
Approach LOS	B			E	B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 58.9

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.13

Intersection Signal Delay: 37.2

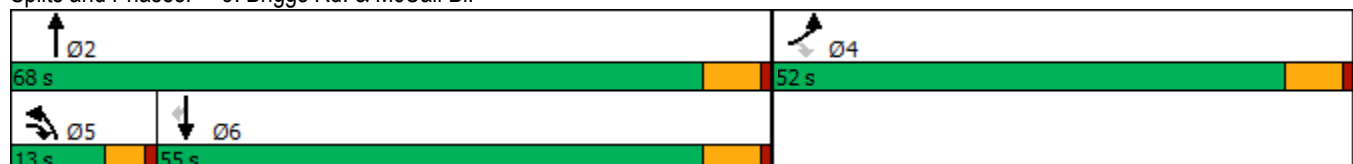
Intersection LOS: D

Intersection Capacity Utilization 55.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 9: Briggs Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	309	294	527	380	322	287
Future Volume (veh/h)	309	294	527	380	322	287
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	343	265	586	422	358	227
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	432	1162	602	936	821	366
Arrive On Green	0.24	0.24	0.17	0.50	0.23	0.23
Sat Flow, veh/h	1781	2790	3456	1870	3647	1585
Grp Volume(v), veh/h	343	265	586	422	358	227
Grp Sat Flow(s),veh/h/ln	1781	1395	1728	1870	1777	1585
Q Serve(g_s), s	8.7	3.0	8.1	7.0	4.2	6.2
Cycle Q Clear(g_c), s	8.7	3.0	8.1	7.0	4.2	6.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	432	1162	602	936	821	366
V/C Ratio(X)	0.79	0.23	0.97	0.45	0.44	0.62
Avail Cap(c_a), veh/h	1692	3135	602	2397	3596	1604
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	17.1	9.1	19.8	7.8	15.9	16.6
Incr Delay (d2), s/veh	1.3	0.0	30.0	0.3	0.4	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	5.1	1.7	1.3	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.4	9.1	49.8	8.1	16.2	18.4
LnGrp LOS	B	A	D	A	B	B
Approach Vol, veh/h	608			1008	585	
Approach Delay, s/veh	14.4			32.4	17.1	
Approach LOS	B			C	B	
Timer - Assigned Phs	2			4	5	6
Phs Duration (G+Y+Rc), s	30.3			17.9	13.0	17.3
Change Period (Y+Rc), s	6.2			6.2	4.6	6.2
Max Green Setting (Gmax), s	61.8			45.8	8.4	48.8
Max Q Clear Time (g_c+I1), s	9.0			10.7	10.1	8.2
Green Ext Time (p_c), s	2.4			1.0	0.0	2.9
Intersection Summary						
HCM 6th Ctrl Delay			23.3			
HCM 6th LOS			C			

Intersection

Intersection Delay, s/veh 36.7

Intersection LOS F

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	197	295	269	685	530	152
Future Vol, veh/h	197	295	269	685	530	152
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	210	314	286	729	564	162
Number of Lanes	1	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left SB			WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay	26	423.6	127.2
HCM LOS	D	F	F

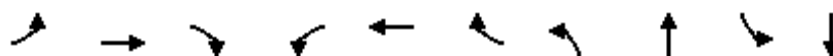
Lane	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	28%	0%	0%
Vol Right, %	0%	0%	72%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	197	295	954	530	152
LT Vol	197	0	0	530	0
Through Vol	0	295	269	0	0
RT Vol	0	0	685	0	152
Lane Flow Rate	210	314	1015	564	162
Geometry Grp	7	7	4	7	7
Degree of Util (X)	0.476	0.67	1.885	1.25	0.305
Departure Headway (Hd)	9.932	9.403	7.333	9.226	7.972
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	365	386	507	400	454
Service Time	7.632	7.103	5.333	6.926	5.672
HCM Lane V/C Ratio	0.575	0.813	2.002	1.41	0.357
HCM Control Delay	21.3	29.2	423.6	159.6	14.1
HCM Lane LOS	C	D	F	F	B
HCM 95th-tile Q	2.5	4.7	60.1	20.9	1.3

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Vol, veh/h	0	591	235	301	797	0	157	38	139	0	96	0
Future Vol, veh/h	0	591	235	301	797	0	157	38	139	0	96	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	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	-	-	205	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	695	276	354	938	0	185	45	164	0	113	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	938	0	0	971	0	0	2398	2341	695	2584	2617	938
Stage 1	-	-	-	-	-	-	695	695	-	1646	1646	-
Stage 2	-	-	-	-	-	-	1703	1646	-	938	971	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	730	-	-	710	-	-	~ 23	~ 36	442	17	~ 24	321
Stage 1	-	-	-	-	-	-	433	444	-	125	157	-
Stage 2	-	-	-	-	-	-	~ 116	157	-	317	331	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	730	-	-	710	-	-	-	0	442	-	0	321
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-	-	0	-
Stage 1	-	-	-	-	-	-	433	444	-	125	0	-
Stage 2	-	-	-	-	-	-	-	0	-	180	331	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			4.1								
HCM LOS							-			-		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	-	730	-	-	710	-	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.499	-	-	-				
HCM Control Delay (s)	-	0	-	-	15	0	-	-				
HCM Lane LOS	-	A	-	-	C	A	-	-				
HCM 95th %tile Q(veh)	-	0	-	-	2.8	-	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	276	200	92	207	258	33	42	585	25	1181
Future Volume (vph)	276	200	92	207	258	33	42	585	25	1181
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.2	29.2	9.6	29.2	29.2	9.6	29.2	9.6	27.2
Total Split (s)	28.0	32.0	32.0	28.0	32.0	32.0	12.0	50.0	10.0	48.0
Total Split (%)	23.3%	26.7%	26.7%	23.3%	26.7%	26.7%	10.0%	41.7%	8.3%	40.0%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min
Act Effct Green (s)	20.5	23.5	23.5	17.2	20.2	20.2	6.6	43.7	5.3	42.6
Actuated g/C Ratio	0.19	0.22	0.22	0.16	0.19	0.19	0.06	0.41	0.05	0.40
v/c Ratio	0.84	0.50	0.22	0.75	0.76	0.09	0.40	0.46	0.30	1.05
Control Delay	65.7	43.2	6.2	61.3	57.0	0.5	63.8	26.2	63.2	71.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.7	43.2	6.2	61.3	57.0	0.5	63.8	26.2	63.2	71.8
LOS	E	D	A	E	E	A	E	C	E	E
Approach Delay		48.1			55.0			28.6		71.7
Approach LOS		D			E			C		E

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 107.1

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 55.6

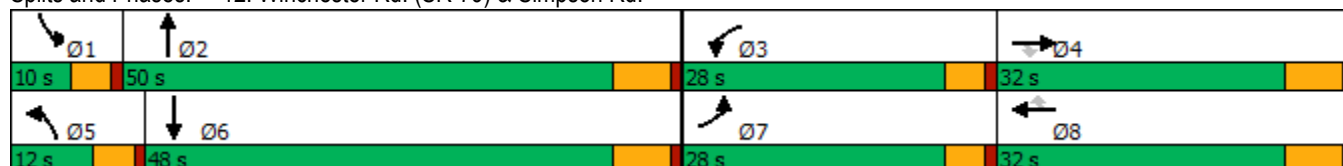
Intersection LOS: E

Intersection Capacity Utilization 83.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 12: Winchester Rd. (SR-79) & Simpson Rd.



Opening Year (2029) Without Project Conditions - AM Peak Hour
Urban Crossroads, Inc.

Synchro 11 Report
Page 19

HCM 6th Signalized Intersection Summary
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	276	200	92	207	258	33	42	585	50	25	1181	223
Future Volume (veh/h)	276	200	92	207	258	33	42	585	50	25	1181	223
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	285	206	61	213	266	21	43	603	39	26	1218	160
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	396	333	246	321	271	61	1403	91	45	1279	167
Arrive On Green	0.18	0.21	0.21	0.14	0.17	0.17	0.03	0.41	0.41	0.03	0.41	0.41
Sat Flow, veh/h	1781	1870	1576	1781	1870	1577	1781	3388	219	1781	3157	413
Grp Volume(v), veh/h	285	206	61	213	266	21	43	316	326	26	683	695
Grp Sat Flow(s),veh/h/ln	1781	1870	1576	1781	1870	1577	1781	1777	1830	1781	1777	1793
Q Serve(g_s), s	16.0	10.0	3.3	12.0	14.1	1.1	2.4	13.0	13.0	1.5	38.1	38.5
Cycle Q Clear(g_c), s	16.0	10.0	3.3	12.0	14.1	1.1	2.4	13.0	13.0	1.5	38.1	38.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		0.23
Lane Grp Cap(c), veh/h	317	396	333	246	321	271	61	736	758	45	720	726
V/C Ratio(X)	0.90	0.52	0.18	0.87	0.83	0.08	0.70	0.43	0.43	0.57	0.95	0.96
Avail Cap(c_a), veh/h	407	471	397	407	471	397	129	760	783	94	725	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.2	35.8	33.1	43.2	41.0	35.6	48.9	21.4	21.4	49.3	29.4	29.6
Incr Delay (d2), s/veh	16.6	1.1	0.3	5.3	7.8	0.1	5.3	0.4	0.4	4.2	21.8	23.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	4.4	1.2	5.4	6.8	0.4	1.1	5.0	5.2	0.7	19.0	19.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.8	36.8	33.4	48.5	48.8	35.7	54.2	21.8	21.8	53.5	51.3	52.6
LnGrp LOS	E	D	C	D	D	D	D	C	C	D	D	D
Approach Vol, veh/h	552			500			685			1404		
Approach Delay, s/veh	47.3			48.1			23.8			52.0		
Approach LOS	D			D			C			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.2	48.6	18.7	27.9	8.1	47.7	22.8	23.8				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	5.4	43.8	23.4	25.8	7.4	41.8	23.4	25.8				
Max Q Clear Time (g_c+I1), s	3.5	15.0	14.0	12.0	4.4	40.5	18.0	16.1				
Green Ext Time (p_c), s	0.0	3.6	0.2	0.9	0.0	0.9	0.2	0.9				
Intersection Summary												
HCM 6th Ctrl Delay	44.4											
HCM 6th LOS	D											

Timings
1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

	→	↘	←	↙	↓	↖
Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations	↑↑↑	↗	↑↑↑	↘	↔	↗
Traffic Volume (vph)	3012	614	2842	780	0	1049
Future Volume (vph)	3012	614	2842	780	0	1049
Turn Type	NA	Free	NA	Split	NA	Perm
Protected Phases	2		6	4	4	
Permitted Phases		Free				4
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	30.0		33.0	20.0	20.0	20.0
Total Split (s)	68.0		68.0	52.0	52.0	52.0
Total Split (%)	56.7%		56.7%	43.3%	43.3%	43.3%
Yellow Time (s)	5.0		5.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min		C-Min	None	None	None
Act Effect Green (s)	63.3	120.0	63.3	45.2	45.2	45.2
Actuated g/C Ratio	0.53	1.00	0.53	0.38	0.38	0.38
v/c Ratio	0.78	0.34	0.98	0.93	0.86	0.83
Control Delay	24.9	0.5	41.7	57.1	45.6	43.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.9	0.5	41.7	57.1	45.6	43.7
LOS	C	A	D	E	D	D
Approach Delay	20.7		41.7		49.0	
Approach LOS	C		D		D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 68 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 34.1

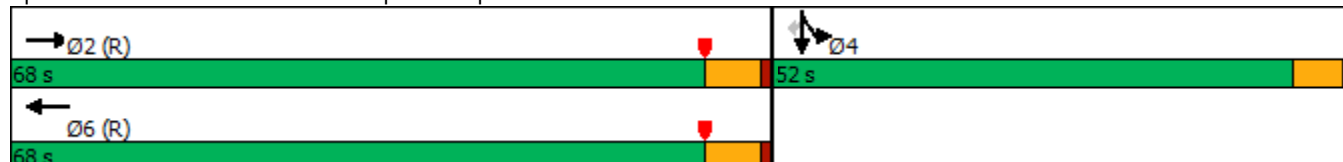
Intersection LOS: C

Intersection Capacity Utilization 107.8%

ICU Level of Service G

Analysis Period (min) 15

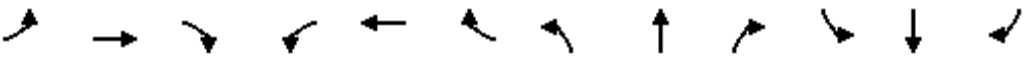
Splits and Phases: 1: I-215 SB Ramps & Newport Rd.



HCM 6th Signalized Intersection Summary
1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗		↑↑↑					↗	↕	↗
Traffic Volume (veh/h)	0	3012	614	0	2842	0	0	0	0	780	0	1049
Future Volume (veh/h)	0	3012	614	0	2842	0	0	0	0	780	0	1049
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	3073	0	0	2900	0				1132	0	625
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	3865		0	2899	0				1381	0	614
Arrive On Green	0.00	0.52	0.00	0.00	0.52	0.00				0.39	0.00	0.39
Sat Flow, veh/h	0	7481	1585	0	5611	0				3563	0	1585
Grp Volume(v), veh/h	0	3073	0	0	2900	0				1132	0	625
Grp Sat Flow(s),veh/h/ln	0	1870	1585	0	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	40.4	0.0	0.0	62.0	0.0				34.2	0.0	46.5
Cycle Q Clear(g_c), s	0.0	40.4	0.0	0.0	62.0	0.0				34.2	0.0	46.5
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3865		0	2899	0				1381	0	614
V/C Ratio(X)	0.00	0.79		0.00	1.00	0.00				0.82	0.00	1.02
Avail Cap(c_a), veh/h	0	3865		0	2899	0				1381	0	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.8	0.0	0.0	29.0	0.0				33.0	0.0	36.8
Incr Delay (d2), s/veh	0.0	1.8	0.0	0.0	16.8	0.0				3.8	0.0	40.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	16.5	0.0	0.0	29.1	0.0				14.7	0.0	23.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.6	0.0	0.0	45.8	0.0				36.8	0.0	77.5
LnGrp LOS	A	C		A	F	A				D	A	F
Approach Vol, veh/h		3073			2900						1757	
Approach Delay, s/veh		25.6			45.8						51.3	
Approach LOS		C			D						D	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		68.0		52.0		68.0						
Change Period (Y+Rc), s		6.0		5.5		6.0						
Max Green Setting (Gmax), s		62.0		46.5		62.0						
Max Q Clear Time (g_c+I1), s		42.4		48.5		64.0						
Green Ext Time (p_c), s		18.2		0.0		0.0						
Intersection Summary												
HCM 6th Ctrl Delay			39.0									
HCM 6th LOS			D									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Timings
2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

	→	←	↖	↗	↑	↘
Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations	↑↑↑	↑↑↑	↖	↗	↔	↖
Traffic Volume (vph)	2989	2804	595	768	0	1123
Future Volume (vph)	2989	2804	595	768	0	1123
Turn Type	NA	NA	Free	Split	NA	Perm
Protected Phases	2	6		8	8	
Permitted Phases			Free			8
Detector Phase	2	6		8	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	33.0	33.0		22.0	22.0	22.0
Total Split (s)	67.0	67.0		53.0	53.0	53.0
Total Split (%)	55.8%	55.8%		44.2%	44.2%	44.2%
Yellow Time (s)	5.0	5.0		4.5	4.5	4.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min	C-Min		None	None	None
Act Effect Green (s)	61.0	61.0	120.0	47.5	47.5	47.5
Actuated g/C Ratio	0.51	0.51	1.00	0.40	0.40	0.40
v/c Ratio	1.10	0.77	0.40	0.93	1.09	0.84
Control Delay	79.1	25.6	0.8	55.9	96.6	43.0
Queue Delay	0.0	0.7	0.0	0.0	0.0	0.0
Total Delay	79.1	26.3	0.8	55.9	96.6	43.0
LOS	E	C	A	E	F	D
Approach Delay	79.1	21.8			65.2	
Approach LOS	E	C			E	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 52.4

Intersection LOS: D

Intersection Capacity Utilization 103.2%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 2: I-215 NB Ramps & Newport Rd.

→ Ø2 (R)	67 s	↖ Ø8	53 s
← Ø6 (R)	67 s		

HCM 6th Signalized Intersection Summary 2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑			↑↑↑↑	↗	↖	↔	↗			
Traffic Volume (veh/h)	0	2989	0	0	2804	595	768	0	1123	0	0	0
Future Volume (veh/h)	0	2989	0	0	2804	595	768	0	1123	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	0	3114	0	0	2921	0	1026	0	485			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	0	2	0	0	2	2	2	2	2			
Cap, veh/h	0	3208	0	0	4277		1184	0	527			
Arrive On Green	0.00	0.57	0.00	0.00	0.57	0.00	0.33	0.00	0.33			
Sat Flow, veh/h	0	5611	0	0	7481	1585	3563	0	1585			
Grp Volume(v), veh/h	0	3114	0	0	2921	0	1026	0	485			
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	0.0	64.1	0.0	0.0	32.9	0.0	32.4	0.0	35.3			
Cycle Q Clear(g_c), s	0.0	64.1	0.0	0.0	32.9	0.0	32.4	0.0	35.3			
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	3208	0	0	4277		1184	0	527			
V/C Ratio(X)	0.00	0.97	0.00	0.00	0.68		0.87	0.00	0.92			
Avail Cap(c_a), veh/h	0	3208	0	0	4277		1410	0	627			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.09	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	24.7	0.0	0.0	18.1	0.0	37.5	0.0	38.5			
Incr Delay (d2), s/veh	0.0	10.4	0.0	0.0	0.1	0.0	4.6	0.0	15.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	27.5	0.0	0.0	12.6	0.0	14.2	0.0	15.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	35.1	0.0	0.0	18.1	0.0	42.1	0.0	54.4			
LnGrp LOS	A	D	A	A	B		D	A	D			
Approach Vol, veh/h	3114			2921			1511					
Approach Delay, s/veh	35.1			18.1			46.1					
Approach LOS	D			B			D					
Timer - Assigned Phs	2			6			8					
Phs Duration (G+Y+Rc), s	74.6			74.6			45.4					
Change Period (Y+Rc), s	6.0			6.0			5.5					
Max Green Setting (Gmax), s	61.0			61.0			47.5					
Max Q Clear Time (g_c+I1), s	66.1			34.9			37.3					
Green Ext Time (p_c), s	0.0			23.1			2.6					
Intersection Summary												
HCM 6th Ctrl Delay	30.7											
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.												

Timings
3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	521	2863	150	2264	697	180	207	158	133	439
Future Volume (vph)	521	2863	150	2264	697	180	207	158	133	439
Turn Type	Prot	NA	Prot	NA	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4	3	8	2	2		6	6	7
Permitted Phases							2			6
Detector Phase	7	4	3	8	2	2	2	6	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.2	9.6	34.8	36.8	36.8	36.8	15.8	15.8	9.6
Total Split (s)	23.0	66.0	10.4	53.4	37.4	37.4	37.4	16.2	16.2	23.0
Total Split (%)	17.7%	50.8%	8.0%	41.1%	28.8%	28.8%	28.8%	12.5%	12.5%	17.7%
Yellow Time (s)	3.6	5.2	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	4.6	5.8	5.8	5.8	5.8	5.8	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag						Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes						Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None	None
Act Effect Green (s)	18.4	59.8	5.8	47.6	28.8	28.8	28.8	10.4	10.4	30.0
Actuated g/C Ratio	0.14	0.47	0.05	0.37	0.23	0.23	0.23	0.08	0.08	0.24
v/c Ratio	1.07	1.46	0.98	1.32	0.81	0.81	0.45	0.57	0.89	0.63
Control Delay	112.5	238.0	127.6	183.3	56.2	64.1	15.8	65.7	107.6	38.6
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.5	238.0	127.6	183.3	56.2	64.1	15.8	65.7	107.6	38.6
LOS	F	F	F	F	E	E	B	E	F	D
Approach Delay		221.2		180.1		50.7			57.1	
Approach LOS		F		F		D			E	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 127.3

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.46

Intersection Signal Delay: 171.6

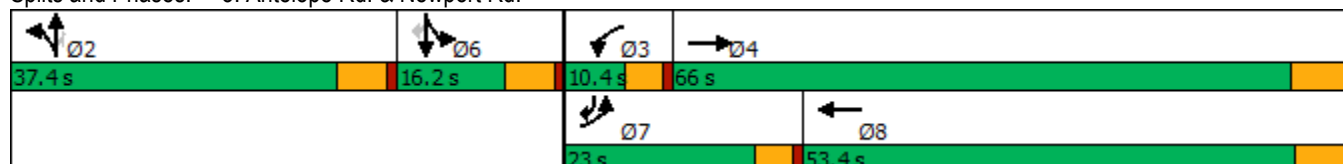
Intersection LOS: F

Intersection Capacity Utilization 115.9%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Antelope Rd. & Newport Rd.



HCM 6th Signalized Intersection Summary

3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	521	2863	496	150	2264	184	697	180	207	158	133	439
Future Volume (veh/h)	521	2863	496	150	2264	184	697	180	207	158	133	439
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	532	2921	384	153	2310	185	654	264	132	161	136	113
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	504	2186	274	159	1820	144	773	406	341	285	154	632
Arrive On Green	0.15	0.48	0.48	0.05	0.38	0.38	0.22	0.22	0.22	0.08	0.08	0.08
Sat Flow, veh/h	3456	4583	575	3456	4824	381	3563	1870	1570	3456	1870	2739
Grp Volume(v), veh/h	532	2133	1172	153	1621	874	654	264	132	161	136	113
Grp Sat Flow(s),veh/h/ln	1728	1702	1754	1728	1702	1801	1781	1870	1570	1728	1870	1369
Q Serve(g_s), s	18.4	60.2	60.2	5.6	47.6	47.6	22.2	16.2	9.1	5.7	9.1	4.2
Cycle Q Clear(g_c), s	18.4	60.2	60.2	5.6	47.6	47.6	22.2	16.2	9.1	5.7	9.1	4.2
Prop In Lane	1.00		0.33	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	504	1624	837	159	1284	679	773	406	341	285	154	632
V/C Ratio(X)	1.06	1.31	1.40	0.96	1.26	1.29	0.85	0.65	0.39	0.57	0.88	0.18
Avail Cap(c_a), veh/h	504	1624	837	159	1284	679	892	468	393	285	154	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	33.0	33.0	60.1	39.3	39.3	47.4	45.0	42.2	55.7	57.3	39.2
Incr Delay (d2), s/veh	55.6	145.6	187.5	59.9	124.5	139.8	6.8	2.6	0.7	2.6	40.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.6	55.4	66.8	3.7	41.0	46.3	10.3	7.6	3.5	2.5	5.9	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	109.5	178.6	220.5	120.0	163.8	179.1	54.1	47.6	42.9	58.3	97.8	39.3
LnGrp LOS	F	F	F	F	F	F	D	D	D	E	F	D
Approach Vol, veh/h	3837			2648			1050			410		
Approach Delay, s/veh	181.8			166.3			51.1			66.2		
Approach LOS	F			F			D			E		
Timer - Assigned Phs	2			3			4			6		
Phs Duration (G+Y+Rc), s	33.2			10.4			66.4			16.2		
Change Period (Y+Rc), s	5.8			4.6			6.2			5.8		
Max Green Setting (Gmax), s	31.6			5.8			59.8			10.4		
Max Q Clear Time (g_c+I1), s	24.2			7.6			62.2			11.1		
Green Ext Time (p_c), s	2.7			0.0			0.0			0.0		

Intersection Summary

HCM 6th Ctrl Delay 153.4

HCM 6th LOS F

Notes

User approved volume balancing among the lanes for turning movement.

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

Timings

4: Menifee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	220	809	28	584	357	179	379	55	498	335
Future Volume (vph)	220	809	28	584	357	179	379	55	498	335
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4	3	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	7	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	9.6	30.8	30.8	9.6	39.5	39.5	9.6	16.5
Total Split (s)	30.0	51.4	9.6	31.0	31.0	26.0	42.0	42.0	17.0	33.0
Total Split (%)	25.0%	42.8%	8.0%	25.8%	25.8%	21.7%	35.0%	35.0%	14.2%	27.5%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effect Green (s)	18.7	43.5	5.2	25.2	25.2	16.0	24.6	24.6	12.8	21.4
Actuated g/C Ratio	0.18	0.42	0.05	0.24	0.24	0.15	0.24	0.24	0.12	0.21
v/c Ratio	0.78	0.80	0.19	0.77	0.62	0.75	0.51	0.13	2.58	0.76
Control Delay	59.7	32.6	56.2	45.5	11.3	61.2	36.5	0.5	748.0	42.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.7	32.6	56.2	45.5	11.3	61.2	36.5	0.5	748.0	42.8
LOS	E	C	E	D	B	E	D	A	F	D
Approach Delay		37.4		33.2			40.4			393.8
Approach LOS		D		C			D			F

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103.5

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 2.58

Intersection Signal Delay: 129.9

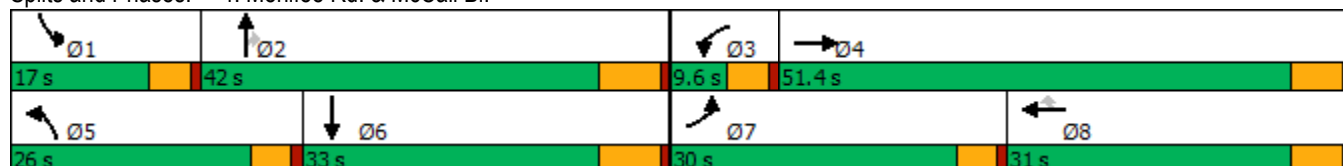
Intersection LOS: F

Intersection Capacity Utilization 91.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 4: Menifee Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	809	218	28	584	357	179	379	55	498	335	167
Future Volume (veh/h)	220	809	218	28	584	357	179	379	55	498	335	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	250	919	201	32	664	371	203	431	32	566	381	73
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	1164	254	107	959	427	241	625	277	255	548	104
Arrive On Green	0.16	0.40	0.40	0.03	0.27	0.27	0.14	0.18	0.18	0.14	0.18	0.18
Sat Flow, veh/h	1781	2900	634	3456	3554	1582	1781	3554	1574	1781	2980	566
Grp Volume(v), veh/h	250	563	557	32	664	371	203	431	32	566	226	228
Grp Sat Flow(s),veh/h/ln	1781	1777	1756	1728	1777	1582	1781	1777	1574	1781	1777	1769
Q Serve(g_s), s	11.8	24.0	24.1	0.8	14.5	19.4	9.6	9.8	1.5	12.4	10.3	10.5
Cycle Q Clear(g_c), s	11.8	24.0	24.1	0.8	14.5	19.4	9.6	9.8	1.5	12.4	10.3	10.5
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	289	713	705	107	959	427	241	625	277	255	327	325
V/C Ratio(X)	0.86	0.79	0.79	0.30	0.69	0.87	0.84	0.69	0.12	2.22	0.69	0.70
Avail Cap(c_a), veh/h	523	936	926	200	1035	461	441	1458	646	255	544	542
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	22.7	22.7	41.0	28.4	30.1	36.5	33.4	30.0	37.1	33.0	33.1
Incr Delay (d2), s/veh	3.0	3.4	3.5	0.6	1.8	15.4	3.1	1.4	0.2	560.3	2.6	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	9.6	9.5	0.3	5.9	8.6	4.0	4.0	0.5	44.7	4.3	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.3	26.1	26.2	41.6	30.2	45.6	39.6	34.8	30.2	597.3	35.6	35.8
LnGrp LOS	D	C	C	D	C	D	D	C	C	F	D	D
Approach Vol, veh/h		1370			1067			666			1020	
Approach Delay, s/veh		28.4			35.9			36.0			347.4	
Approach LOS		C			D			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	21.7	7.3	40.5	16.3	22.4	18.7	29.1				
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	12.4	35.5	5.0	45.6	21.4	26.5	25.4	25.2				
Max Q Clear Time (g_c+I1), s	14.4	11.8	2.8	26.1	11.6	12.5	13.8	21.4				
Green Ext Time (p_c), s	0.0	2.5	0.0	6.8	0.2	1.9	0.3	1.9				
Intersection Summary												
HCM 6th Ctrl Delay			110.5									
HCM 6th LOS			F									

Timings

Salt Creek TA (JN:15470)

5: Meniffee Rd. & Simpson Rd.

09/07/2023

	←	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↑↑	↖	↖	↑↑
Traffic Volume (vph)	159	180	537	161	242	460
Future Volume (vph)	159	180	537	161	242	460
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0
Minimum Split (s)	26.5	26.5	27.5	27.5	9.0	16.5
Total Split (s)	39.0	39.0	43.0	43.0	38.0	81.0
Total Split (%)	32.5%	32.5%	35.8%	35.8%	31.7%	67.5%
Yellow Time (s)	5.5	5.5	5.5	5.5	3.0	5.5
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)	6.5	6.5	6.5	6.5	4.0	6.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min
Act Effect Green (s)	13.0	13.0	17.0	17.0	15.1	36.3
Actuated g/C Ratio	0.21	0.21	0.27	0.27	0.24	0.58
v/c Ratio	0.45	0.39	0.58	0.30	0.59	0.23
Control Delay	28.5	7.2	23.4	5.7	28.7	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.5	7.2	23.4	5.7	28.7	6.8
LOS	C	A	C	A	C	A
Approach Delay	17.2		19.3			14.3
Approach LOS	B		B			B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 62.9

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 16.9

Intersection LOS: B

Intersection Capacity Utilization 51.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Meniffee Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
5: Menifee Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	159	180	537	161	242	460
Future Volume (veh/h)	159	180	537	161	242	460
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	164	96	554	124	249	474
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	363	323	914	408	324	1858
Arrive On Green	0.20	0.20	0.26	0.26	0.18	0.52
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	164	96	554	124	249	474
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	3.8	2.4	6.5	3.0	6.3	3.5
Cycle Q Clear(g_c), s	3.8	2.4	6.5	3.0	6.3	3.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	363	323	914	408	324	1858
V/C Ratio(X)	0.45	0.30	0.61	0.30	0.77	0.26
Avail Cap(c_a), veh/h	1218	1084	2729	1217	1274	5569
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	16.6	16.0	15.5	14.2	18.5	6.2
Incr Delay (d2), s/veh	0.9	0.5	0.7	0.4	3.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.7	2.0	0.8	2.3	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.5	16.6	16.2	14.6	22.4	6.3
LnGrp LOS	B	B	B	B	C	A
Approach Vol, veh/h	260		678			723
Approach Delay, s/veh	17.1		15.9			11.8
Approach LOS	B		B			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.6	18.7			31.4	16.2
Change Period (Y+Rc), s	4.0	6.5			6.5	6.5
Max Green Setting (Gmax), s	34.0	36.5			74.5	32.5
Max Q Clear Time (g_c+I1), s	8.3	8.5			5.5	5.8
Green Ext Time (p_c), s	0.7	3.7			2.9	0.7
Intersection Summary						
HCM 6th Ctrl Delay			14.3			
HCM 6th LOS			B			

Timings

Salt Creek TA (JN:15470)

6: Meniffee Rd. & Newport Rd.

09/07/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	532	2156	416	1646	75	313	331	535	106	231	459
Future Volume (vph)	532	2156	416	1646	75	313	331	535	106	231	459
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0
Minimum Split (s)	9.6	34.8	9.6	32.8	32.8	9.6	39.8	9.6	9.6	35.8	9.6
Total Split (s)	31.0	55.7	11.3	36.0	36.0	14.8	40.8	11.3	12.2	38.2	31.0
Total Split (%)	25.8%	46.4%	9.4%	30.0%	30.0%	12.3%	34.0%	9.4%	10.2%	31.8%	25.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.8	3.6	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.8	4.6	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effect Green (s)	26.5	50.2	6.7	30.4	30.4	10.3	18.2	26.1	7.6	15.6	43.3
Actuated g/C Ratio	0.26	0.48	0.06	0.29	0.29	0.10	0.18	0.25	0.07	0.15	0.42
v/c Ratio	1.29	1.10	2.05	1.21	0.15	1.01	0.59	1.24	0.89	0.48	0.72
Control Delay	181.0	78.5	515.5	136.4	0.5	100.1	42.7	151.0	104.3	42.6	25.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	181.0	78.5	515.5	136.4	0.5	100.1	42.7	151.0	104.3	42.6	25.9
LOS	F	E	F	F	A	F	D	F	F	D	C
Approach Delay		96.9		205.5			107.1			41.1	
Approach LOS		F		F			F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103.6

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 2.05

Intersection Signal Delay: 125.2

Intersection LOS: F

Intersection Capacity Utilization 99.4%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 6: Meniffee Rd. & Newport Rd.

			
12.2 s	40.8 s	11.3 s	55.7 s
			
14.8 s	38.2 s	31 s	36 s

HCM 6th Signalized Intersection Summary
6: Menifee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Traffic Volume (veh/h)	532	2156	271	416	1646	75	313	331	535	106	231	459
Future Volume (veh/h)	532	2156	271	416	1646	75	313	331	535	106	231	459
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	585	2369	286	457	1809	47	344	364	518	116	254	318
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	1926	226	193	1285	393	294	1036	543	113	959	776
Arrive On Green	0.22	0.42	0.42	0.06	0.25	0.25	0.08	0.29	0.29	0.06	0.27	0.27
Sat Flow, veh/h	1781	4631	545	3456	5106	1563	3456	3554	1557	1781	3554	1583
Grp Volume(v), veh/h	585	1724	931	457	1809	47	344	364	518	116	254	318
Grp Sat Flow(s),veh/h/ln	1781	1702	1772	1728	1702	1563	1728	1777	1557	1781	1777	1583
Q Serve(g_s), s	26.4	49.9	49.9	6.7	30.2	2.8	10.2	9.7	35.0	7.6	6.7	15.4
Cycle Q Clear(g_c), s	26.4	49.9	49.9	6.7	30.2	2.8	10.2	9.7	35.0	7.6	6.7	15.4
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	1416	737	193	1285	393	294	1036	543	113	959	776
V/C Ratio(X)	1.49	1.22	1.26	2.37	1.41	0.12	1.17	0.35	0.95	1.03	0.26	0.41
Avail Cap(c_a), veh/h	392	1416	737	193	1285	393	294	1036	543	113	959	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.8	35.1	35.1	56.7	44.9	34.6	54.9	33.5	38.3	56.2	34.4	19.5
Incr Delay (d2), s/veh	234.9	104.9	129.1	631.6	188.2	0.1	107.1	0.2	27.6	92.5	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	36.8	39.9	46.5	19.8	34.6	1.0	8.7	4.1	18.3	6.2	2.9	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	281.7	139.9	164.1	688.2	233.1	34.8	162.0	33.7	65.9	148.7	34.6	19.9
LnGrp LOS	F	F	F	F	F	C	F	C	E	F	C	B
Approach Vol, veh/h		3240			2313			1226			688	
Approach Delay, s/veh		172.5			319.0			83.3			47.0	
Approach LOS		F			F			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.2	40.8	11.3	55.7	14.8	38.2	31.0	36.0				
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8				
Max Green Setting (Gmax), s	7.6	35.0	6.7	49.9	10.2	32.4	26.4	30.2				
Max Q Clear Time (g_c+I1), s	9.6	37.0	8.7	51.9	12.2	17.4	28.4	32.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			191.7									
HCM 6th LOS			F									

Timings

Salt Creek TA (JN:15470)

7: Lindenberger Rd. & Simpson Rd.

09/07/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	55	267	37	62	298	35	39	128	18	97	48
Future Volume (vph)	55	267	37	62	298	35	39	128	18	97	48
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	26.2	26.2	9.6	28.2	28.2	9.6	30.2	9.6	26.2	26.2
Total Split (s)	20.0	44.0	44.0	21.0	45.0	45.0	17.0	40.0	15.0	38.0	38.0
Total Split (%)	16.7%	36.7%	36.7%	17.5%	37.5%	37.5%	14.2%	33.3%	12.5%	31.7%	31.7%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effect Green (s)	7.5	16.8	16.8	7.8	19.8	19.8	6.9	17.5	6.2	13.0	13.0
Actuated g/C Ratio	0.13	0.28	0.28	0.13	0.33	0.33	0.12	0.30	0.10	0.22	0.22
v/c Ratio	0.28	0.58	0.08	0.31	0.29	0.07	0.22	0.26	0.11	0.27	0.13
Control Delay	33.4	26.4	0.3	33.3	18.8	0.2	33.7	11.5	34.6	26.4	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.4	26.4	0.3	33.3	18.8	0.2	33.7	11.5	34.6	26.4	0.8
LOS	C	C	A	C	B	A	C	B	C	C	A
Approach Delay		24.8			19.5			14.7		19.8	
Approach LOS		C			B			B		B	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 59.3

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 20.0

Intersection LOS: C

Intersection Capacity Utilization 47.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Lindenberger Rd. & Simpson Rd.

			
Ø1	Ø2	Ø3	Ø4
15 s	40 s	21 s	44 s
			
Ø5	Ø6	Ø7	Ø8
17 s	38 s	20 s	45 s

HCM 6th Signalized Intersection Summary
7: Lindenberger Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	267	37	62	298	35	39	128	106	18	97	48
Future Volume (veh/h)	55	267	37	62	298	35	39	128	106	18	97	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	307	28	71	343	33	45	147	79	21	111	32
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	426	361	113	826	368	84	531	268	45	399	332
Arrive On Green	0.06	0.23	0.23	0.06	0.23	0.23	0.05	0.23	0.23	0.03	0.21	0.21
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	1781	2262	1143	1781	1870	1556
Grp Volume(v), veh/h	63	307	28	71	343	33	45	113	113	21	111	32
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1781	1777	1628	1781	1870	1556
Q Serve(g_s), s	1.7	7.3	0.7	1.9	4.0	0.8	1.2	2.5	2.7	0.6	2.4	0.8
Cycle Q Clear(g_c), s	1.7	7.3	0.7	1.9	4.0	0.8	1.2	2.5	2.7	0.6	2.4	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	105	426	361	113	826	368	84	417	382	45	399	332
V/C Ratio(X)	0.60	0.72	0.08	0.63	0.42	0.09	0.54	0.27	0.29	0.46	0.28	0.10
Avail Cap(c_a), veh/h	569	1468	1244	606	2862	1277	459	1247	1142	385	1235	1027
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	17.2	14.6	22.0	15.7	14.5	22.4	15.1	15.2	23.1	15.9	15.2
Incr Delay (d2), s/veh	2.0	2.3	0.1	2.1	0.3	0.1	2.0	0.3	0.4	2.7	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.7	0.2	0.7	1.3	0.2	0.5	0.8	0.8	0.2	0.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.1	19.5	14.7	24.1	16.0	14.6	24.4	15.4	15.6	25.9	16.2	15.3
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		398			447			271			164	
Approach Delay, s/veh		19.9			17.2			17.0			17.3	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.8	17.5	7.7	17.2	6.9	16.5	7.4	17.4				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	10.4	33.8	16.4	37.8	12.4	31.8	15.4	38.8				
Max Q Clear Time (g_c+I1), s	2.6	4.7	3.9	9.3	3.2	4.4	3.7	6.0				
Green Ext Time (p_c), s	0.0	1.1	0.0	1.7	0.0	0.6	0.0	2.1				
Intersection Summary												
HCM 6th Ctrl Delay			18.0									
HCM 6th LOS			B									

Timings
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	169	439	269	123	106	128
Future Volume (vph)	169	439	269	123	106	128
Turn Type	Prot	pm+ov	Prot	NA	NA	Perm
Protected Phases	4	5	5	2	6	
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	6
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	16.2	9.6	9.6	16.2	43.2	43.2
Total Split (s)	46.0	17.0	17.0	74.0	57.0	57.0
Total Split (%)	38.3%	14.2%	14.2%	61.7%	47.5%	47.5%
Yellow Time (s)	5.2	3.6	3.6	5.2	5.2	5.2
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)	6.2	4.6	4.6	6.2	6.2	6.2
Lead/Lag		Lead	Lead		Lag	Lag
Lead-Lag Optimize?		Yes	Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
Act Effect Green (s)	11.8	29.8	11.5	30.4	14.1	14.1
Actuated g/C Ratio	0.21	0.54	0.21	0.55	0.26	0.26
v/c Ratio	0.51	0.29	0.43	0.14	0.14	0.29
Control Delay	26.9	1.7	23.7	6.2	15.8	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.9	1.7	23.7	6.2	15.8	4.8
LOS	C	A	C	A	B	A
Approach Delay	8.7			18.2	9.8	
Approach LOS	A			B	A	

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 55.2	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 11.9	Intersection LOS: B
Intersection Capacity Utilization 36.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Briggs Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	169	439	269	123	106	128
Future Volume (veh/h)	169	439	269	123	106	128
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	194	505	309	141	122	147
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	405	1024	483	918	875	386
Arrive On Green	0.23	0.23	0.14	0.49	0.25	0.25
Sat Flow, veh/h	1781	2790	3456	1870	3647	1569
Grp Volume(v), veh/h	194	505	309	141	122	147
Grp Sat Flow(s),veh/h/ln	1781	1395	1728	1870	1777	1569
Q Serve(g_s), s	4.2	6.2	3.7	1.8	1.2	3.4
Cycle Q Clear(g_c), s	4.2	6.2	3.7	1.8	1.2	3.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	405	1024	483	918	875	386
V/C Ratio(X)	0.48	0.49	0.64	0.15	0.14	0.38
Avail Cap(c_a), veh/h	1613	2915	975	2884	4106	1813
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	14.7	10.8	17.9	6.2	12.9	13.8
Incr Delay (d2), s/veh	0.3	0.1	1.4	0.1	0.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.1	1.2	0.4	0.3	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.1	10.9	19.3	6.2	13.0	14.4
LnGrp LOS	B	B	B	A	B	B
Approach Vol, veh/h	699			450	269	
Approach Delay, s/veh	12.0			15.2	13.8	
Approach LOS	B			B	B	
Timer - Assigned Phs	2			4	5	6
Phs Duration (G+Y+Rc), s	27.8			16.2	10.7	17.0
Change Period (Y+Rc), s	6.2			6.2	4.6	6.2
Max Green Setting (Gmax), s	67.8			39.8	12.4	50.8
Max Q Clear Time (g_c+I1), s	3.8			8.2	5.7	5.4
Green Ext Time (p_c), s	0.7			1.3	0.6	1.2
Intersection Summary						
HCM 6th Ctrl Delay			13.4			
HCM 6th LOS			B			

Intersection

Intersection Delay, s/veh 57.1

Intersection LOS F

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	105	292	283	691	824	100
Future Vol, veh/h	105	292	283	691	824	100
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	113	314	304	743	886	108
Number of Lanes	1	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	2	0
Conflicting Approach Left SB			WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	2
HCM Control Delay	30.2	450.2	399.4
HCM LOS	D	F	F

Lane	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	29%	0%	0%
Vol Right, %	0%	0%	71%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	105	292	974	824	100
LT Vol	105	0	0	824	0
Through Vol	0	292	283	0	0
RT Vol	0	0	691	0	100
Lane Flow Rate	113	314	1047	886	108
Geometry Grp	7	7	4	7	7
Degree of Util (X)	0.256	0.668	1.937	1.924	0.198
Departure Headway (Hd)	11.951	11.413	8.548	9.288	8.036
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	303	320	440	399	449
Service Time	9.651	9.113	6.548	6.988	5.736
HCM Lane V/C Ratio	0.373	0.981	2.38	2.221	0.241
HCM Control Delay	18.7	34.3	450.2	446.3	12.7
HCM Lane LOS	C	D	F	F	B
HCM 95th-tile Q	1	4.5	54.9	50.3	0.7

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	879	237	213	682	0	292	113	327	1	71	0
Future Vol, veh/h	0	879	237	213	682	0	292	113	327	1	71	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	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	-	-	205	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	945	255	229	733	0	314	122	352	1	76	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	733	0	0	1200	0	0	2174	2136	945	2501	2391	733
Stage 1	-	-	-	-	-	-	945	945	-	1191	1191	-
Stage 2	-	-	-	-	-	-	1229	1191	-	1310	1200	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	872	-	-	582	-	-	~ 34	~ 49	~ 318	19	~ 34	421
Stage 1	-	-	-	-	-	-	314	340	-	229	261	-
Stage 2	-	-	-	-	-	-	~ 218	261	-	196	258	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	872	-	-	582	-	-	-	~ 16	~ 318	-	~ 11	421
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	~ 16	-	-	~ 11	-
Stage 1	-	-	-	-	-	-	314	340	-	229	88	-
Stage 2	-	-	-	-	-	-	~ 10	~ 88	-	-	258	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			3.6								
HCM LOS							-			-		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	-	872	-	-	582	-	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.394	-	-	-				
HCM Control Delay (s)	-	0	-	-	15.1	0	-	-				
HCM Lane LOS	-	A	-	-	C	A	-	-				
HCM 95th %tile Q(veh)	-	0	-	-	1.9	-	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Timings
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	170	232	53	73	158	49	80	1305	51	840
Future Volume (vph)	170	232	53	73	158	49	80	1305	51	840
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.2	29.2	9.6	29.2	29.2	9.6	29.2	9.6	27.2
Total Split (s)	20.0	35.0	35.0	17.0	32.0	32.0	19.0	55.0	13.0	49.0
Total Split (%)	16.7%	29.2%	29.2%	14.2%	26.7%	26.7%	15.8%	45.8%	10.8%	40.8%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	13.9	23.5	23.5	8.9	16.1	16.1	9.6	49.5	7.1	47.1
Actuated g/C Ratio	0.13	0.22	0.22	0.08	0.15	0.15	0.09	0.47	0.07	0.44
v/c Ratio	0.80	0.61	0.12	0.53	0.61	0.14	0.54	0.98	0.46	0.72
Control Delay	71.3	46.4	0.5	62.3	52.6	0.8	61.1	48.5	63.8	29.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.3	46.4	0.5	62.3	52.6	0.8	61.1	48.5	63.8	29.5
LOS	E	D	A	E	D	A	E	D	E	C
Approach Delay		50.3			46.1			49.1		31.1
Approach LOS		D			D			D		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 106.1

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 43.3

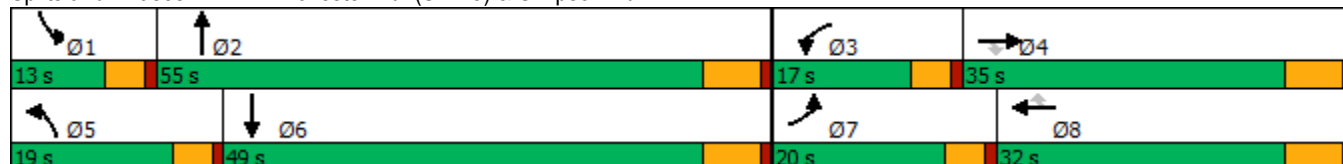
Intersection LOS: D

Intersection Capacity Utilization 82.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 12: Winchester Rd. (SR-79) & Simpson Rd.



HCM 6th Signalized Intersection Summary
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	232	53	73	158	49	80	1305	167	51	840	174
Future Volume (veh/h)	170	232	53	73	158	49	80	1305	167	51	840	174
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	185	252	25	79	172	41	87	1418	108	55	913	148
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	357	302	102	234	197	112	1604	122	73	1399	227
Arrive On Green	0.12	0.19	0.19	0.06	0.12	0.12	0.06	0.48	0.48	0.04	0.46	0.46
Sat Flow, veh/h	1781	1870	1583	1781	1870	1574	1781	3348	254	1781	3060	496
Grp Volume(v), veh/h	185	252	25	79	172	41	87	750	776	55	530	531
Grp Sat Flow(s),veh/h/ln	1781	1870	1583	1781	1870	1574	1781	1777	1825	1781	1777	1779
Q Serve(g_s), s	9.5	11.7	1.2	4.1	8.2	2.2	4.5	35.4	35.9	2.8	21.5	21.5
Cycle Q Clear(g_c), s	9.5	11.7	1.2	4.1	8.2	2.2	4.5	35.4	35.9	2.8	21.5	21.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.28
Lane Grp Cap(c), veh/h	219	357	302	102	234	197	112	851	874	73	812	813
V/C Ratio(X)	0.84	0.71	0.08	0.78	0.74	0.21	0.78	0.88	0.89	0.76	0.65	0.65
Avail Cap(c_a), veh/h	295	579	490	237	519	436	276	932	957	161	817	818
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	35.2	31.0	43.3	39.2	36.6	43.0	21.8	22.0	44.2	19.5	19.5
Incr Delay (d2), s/veh	12.0	2.6	0.1	4.7	4.5	0.5	4.4	9.2	9.6	5.9	1.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	5.2	0.4	1.8	3.9	0.8	2.0	14.7	15.4	1.3	8.2	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.9	37.8	31.1	48.0	43.7	37.1	47.3	31.1	31.6	50.1	21.4	21.4
LnGrp LOS	D	D	C	D	D	D	D	C	C	D	C	C
Approach Vol, veh/h	462			292			1613			1116		
Approach Delay, s/veh	43.1			43.9			32.2			22.8		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.4	50.8	9.9	24.0	10.4	48.8	16.0	17.8				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	8.4	48.8	12.4	28.8	14.4	42.8	15.4	25.8				
Max Q Clear Time (g_c+I1), s	4.8	37.9	6.1	13.7	6.5	23.5	11.5	10.2				
Green Ext Time (p_c), s	0.0	6.7	0.0	1.1	0.0	6.1	0.1	0.8				
Intersection Summary												
HCM 6th Ctrl Delay	31.6											
HCM 6th LOS	C											

APPENDIX 6.2: OPENING YEAR (2029) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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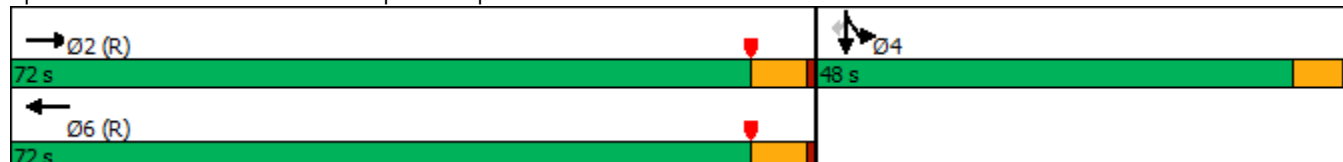
Timings
1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

	→	↘	←	↙	↓	↗
Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↗	↑↑↑↑	↘	↕	↗
Traffic Volume (vph)	1851	842	2303	426	0	744
Future Volume (vph)	1851	842	2303	426	0	744
Turn Type	NA	Free	NA	Split	NA	Perm
Protected Phases	2		6	4	4	
Permitted Phases		Free				4
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	30.0		33.0	20.0	20.0	20.0
Total Split (s)	72.0		72.0	48.0	48.0	48.0
Total Split (%)	60.0%		60.0%	40.0%	40.0%	40.0%
Yellow Time (s)	5.0		5.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min		C-Min	None	None	None
Act Effct Green (s)	75.5	120.0	75.5	33.0	33.0	33.0
Actuated g/C Ratio	0.63	1.00	0.63	0.28	0.28	0.28
v/c Ratio	0.42	0.48	0.70	0.80	0.78	0.79
Control Delay	12.3	0.9	17.2	51.6	47.6	47.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.3	0.9	17.2	51.6	47.6	47.8
LOS	B	A	B	D	D	D
Approach Delay	8.8		17.2		49.0	
Approach LOS	A		B		D	
Intersection Summary						
Cycle Length: 120						
Actuated Cycle Length: 120						
Offset: 68 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow						
Natural Cycle: 55						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.80						
Intersection Signal Delay: 19.5				Intersection LOS: B		
Intersection Capacity Utilization 84.8%				ICU Level of Service E		
Analysis Period (min) 15						

Splits and Phases: 1: I-215 SB Ramps & Newport Rd.

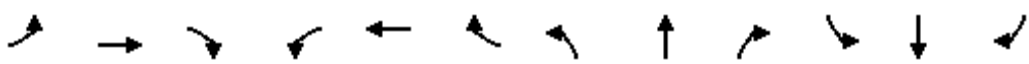


HCM 6th Signalized Intersection Summary

1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗		↑↑↑					↗	↕	↗
Traffic Volume (veh/h)	0	1851	842	0	2303	0	0	0	0	426	0	744
Future Volume (veh/h)	0	1851	842	0	2303	0	0	0	0	426	0	744
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	1969	0	0	2450	0				680	0	394
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	4728		0	3546	0				970	0	432
Arrive On Green	0.00	0.63	0.00	0.00	0.63	0.00				0.27	0.00	0.27
Sat Flow, veh/h	0	7481	1585	0	5611	0				3563	0	1585
Grp Volume(v), veh/h	0	1969	0	0	2450	0				680	0	394
Grp Sat Flow(s),veh/h/ln	0	1870	1585	0	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	15.8	0.0	0.0	34.2	0.0				20.6	0.0	28.9
Cycle Q Clear(g_c), s	0.0	15.8	0.0	0.0	34.2	0.0				20.6	0.0	28.9
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	4728		0	3546	0				970	0	432
V/C Ratio(X)	0.00	0.42		0.00	0.69	0.00				0.70	0.00	0.91
Avail Cap(c_a), veh/h	0	4728		0	3546	0				1262	0	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.0	0.0	0.0	14.4	0.0				39.3	0.0	42.3
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	1.1	0.0				0.7	0.0	14.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.8	0.0	0.0	12.7	0.0				8.8	0.0	12.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	11.3	0.0	0.0	15.6	0.0				39.9	0.0	56.7
LnGrp LOS	A	B		A	B	A				D	A	E
Approach Vol, veh/h		1969			2450						1074	
Approach Delay, s/veh		11.3			15.6						46.1	
Approach LOS		B			B						D	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		81.8		38.2		81.8						
Change Period (Y+Rc), s		6.0		5.5		6.0						
Max Green Setting (Gmax), s		66.0		42.5		66.0						
Max Q Clear Time (g_c+I1), s		17.8		30.9		36.2						
Green Ext Time (p_c), s		21.9		1.8		22.2						
Intersection Summary												
HCM 6th Ctrl Delay			20.0									
HCM 6th LOS			C									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

Timings
2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

						
Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations						
Traffic Volume (vph)	1671	3109	662	481	0	730
Future Volume (vph)	1671	3109	662	481	0	730
Turn Type	NA	NA	Free	Split	NA	Perm
Protected Phases	2	6		8	8	
Permitted Phases			Free			8
Detector Phase	2	6		8	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	33.0	33.0		22.0	22.0	22.0
Total Split (s)	66.0	66.0		54.0	54.0	54.0
Total Split (%)	55.0%	55.0%		45.0%	45.0%	45.0%
Yellow Time (s)	5.0	5.0		4.5	4.5	4.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min	C-Min		None	None	None
Act Effct Green (s)	70.1	70.1	120.0	38.4	38.4	38.4
Actuated g/C Ratio	0.58	0.58	1.00	0.32	0.32	0.32
v/c Ratio	0.53	0.74	0.44	0.72	0.84	0.66
Control Delay	16.9	20.8	0.9	42.6	50.2	37.1
Queue Delay	0.0	0.5	0.0	0.0	0.0	0.0
Total Delay	16.9	21.4	0.9	42.6	50.2	37.1
LOS	B	C	A	D	D	D
Approach Delay	16.9	17.8			43.3	
Approach LOS	B	B			D	
Intersection Summary						
Cycle Length: 120						
Actuated Cycle Length: 120						
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection						
Natural Cycle: 55						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.84						
Intersection Signal Delay: 22.2				Intersection LOS: C		
Intersection Capacity Utilization 75.4%				ICU Level of Service D		
Analysis Period (min) 15						

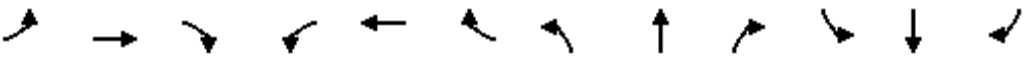
Splits and Phases: 2: I-215 NB Ramps & Newport Rd.

→ Ø2 (R)	↖ Ø8
66 s	54 s
← Ø6 (R)	
66 s	

HCM 6th Signalized Intersection Summary 2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑			↑↑↑	↑	↑	↑	↑			
Traffic Volume (veh/h)	0	1671	0	0	3109	662	481	0	730	0	0	0
Future Volume (veh/h)	0	1671	0	0	3109	662	481	0	730	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	0	1723	0	0	3205	0	653	0	334			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	2	0	0	2	2	2	2	2			
Cap, veh/h	0	3751	0	0	5002		839	0	374			
Arrive On Green	0.00	0.67	0.00	0.00	0.67	0.00	0.24	0.00	0.24			
Sat Flow, veh/h	0	5611	0	0	7481	1585	3563	0	1585			
Grp Volume(v), veh/h	0	1723	0	0	3205	0	653	0	334			
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	0.0	17.6	0.0	0.0	29.8	0.0	20.6	0.0	24.5			
Cycle Q Clear(g_c), s	0.0	17.6	0.0	0.0	29.8	0.0	20.6	0.0	24.5			
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	3751	0	0	5002		839	0	374			
V/C Ratio(X)	0.00	0.46	0.00	0.00	0.64		0.78	0.00	0.89			
Avail Cap(c_a), veh/h	0	3751	0	0	5002		1440	0	641			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.09	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	9.5	0.0	0.0	11.5	0.0	42.9	0.0	44.4			
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	0.1	0.0	0.6	0.0	4.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	6.2	0.0	0.0	10.2	0.0	8.8	0.0	9.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	9.9	0.0	0.0	11.6	0.0	43.5	0.0	48.9			
LnGrp LOS	A	A	A	A	B		D	A	D			
Approach Vol, veh/h		1723			3205			987				
Approach Delay, s/veh		9.9			11.6			45.3				
Approach LOS		A			B			D				
Timer - Assigned Phs		2			6			8				
Phs Duration (G+Y+Rc), s		86.2			86.2			33.8				
Change Period (Y+Rc), s		6.0			6.0			5.5				
Max Green Setting (Gmax), s		60.0			60.0			48.5				
Max Q Clear Time (g_c+I1), s		19.6			31.8			26.5				
Green Ext Time (p_c), s		16.4			26.1			1.8				
Intersection Summary												
HCM 6th Ctrl Delay					16.7							
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.												

Timings
3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 	 	 	 	 	 	 	 	 
Traffic Volume (vph)	189	1797	95	2759	648	70	97	110	96	363
Future Volume (vph)	189	1797	95	2759	648	70	97	110	96	363
Turn Type	Prot	NA	Prot	NA	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4	3	8	2	2		6	6	7
Permitted Phases							2			6
Detector Phase	7	4	3	8	2	2	2	6	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.2	9.6	34.8	36.8	36.8	36.8	15.8	15.8	9.6
Total Split (s)	13.6	64.1	11.7	62.2	38.1	38.1	38.1	16.1	16.1	13.6
Total Split (%)	10.5%	49.3%	9.0%	47.8%	29.3%	29.3%	29.3%	12.4%	12.4%	10.5%
Yellow Time (s)	3.6	5.2	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	4.6	5.8	5.8	5.8	5.8	5.8	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag						Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes						Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None	None
Act Effect Green (s)	8.8	58.3	6.7	56.5	24.9	24.9	24.9	10.2	10.2	24.9
Actuated g/C Ratio	0.07	0.48	0.05	0.46	0.20	0.20	0.20	0.08	0.08	0.20
v/c Ratio	0.77	0.90	0.51	1.25	0.74	0.73	0.24	0.39	0.63	0.59
Control Delay	77.8	35.7	67.6	145.3	53.0	58.6	6.3	58.9	74.1	39.8
Queue Delay	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.8	36.6	67.6	145.3	53.0	58.6	6.3	58.9	74.1	39.8
LOS	E	D	E	F	D	E	A	E	E	D
Approach Delay		40.0		142.8		49.1			49.2	
Approach LOS		D		F		D			D	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 122.6

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.25

Intersection Signal Delay: 87.8

Intersection LOS: F

Intersection Capacity Utilization 95.4%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Antelope Rd. & Newport Rd.

 Ø2	 Ø6	 Ø3	 Ø4
38.1 s	16.1 s	11.7 s	64.1 s
		 Ø7	 Ø8
		13.6 s	62.2 s

HCM 6th Signalized Intersection Summary

3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	1797	317	95	2759	120	648	70	97	110	96	363
Future Volume (veh/h)	189	1797	317	95	2759	120	648	70	97	110	96	363
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	191	1815	281	96	2787	117	570	191	37	111	97	110
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	2218	340	146	2353	97	684	359	300	287	155	430
Arrive On Green	0.07	0.50	0.50	0.04	0.47	0.47	0.19	0.19	0.19	0.08	0.08	0.08
Sat Flow, veh/h	3456	4466	685	3456	5026	208	3563	1870	1564	3456	1870	2790
Grp Volume(v), veh/h	191	1379	717	96	1875	1029	570	191	37	111	97	110
Grp Sat Flow(s),veh/h/ln	1728	1702	1747	1728	1702	1830	1781	1870	1564	1728	1870	1395
Q Serve(g_s), s	6.5	41.3	42.2	3.3	56.4	56.4	18.5	11.1	2.4	3.7	6.0	4.2
Cycle Q Clear(g_c), s	6.5	41.3	42.2	3.3	56.4	56.4	18.5	11.1	2.4	3.7	6.0	4.2
Prop In Lane	1.00		0.39	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	1691	868	146	1593	857	684	359	300	287	155	430
V/C Ratio(X)	0.78	0.82	0.83	0.66	1.18	1.20	0.83	0.53	0.12	0.39	0.62	0.26
Avail Cap(c_a), veh/h	258	1691	868	204	1593	857	955	501	419	295	160	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.0	25.7	25.9	56.8	32.0	32.0	46.8	43.8	40.3	52.3	53.4	44.9
Incr Delay (d2), s/veh	12.0	3.2	6.6	1.9	86.3	102.0	4.6	1.2	0.2	0.9	7.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	15.9	17.5	1.4	40.4	47.2	8.4	5.1	0.9	1.6	3.1	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.1	28.9	32.5	58.7	118.3	134.1	51.4	45.0	40.5	53.2	60.5	45.2
LnGrp LOS	E	C	C	E	F	F	D	D	D	D	E	D
Approach Vol, veh/h	2287			3000			798			318		
Approach Delay, s/veh	33.2			121.8			49.4			52.7		
Approach LOS	C			F			D			D		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	28.9			9.7			66.0			15.8		
Change Period (Y+Rc), s	5.8			4.6			6.2			5.8		
Max Green Setting (Gmax), s	32.3			7.1			57.9			10.3		
Max Q Clear Time (g_c+I1), s	20.5			5.3			44.2			8.0		
Green Ext Time (p_c), s	2.6			0.0			10.3			0.3		
Intersection Summary												
HCM 6th Ctrl Delay	77.7											
HCM 6th LOS	E											
Notes												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings

4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	128	589	51	848	578	347	360	44	371	392
Future Volume (vph)	128	589	51	848	578	347	360	44	371	392
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4	3	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	7	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	9.6	30.8	30.8	9.6	39.5	39.5	9.6	16.5
Total Split (s)	20.0	41.0	9.8	30.8	30.8	39.0	44.2	44.2	25.0	30.2
Total Split (%)	16.7%	34.2%	8.2%	25.7%	25.7%	32.5%	36.8%	36.8%	20.8%	25.2%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effect Green (s)	13.2	36.1	5.2	25.8	25.8	30.1	33.4	33.4	20.5	23.8
Actuated g/C Ratio	0.12	0.32	0.05	0.23	0.23	0.26	0.29	0.29	0.18	0.21
v/c Ratio	0.76	0.99	0.40	1.30	0.98	0.91	0.43	0.10	1.43	0.94
Control Delay	73.9	63.1	63.4	179.8	43.7	65.7	34.2	0.3	246.0	62.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.9	63.1	63.4	179.8	43.7	65.7	34.2	0.3	246.0	62.8
LOS	E	E	E	F	D	E	C	A	F	E
Approach Delay		64.4		122.5			46.7			135.1
Approach LOS		E		F			D			F

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 114.5

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.43

Intersection Signal Delay: 97.5

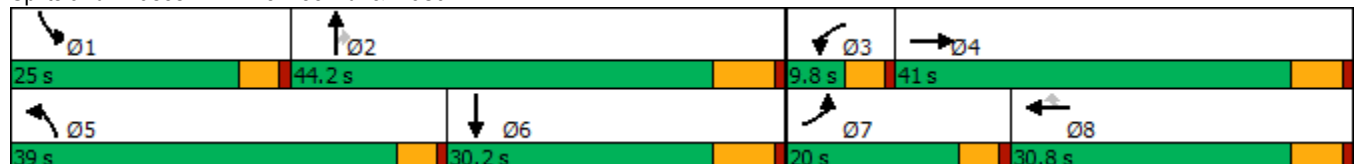
Intersection LOS: F

Intersection Capacity Utilization 84.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 4: Meniffee Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	589	320	51	848	578	347	360	44	371	392	177
Future Volume (veh/h)	128	589	320	51	848	578	347	360	44	371	392	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	156	718	312	62	1034	583	423	439	21	452	478	109
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	766	333	135	897	400	453	917	409	334	551	125
Arrive On Green	0.10	0.32	0.32	0.04	0.25	0.25	0.25	0.26	0.26	0.19	0.19	0.19
Sat Flow, veh/h	1781	2411	1047	3456	3554	1585	1781	3554	1585	1781	2878	652
Grp Volume(v), veh/h	156	529	501	62	1034	583	423	439	21	452	294	293
Grp Sat Flow(s),veh/h/ln	1781	1777	1682	1728	1777	1585	1781	1777	1585	1781	1777	1753
Q Serve(g_s), s	9.3	31.4	31.5	1.9	27.4	27.4	25.2	11.4	1.1	20.4	17.4	17.6
Cycle Q Clear(g_c), s	9.3	31.4	31.5	1.9	27.4	27.4	25.2	11.4	1.1	20.4	17.4	17.6
Prop In Lane	1.00		0.62	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	185	564	534	135	897	400	453	917	409	334	340	336
V/C Ratio(X)	0.84	0.94	0.94	0.46	1.15	1.46	0.93	0.48	0.05	1.35	0.86	0.87
Avail Cap(c_a), veh/h	252	576	545	165	897	400	564	1233	550	334	387	382
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.8	36.0	36.0	51.1	40.6	40.6	39.6	34.1	30.3	44.1	42.6	42.7
Incr Delay (d2), s/veh	13.0	23.0	24.0	0.9	81.6	219.3	18.7	0.4	0.1	176.8	16.5	17.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	16.5	15.7	0.8	21.6	34.5	12.6	4.7	0.4	24.9	8.7	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.8	59.1	60.0	52.0	122.2	259.9	58.3	34.5	30.4	221.0	59.1	60.4
LnGrp LOS	E	E	E	D	F	F	E	C	C	F	E	E
Approach Vol, veh/h	1186			1679			883			1039		
Approach Delay, s/veh	59.7			167.4			45.8			129.9		
Approach LOS	E			F			D			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.0	34.5	8.8	40.3	32.2	27.3	15.9	33.2				
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	20.4	37.7	5.2	35.2	34.4	23.7	15.4	25.0				
Max Q Clear Time (g_c+I1), s	22.4	13.4	3.9	33.5	27.2	19.6	11.3	29.4				
Green Ext Time (p_c), s	0.0	2.5	0.0	1.0	0.4	1.2	0.1	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	110.2											
HCM 6th LOS	F											

Timings
5: Meniffee Rd. & Simpson Rd.

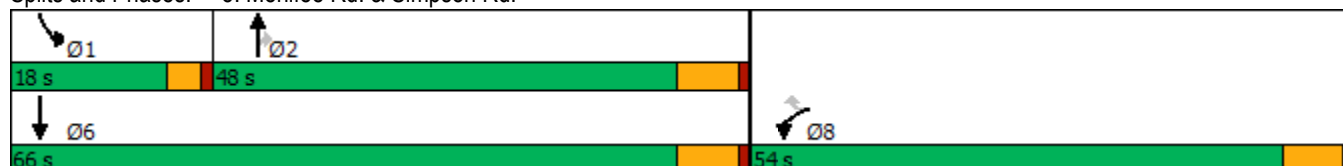
Salt Creek TA (JN:15470)
09/07/2023

	←	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↑↑	↖	↖	↑↑
Traffic Volume (vph)	389	146	394	328	86	470
Future Volume (vph)	389	146	394	328	86	470
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0
Minimum Split (s)	26.5	26.5	27.5	27.5	9.0	16.5
Total Split (s)	54.0	54.0	48.0	48.0	18.0	66.0
Total Split (%)	45.0%	45.0%	40.0%	40.0%	15.0%	55.0%
Yellow Time (s)	5.5	5.5	5.5	5.5	3.0	5.5
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)	6.5	6.5	6.5	6.5	4.0	6.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min
Act Effect Green (s)	23.4	23.4	16.7	16.7	9.9	27.4
Actuated g/C Ratio	0.36	0.36	0.26	0.26	0.15	0.42
v/c Ratio	0.70	0.25	0.50	0.55	0.37	0.36
Control Delay	26.5	4.2	25.0	6.6	34.1	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.5	4.2	25.0	6.6	34.1	13.6
LOS	C	A	C	A	C	B
Approach Delay	20.4		16.6			16.8
Approach LOS	C		B			B

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 65.1
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 17.8
 Intersection LOS: B
 Intersection Capacity Utilization 51.8%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Meniffee Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary 5: Menifee Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	389	146	394	328	86	470
Future Volume (veh/h)	389	146	394	328	86	470
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	447	107	453	275	99	540
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	547	486	974	423	134	1528
Arrive On Green	0.31	0.31	0.27	0.27	0.08	0.43
Sat Flow, veh/h	1781	1585	3647	1546	1781	3647
Grp Volume(v), veh/h	447	107	453	275	99	540
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1546	1781	1777
Q Serve(g_s), s	11.5	2.5	5.2	7.8	2.7	5.0
Cycle Q Clear(g_c), s	11.5	2.5	5.2	7.8	2.7	5.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	547	486	974	423	134	1528
V/C Ratio(X)	0.82	0.22	0.47	0.65	0.74	0.35
Avail Cap(c_a), veh/h	1712	1523	2984	1298	505	4278
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	15.8	12.7	14.9	15.8	22.4	9.5
Incr Delay (d2), s/veh	3.1	0.2	0.3	1.7	7.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.7	1.6	2.2	1.2	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.9	13.0	15.3	17.5	30.1	9.6
LnGrp LOS	B	B	B	B	C	A
Approach Vol, veh/h	554		728			639
Approach Delay, s/veh	17.8		16.1			12.8
Approach LOS	B		B			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.7	20.0			27.8	21.7
Change Period (Y+Rc), s	4.0	6.5			6.5	6.5
Max Green Setting (Gmax), s	14.0	41.5			59.5	47.5
Max Q Clear Time (g_c+I1), s	4.7	9.8			7.0	13.5
Green Ext Time (p_c), s	0.1	3.7			3.4	1.7
Intersection Summary						
HCM 6th Ctrl Delay			15.5			
HCM 6th LOS			B			

Timings
6: Meniffee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	354	1511	472	1795	69	263	221	301	134	358	635
Future Volume (vph)	354	1511	472	1795	69	263	221	301	134	358	635
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0
Minimum Split (s)	9.6	34.8	9.6	32.8	32.8	9.6	39.8	9.6	9.6	35.8	9.6
Total Split (s)	24.0	50.6	13.5	40.1	40.1	16.0	41.4	13.5	14.5	39.9	24.0
Total Split (%)	20.0%	42.2%	11.3%	33.4%	33.4%	13.3%	34.5%	11.3%	12.1%	33.3%	20.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.8	3.6	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.8	4.6	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effect Green (s)	19.5	45.0	8.9	34.5	34.5	11.2	19.9	30.1	9.9	18.6	39.3
Actuated g/C Ratio	0.19	0.43	0.09	0.33	0.33	0.11	0.19	0.29	0.09	0.18	0.38
v/c Ratio	1.19	0.87	1.79	1.19	0.13	0.79	0.37	0.63	0.89	0.63	1.12
Control Delay	152.3	33.3	398.4	125.4	0.4	63.1	37.8	24.4	94.6	44.2	101.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	152.3	33.3	398.4	125.4	0.4	63.1	37.8	24.4	94.6	44.2	101.7
LOS	F	C	F	F	A	E	D	C	F	D	F
Approach Delay		53.8		176.8			41.1			82.6	
Approach LOS		D		F			D			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 104.7

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.79

Intersection Signal Delay: 103.0

Intersection LOS: F

Intersection Capacity Utilization 94.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 6: Meniffee Rd. & Newport Rd.

			
14.5 s	41.4 s	13.5 s	50.6 s
			
16 s	39.9 s	24 s	40.1 s

HCM 6th Signalized Intersection Summary
6: Menifee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	354	1511	185	472	1795	69	263	221	301	134	358	635
Future Volume (veh/h)	354	1511	185	472	1795	69	263	221	301	134	358	635
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	393	1679	192	524	1994	51	292	246	244	149	398	445
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	296	1785	204	264	1501	460	338	983	558	151	937	672
Arrive On Green	0.17	0.38	0.38	0.08	0.29	0.29	0.10	0.28	0.28	0.08	0.26	0.26
Sat Flow, veh/h	1781	4649	530	3456	5106	1563	3456	3554	1582	1781	3554	1548
Grp Volume(v), veh/h	393	1228	643	524	1994	51	292	246	244	149	398	445
Grp Sat Flow(s),veh/h/ln	1781	1702	1775	1728	1702	1563	1728	1777	1582	1781	1777	1548
Q Serve(g_s), s	19.4	40.6	40.8	8.9	34.3	2.8	9.7	6.3	13.8	9.7	10.8	26.8
Cycle Q Clear(g_c), s	19.4	40.6	40.8	8.9	34.3	2.8	9.7	6.3	13.8	9.7	10.8	26.8
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	296	1307	682	264	1501	460	338	983	558	151	937	672
V/C Ratio(X)	1.33	0.94	0.94	1.99	1.33	0.11	0.86	0.25	0.44	0.99	0.42	0.66
Avail Cap(c_a), veh/h	296	1307	682	264	1501	460	338	1084	603	151	1039	716
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	34.6	34.7	53.9	41.2	30.1	51.9	32.8	28.9	53.3	35.6	26.6
Incr Delay (d2), s/veh	168.6	13.1	21.7	457.9	152.5	0.1	19.4	0.1	0.5	68.6	0.3	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.2	18.1	20.6	20.5	34.9	1.0	5.0	2.6	5.1	7.1	4.6	9.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	217.3	47.7	56.4	511.8	193.7	30.2	71.3	32.9	29.4	121.9	35.9	28.7
LnGrp LOS	F	D	E	F	F	C	E	C	C	F	D	C
Approach Vol, veh/h	2264		2569				782			992		
Approach Delay, s/veh	79.6		255.3				46.2			45.6		
Approach LOS	E		F				D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.5	38.1	13.5	50.6	16.0	36.6	24.0	40.1				
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8				
Max Green Setting (Gmax), s	9.9	35.6	8.9	44.8	11.4	34.1	19.4	34.3				
Max Q Clear Time (g_c+I1), s	11.7	15.8	10.9	42.8	11.7	28.8	21.4	36.3				
Green Ext Time (p_c), s	0.0	2.1	0.0	1.7	0.0	2.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			138.9									
HCM 6th LOS			F									

Timings

Salt Creek TA (JN:15470)

7: Lindenberger Rd. & Simpson Rd.

09/07/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	59	278	33	107	349	54	64	125	56	214	62
Future Volume (vph)	59	278	33	107	349	54	64	125	56	214	62
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	26.2	26.2	9.6	28.2	28.2	9.6	30.2	9.6	26.2	26.2
Total Split (s)	17.0	39.0	39.0	24.0	46.0	46.0	18.0	40.0	17.0	39.0	39.0
Total Split (%)	14.2%	32.5%	32.5%	20.0%	38.3%	38.3%	15.0%	33.3%	14.2%	32.5%	32.5%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effect Green (s)	8.5	20.1	20.1	10.9	22.2	22.2	8.7	18.0	8.3	17.7	17.7
Actuated g/C Ratio	0.12	0.27	0.27	0.15	0.30	0.30	0.12	0.24	0.11	0.24	0.24
v/c Ratio	0.34	0.64	0.07	0.48	0.38	0.11	0.36	0.36	0.33	0.56	0.15
Control Delay	42.9	34.1	0.2	42.1	23.9	1.1	42.9	13.9	42.9	35.1	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.9	34.1	0.2	42.1	23.9	1.1	42.9	13.9	42.9	35.1	0.6
LOS	D	C	A	D	C	A	D	B	D	D	A
Approach Delay		32.5			25.3			19.1		30.0	
Approach LOS		C			C			B		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 73.8

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 26.6

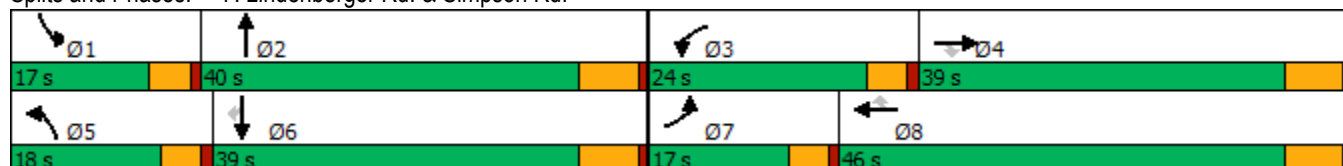
Intersection LOS: C

Intersection Capacity Utilization 54.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Lindenberger Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
7: Lindenberger Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	278	33	107	349	54	64	125	163	56	214	62
Future Volume (veh/h)	59	278	33	107	349	54	64	125	163	56	214	62
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	69	323	17	124	406	33	74	145	128	65	249	39
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	432	366	161	927	413	113	372	302	105	368	311
Arrive On Green	0.06	0.23	0.23	0.09	0.26	0.26	0.06	0.20	0.20	0.06	0.20	0.20
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	1781	1848	1503	1781	1870	1580
Grp Volume(v), veh/h	69	323	17	124	406	33	74	139	134	65	249	39
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1781	1777	1574	1781	1870	1580
Q Serve(g_s), s	2.0	8.3	0.4	3.5	4.9	0.8	2.1	3.5	3.8	1.8	6.4	1.0
Cycle Q Clear(g_c), s	2.0	8.3	0.4	3.5	4.9	0.8	2.1	3.5	3.8	1.8	6.4	1.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.95	1.00		1.00
Lane Grp Cap(c), veh/h	108	432	366	161	927	413	113	357	317	105	368	311
V/C Ratio(X)	0.64	0.75	0.05	0.77	0.44	0.08	0.66	0.39	0.42	0.62	0.68	0.13
Avail Cap(c_a), veh/h	428	1188	1007	669	2740	1222	462	1163	1031	428	1188	1004
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	18.4	15.4	22.9	15.9	14.4	23.6	17.9	18.0	23.7	19.2	17.1
Incr Delay (d2), s/veh	2.3	2.6	0.1	2.9	0.3	0.1	2.4	0.7	0.9	2.2	2.2	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	0.8	3.1	0.1	1.4	1.6	0.2	0.8	1.2	1.2	0.7	2.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.0	21.0	15.5	25.9	16.2	14.5	26.0	18.6	18.9	26.0	21.4	17.3
LnGrp LOS	C	C	B	C	B	B	C	B	B	C	C	B
Approach Vol, veh/h		409			563			347			353	
Approach Delay, s/veh		21.6			18.3			20.3			21.8	
Approach LOS		C			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.6	16.6	9.3	18.1	7.9	16.3	7.7	19.7				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	12.4	33.8	19.4	32.8	13.4	32.8	12.4	39.8				
Max Q Clear Time (g_c+I1), s	3.8	5.8	5.5	10.3	4.1	8.4	4.0	6.9				
Green Ext Time (p_c), s	0.0	1.4	0.1	1.6	0.0	1.3	0.0	2.5				
Intersection Summary												
HCM 6th Ctrl Delay			20.3									
HCM 6th LOS			C									

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑	↑↑	↑	
Traffic Vol, veh/h	510	9	6	473	26	17
Future Vol, veh/h	510	9	6	473	26	17
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	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	554	10	7	514	28	18

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	564	0	830
Stage 1	-	-	-	-	559
Stage 2	-	-	-	-	271
Critical Hdwy	-	-	4.14	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	-	-	2.22	-	3.52
Pot Cap-1 Maneuver	-	-	1004	-	308
Stage 1	-	-	-	-	536
Stage 2	-	-	-	-	750
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1004	-	306
Mov Cap-2 Maneuver	-	-	-	-	475
Stage 1	-	-	-	-	536
Stage 2	-	-	-	-	745

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	12.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	548	-	-	1004	-
HCM Lane V/C Ratio	0.085	-	-	0.006	-
HCM Control Delay (s)	12.2	-	-	8.6	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Timings
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

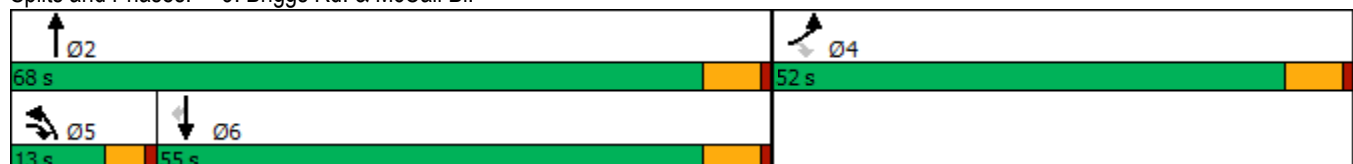
09/07/2023

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	309	309	570	397	328	287
Future Volume (vph)	309	309	570	397	328	287
Turn Type	Prot	pm+ov	Prot	NA	NA	Perm
Protected Phases	4	5	5	2	6	
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	6
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	16.2	9.6	9.6	16.2	43.2	43.2
Total Split (s)	52.0	13.0	13.0	68.0	55.0	55.0
Total Split (%)	43.3%	10.8%	10.8%	56.7%	45.8%	45.8%
Yellow Time (s)	5.2	3.6	3.6	5.2	5.2	5.2
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)	6.2	4.6	4.6	6.2	6.2	6.2
Lead/Lag		Lead	Lead		Lag	Lag
Lead-Lag Optimize?		Yes	Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
Act Effect Green (s)	16.2	26.8	8.9	29.7	15.9	15.9
Actuated g/C Ratio	0.27	0.45	0.15	0.50	0.27	0.27
v/c Ratio	0.71	0.24	1.22	0.47	0.38	0.48
Control Delay	29.2	1.9	144.0	12.0	18.6	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.2	1.9	144.0	12.0	18.6	5.0
LOS	C	A	F	B	B	A
Approach Delay	15.6			89.8	12.2	
Approach LOS	B			F	B	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 59
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 1.22
Intersection Signal Delay: 47.3
Intersection Capacity Utilization 56.6%
Analysis Period (min) 15
Intersection LOS: D
ICU Level of Service B

Splits and Phases: 9: Briggs Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	309	309	570	397	328	287
Future Volume (veh/h)	309	309	570	397	328	287
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	343	281	633	441	364	227
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	433	1163	601	936	823	367
Arrive On Green	0.24	0.24	0.17	0.50	0.23	0.23
Sat Flow, veh/h	1781	2790	3456	1870	3647	1585
Grp Volume(v), veh/h	343	281	633	441	364	227
Grp Sat Flow(s),veh/h/ln	1781	1395	1728	1870	1777	1585
Q Serve(g_s), s	8.7	3.2	8.4	7.4	4.2	6.2
Cycle Q Clear(g_c), s	8.7	3.2	8.4	7.4	4.2	6.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	433	1163	601	936	823	367
V/C Ratio(X)	0.79	0.24	1.05	0.47	0.44	0.62
Avail Cap(c_a), veh/h	1688	3129	601	2392	3589	1601
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	17.2	9.1	20.0	7.9	15.9	16.7
Incr Delay (d2), s/veh	1.3	0.0	51.7	0.4	0.4	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	7.0	1.8	1.4	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.4	9.2	71.7	8.3	16.3	18.4
LnGrp LOS	B	A	F	A	B	B
Approach Vol, veh/h	624			1074	591	
Approach Delay, s/veh	14.3			45.6	17.1	
Approach LOS	B			D	B	
Timer - Assigned Phs	2			4	5	6
Phs Duration (G+Y+Rc), s	30.4			17.9	13.0	17.4
Change Period (Y+Rc), s	6.2			6.2	4.6	6.2
Max Green Setting (Gmax), s	61.8			45.8	8.4	48.8
Max Q Clear Time (g_c+I1), s	9.4			10.7	10.4	8.2
Green Ext Time (p_c), s	2.6			1.0	0.0	3.0
Intersection Summary						
HCM 6th Ctrl Delay			29.7			
HCM 6th LOS			C			

Intersection

Intersection Delay, s/veh 58.6

Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	206	304	18	9	272	685	51	51	26	530	18	155
Future Vol, veh/h	206	304	18	9	272	685	51	51	26	530	18	155
Peak Hour Factor	0.94	0.94	0.92	0.92	0.94	0.94	0.92	0.92	0.92	0.94	0.92	0.94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	219	323	20	10	289	729	55	55	28	564	20	165
Number of Lanes	1	1	1	0	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	3	3	2
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	3	2	3	1
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	2	3	1	3
HCM Control Delay	36.9	692.2	22.4	204.6
HCM LOS	E	F	C	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	1%	100%	0%	0%
Vol Thru, %	0%	66%	0%	100%	0%	28%	0%	100%	0%
Vol Right, %	0%	34%	0%	0%	100%	71%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	51	77	206	304	18	966	530	18	155
LT Vol	51	0	206	0	0	9	530	0	0
Through Vol	0	51	0	304	0	272	0	18	0
RT Vol	0	26	0	0	18	685	0	0	155
Lane Flow Rate	55	84	219	323	20	1028	564	20	165
Geometry Grp	8	8	7	7	7	8	8	8	8
Degree of Util (X)	0.169	0.239	0.544	0.758	0.042	2.476	1.481	0.049	0.378
Departure Headway (Hd)	16.091	15.246	12.358	11.813	11.051	9.607	12.513	11.975	11.222
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	225	238	294	310	326	391	299	301	323
Service Time	13.791	12.946	10.058	9.513	8.751	7.307	10.213	9.675	8.922
HCM Lane V/C Ratio	0.244	0.353	0.745	1.042	0.061	2.629	1.886	0.066	0.511
HCM Control Delay	22	22.7	28.9	43.7	14.2	692.2	265	15.3	20.6
HCM Lane LOS	C	C	D	E	B	F	F	C	C
HCM 95th-tile Q	0.6	0.9	3	5.8	0.1	73.8	24	0.2	1.7

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	0	617	244	301	806	0	160	38	139	0	96	0
Future Vol, veh/h	0	617	244	301	806	0	160	38	139	0	96	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	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	-	-	205	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	726	287	354	948	0	188	45	164	0	113	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	948	0	0	1013	0	0	2439	2382	726	2630	2669	948
Stage 1	-	-	-	-	-	-	726	726	-	1656	1656	-
Stage 2	-	-	-	-	-	-	1713	1656	-	974	1013	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	724	-	-	684	-	-	~ 22	~ 34	425	16	~ 22	316
Stage 1	-	-	-	-	-	-	416	430	-	124	155	-
Stage 2	-	-	-	-	-	-	~ 115	155	-	303	316	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	724	-	-	684	-	-	-	0	425	-	0	316
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-	-	0	-
Stage 1	-	-	-	-	-	-	416	430	-	124	0	-
Stage 2	-	-	-	-	-	-	-	0	-	167	316	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			4.3								
HCM LOS							-			-		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	-	724	-	-	684	-	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.518	-	-	-				
HCM Control Delay (s)	-	0	-	-	15.8	0	-	-				
HCM Lane LOS	-	A	-	-	C	A	-	-				
HCM 95th %tile Q(veh)	-	0	-	-	3	-	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Timings
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	285	209	101	207	261	33	45	585	25	1181
Future Volume (vph)	285	209	101	207	261	33	45	585	25	1181
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.2	29.2	9.6	29.2	29.2	9.6	29.2	9.6	27.2
Total Split (s)	28.0	32.0	32.0	28.0	32.0	32.0	12.0	50.0	10.0	48.0
Total Split (%)	23.3%	26.7%	26.7%	23.3%	26.7%	26.7%	10.0%	41.7%	8.3%	40.0%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	20.9	24.1	24.1	17.2	20.4	20.4	6.6	45.7	5.3	42.5
Actuated g/C Ratio	0.19	0.22	0.22	0.16	0.19	0.19	0.06	0.42	0.05	0.39
v/c Ratio	0.87	0.53	0.24	0.77	0.78	0.09	0.43	0.45	0.31	1.08
Control Delay	70.4	44.6	7.6	63.9	59.6	0.5	66.4	26.1	64.2	84.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.4	44.6	7.6	63.9	59.6	0.5	66.4	26.1	64.2	84.4
LOS	E	D	A	E	E	A	E	C	E	F
Approach Delay		50.7			57.5			28.7		84.1
Approach LOS		D			E			C		F

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 109.9

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.08

Intersection Signal Delay: 62.0

Intersection LOS: E

Intersection Capacity Utilization 84.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 12: Winchester Rd. (SR-79) & Simpson Rd.

			
10 s	50 s	28 s	32 s
			
12 s	48 s	28 s	32 s

HCM 6th Signalized Intersection Summary
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	285	209	101	207	261	33	45	585	50	25	1181	226
Future Volume (veh/h)	285	209	101	207	261	33	45	585	50	25	1181	226
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	294	215	70	213	269	21	46	603	39	26	1218	163
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	325	406	342	246	322	272	63	1395	90	45	1265	169
Arrive On Green	0.18	0.22	0.22	0.14	0.17	0.17	0.04	0.41	0.41	0.03	0.40	0.40
Sat Flow, veh/h	1781	1870	1576	1781	1870	1577	1781	3388	219	1781	3149	420
Grp Volume(v), veh/h	294	215	70	213	269	21	46	316	326	26	685	696
Grp Sat Flow(s),veh/h/ln	1781	1870	1576	1781	1870	1577	1781	1777	1830	1781	1777	1792
Q Serve(g_s), s	16.8	10.6	3.8	12.2	14.4	1.2	2.7	13.2	13.3	1.5	39.0	39.5
Cycle Q Clear(g_c), s	16.8	10.6	3.8	12.2	14.4	1.2	2.7	13.2	13.3	1.5	39.0	39.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		0.23
Lane Grp Cap(c), veh/h	325	406	342	246	322	272	63	731	753	45	714	720
V/C Ratio(X)	0.90	0.53	0.20	0.87	0.83	0.08	0.73	0.43	0.43	0.57	0.96	0.97
Avail Cap(c_a), veh/h	401	465	392	401	465	392	127	749	772	93	715	721
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.6	36.0	33.3	43.8	41.5	36.1	49.6	21.9	21.9	50.1	30.3	30.4
Incr Delay (d2), s/veh	18.5	1.1	0.3	6.0	8.6	0.1	5.9	0.4	0.4	4.2	24.1	25.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	4.7	1.4	5.5	7.1	0.4	1.2	5.1	5.3	0.7	19.8	20.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.1	37.0	33.6	49.8	50.1	36.2	55.5	22.3	22.3	54.3	54.4	55.9
LnGrp LOS	E	D	C	D	D	D	E	C	C	D	D	E
Approach Vol, veh/h	579			503			688			1407		
Approach Delay, s/veh	48.3			49.4			24.5			55.1		
Approach LOS	D			D			C			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.2	49.0	18.9	28.8	8.3	47.9	23.6	24.1				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	5.4	43.8	23.4	25.8	7.4	41.8	23.4	25.8				
Max Q Clear Time (g_c+I1), s	3.5	15.3	14.2	12.6	4.7	41.5	18.8	16.4				
Green Ext Time (p_c), s	0.0	3.5	0.2	1.0	0.0	0.3	0.2	0.9				
Intersection Summary												
HCM 6th Ctrl Delay	46.3											
HCM 6th LOS	D											

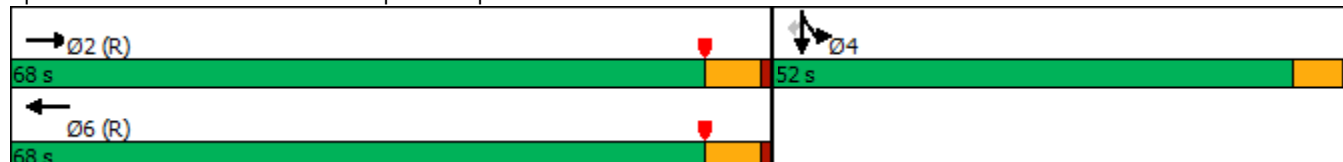
Timings
1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

	→	↘	←	↙	↓	↗
Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Configurations	↑↑↑↑	↗	↑↑↑↑	↘	↕	↗
Traffic Volume (vph)	3012	614	2842	780	0	1049
Future Volume (vph)	3012	614	2842	780	0	1049
Turn Type	NA	Free	NA	Split	NA	Perm
Protected Phases	2		6	4	4	
Permitted Phases		Free				4
Detector Phase	2		6	4	4	4
Switch Phase						
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0
Minimum Split (s)	30.0		33.0	20.0	20.0	20.0
Total Split (s)	68.0		68.0	52.0	52.0	52.0
Total Split (%)	56.7%		56.7%	43.3%	43.3%	43.3%
Yellow Time (s)	5.0		5.0	4.5	4.5	4.5
All-Red Time (s)	1.0		1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0		6.0	5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min		C-Min	None	None	None
Act Effct Green (s)	63.3	120.0	63.3	45.2	45.2	45.2
Actuated g/C Ratio	0.53	1.00	0.53	0.38	0.38	0.38
v/c Ratio	0.78	0.34	0.98	0.93	0.86	0.83
Control Delay	24.9	0.5	41.7	57.1	45.6	43.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.9	0.5	41.7	57.1	45.6	43.7
LOS	C	A	D	E	D	D
Approach Delay	20.7		41.7		49.0	
Approach LOS	C		D		D	
Intersection Summary						
Cycle Length: 120						
Actuated Cycle Length: 120						
Offset: 68 (57%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow						
Natural Cycle: 90						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 0.98						
Intersection Signal Delay: 34.1				Intersection LOS: C		
Intersection Capacity Utilization 107.8%				ICU Level of Service G		
Analysis Period (min) 15						

Splits and Phases: 1: I-215 SB Ramps & Newport Rd.

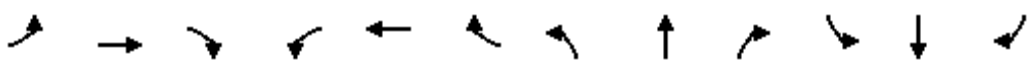


HCM 6th Signalized Intersection Summary

1: I-215 SB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↗		↑↑↑					↖	↔	↗
Traffic Volume (veh/h)	0	3012	614	0	2842	0	0	0	0	780	0	1049
Future Volume (veh/h)	0	3012	614	0	2842	0	0	0	0	780	0	1049
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	3073	0	0	2900	0				1132	0	625
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	0	2	0				2	2	2
Cap, veh/h	0	3865		0	2899	0				1381	0	614
Arrive On Green	0.00	0.52	0.00	0.00	0.52	0.00				0.39	0.00	0.39
Sat Flow, veh/h	0	7481	1585	0	5611	0				3563	0	1585
Grp Volume(v), veh/h	0	3073	0	0	2900	0				1132	0	625
Grp Sat Flow(s),veh/h/ln	0	1870	1585	0	1870	0				1781	0	1585
Q Serve(g_s), s	0.0	40.4	0.0	0.0	62.0	0.0				34.2	0.0	46.5
Cycle Q Clear(g_c), s	0.0	40.4	0.0	0.0	62.0	0.0				34.2	0.0	46.5
Prop In Lane	0.00		1.00	0.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3865		0	2899	0				1381	0	614
V/C Ratio(X)	0.00	0.79		0.00	1.00	0.00				0.82	0.00	1.02
Avail Cap(c_a), veh/h	0	3865		0	2899	0				1381	0	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.8	0.0	0.0	29.0	0.0				33.0	0.0	36.8
Incr Delay (d2), s/veh	0.0	1.8	0.0	0.0	16.8	0.0				3.8	0.0	40.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	16.5	0.0	0.0	29.1	0.0				14.7	0.0	23.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.6	0.0	0.0	45.8	0.0				36.8	0.0	77.5
LnGrp LOS	A	C		A	F	A				D	A	F
Approach Vol, veh/h		3073			2900						1757	
Approach Delay, s/veh		25.6			45.8						51.3	
Approach LOS		C			D						D	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		68.0		52.0		68.0						
Change Period (Y+Rc), s		6.0		5.5		6.0						
Max Green Setting (Gmax), s		62.0		46.5		62.0						
Max Q Clear Time (g_c+I1), s		42.4		48.5		64.0						
Green Ext Time (p_c), s		18.2		0.0		0.0						
Intersection Summary												
HCM 6th Ctrl Delay			39.0									
HCM 6th LOS			D									
Notes												
User approved volume balancing among the lanes for turning movement.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

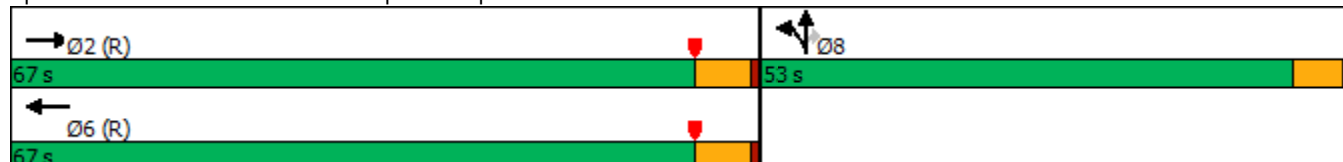
Timings
2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

	→	←	↖	↗	↑	↘
Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations	↑↑↑	↑↑↑	↗	↗	↕	↗
Traffic Volume (vph)	2989	2844	595	768	0	1191
Future Volume (vph)	2989	2844	595	768	0	1191
Turn Type	NA	NA	Free	Split	NA	Perm
Protected Phases	2	6		8	8	
Permitted Phases			Free			8
Detector Phase	2	6		8	8	8
Switch Phase						
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	33.0	33.0		22.0	22.0	22.0
Total Split (s)	67.0	67.0		53.0	53.0	53.0
Total Split (%)	55.8%	55.8%		44.2%	44.2%	44.2%
Yellow Time (s)	5.0	5.0		4.5	4.5	4.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		5.5	5.5	5.5
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Min	C-Min		None	None	None
Act Effct Green (s)	61.0	61.0	120.0	47.5	47.5	47.5
Actuated g/C Ratio	0.51	0.51	1.00	0.40	0.40	0.40
v/c Ratio	1.10	0.78	0.40	0.97	1.13	0.87
Control Delay	79.1	26.0	0.8	61.9	110.7	46.2
Queue Delay	0.0	0.8	0.0	0.0	0.0	0.0
Total Delay	79.1	26.7	0.8	61.9	110.7	46.2
LOS	E	C	A	E	F	D
Approach Delay	79.1	22.2			72.9	
Approach LOS	E	C			E	
Intersection Summary						
Cycle Length: 120						
Actuated Cycle Length: 120						
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection						
Natural Cycle: 100						
Control Type: Actuated-Coordinated						
Maximum v/c Ratio: 1.13						
Intersection Signal Delay: 54.3				Intersection LOS: D		
Intersection Capacity Utilization 106.6%				ICU Level of Service G		
Analysis Period (min) 15						

Splits and Phases: 2: I-215 NB Ramps & Newport Rd.



HCM 6th Signalized Intersection Summary 2: I-215 NB Ramps & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑			↑↑↑↑	↗	↖	↔	↗			
Traffic Volume (veh/h)	0	2989	0	0	2844	595	768	0	1191	0	0	0
Future Volume (veh/h)	0	2989	0	0	2844	595	768	0	1191	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	0	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	0	3114	0	0	2962	0	1048	0	532			
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	0	2	0	0	2	2	2	2	2			
Cap, veh/h	0	3059	0	0	4078		1279	0	569			
Arrive On Green	0.00	0.55	0.00	0.00	0.55	0.00	0.36	0.00	0.36			
Sat Flow, veh/h	0	5611	0	0	7481	1585	3563	0	1585			
Grp Volume(v), veh/h	0	3114	0	0	2962	0	1048	0	532			
Grp Sat Flow(s),veh/h/ln	0	1870	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	0.0	65.4	0.0	0.0	35.8	0.0	32.1	0.0	38.9			
Cycle Q Clear(g_c), s	0.0	65.4	0.0	0.0	35.8	0.0	32.1	0.0	38.9			
Prop In Lane	0.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	3059	0	0	4078		1279	0	569			
V/C Ratio(X)	0.00	1.02	0.00	0.00	0.73		0.82	0.00	0.93			
Avail Cap(c_a), veh/h	0	3059	0	0	4078		1410	0	627			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.09	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	27.3	0.0	0.0	20.6	0.0	34.9	0.0	37.1			
Incr Delay (d2), s/veh	0.0	21.0	0.0	0.0	0.1	0.0	3.2	0.0	19.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	31.5	0.0	0.0	14.0	0.0	13.8	0.0	17.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	48.3	0.0	0.0	20.7	0.0	38.2	0.0	56.7			
LnGrp LOS	A	F	A	A	C		D	A	E			
Approach Vol, veh/h	3114			2962			1580					
Approach Delay, s/veh	48.3			20.7			44.4					
Approach LOS	D			C			D					
Timer - Assigned Phs	2			6			8					
Phs Duration (G+Y+Rc), s	71.4			71.4			48.6					
Change Period (Y+Rc), s	6.0			6.0			5.5					
Max Green Setting (Gmax), s	61.0			61.0			47.5					
Max Q Clear Time (g_c+I1), s	67.4			37.8			40.9					
Green Ext Time (p_c), s	0.0			20.9			2.2					
Intersection Summary												
HCM 6th Ctrl Delay	36.8											
HCM 6th LOS	D											
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.												

Timings
3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  	 	  	 	 	 	 	 	 
Traffic Volume (vph)	521	2931	150	2304	697	180	207	158	133	439
Future Volume (vph)	521	2931	150	2304	697	180	207	158	133	439
Turn Type	Prot	NA	Prot	NA	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4	3	8	2	2		6	6	7
Permitted Phases							2			6
Detector Phase	7	4	3	8	2	2	2	6	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.2	9.6	34.8	36.8	36.8	36.8	15.8	15.8	9.6
Total Split (s)	23.0	66.0	10.4	53.4	37.4	37.4	37.4	16.2	16.2	23.0
Total Split (%)	17.7%	50.8%	8.0%	41.1%	28.8%	28.8%	28.8%	12.5%	12.5%	17.7%
Yellow Time (s)	3.6	5.2	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	4.6	5.8	5.8	5.8	5.8	5.8	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag						Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes						Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None	None
Act Effect Green (s)	18.4	59.8	5.8	47.6	28.8	28.8	28.8	10.4	10.4	30.0
Actuated g/C Ratio	0.14	0.47	0.05	0.37	0.23	0.23	0.23	0.08	0.08	0.24
v/c Ratio	1.07	1.49	0.98	1.35	0.81	0.81	0.45	0.57	0.89	0.63
Control Delay	112.5	251.3	127.6	192.6	56.2	64.1	15.8	65.7	107.6	38.6
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.5	251.3	127.6	192.6	56.2	64.1	15.8	65.7	107.6	38.6
LOS	F	F	F	F	E	E	B	E	F	D
Approach Delay		233.0		188.9		50.7			57.1	
Approach LOS		F		F		D			E	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 127.3

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.49

Intersection Signal Delay: 180.3

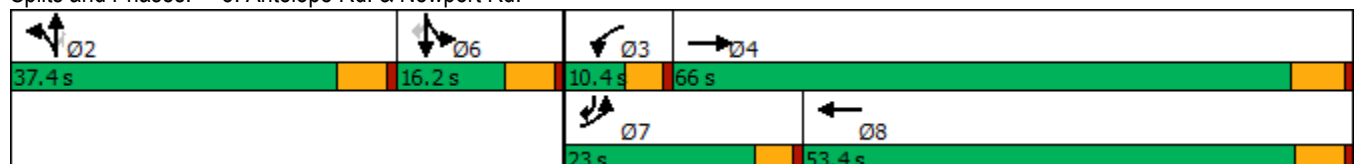
Intersection LOS: F

Intersection Capacity Utilization 117.2%

ICU Level of Service H

Analysis Period (min) 15

Splits and Phases: 3: Antelope Rd. & Newport Rd.



HCM 6th Signalized Intersection Summary

3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	521	2931	496	150	2304	184	697	180	207	158	133	439
Future Volume (veh/h)	521	2931	496	150	2304	184	697	180	207	158	133	439
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	532	2991	384	153	2351	185	654	264	132	161	136	113
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	504	2193	269	159	1822	141	773	406	341	285	154	632
Arrive On Green	0.15	0.48	0.48	0.05	0.38	0.38	0.22	0.22	0.22	0.08	0.08	0.08
Sat Flow, veh/h	3456	4597	564	3456	4832	375	3563	1870	1570	3456	1870	2739
Grp Volume(v), veh/h	532	2178	1197	153	1647	889	654	264	132	161	136	113
Grp Sat Flow(s),veh/h/ln	1728	1702	1756	1728	1702	1803	1781	1870	1570	1728	1870	1369
Q Serve(g_s), s	18.4	60.2	60.2	5.6	47.6	47.6	22.2	16.2	9.1	5.7	9.1	4.2
Cycle Q Clear(g_c), s	18.4	60.2	60.2	5.6	47.6	47.6	22.2	16.2	9.1	5.7	9.1	4.2
Prop In Lane	1.00		0.32	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	504	1624	838	159	1284	680	773	406	341	285	154	632
V/C Ratio(X)	1.06	1.34	1.43	0.96	1.28	1.31	0.85	0.65	0.39	0.57	0.88	0.18
Avail Cap(c_a), veh/h	504	1624	838	159	1284	680	892	468	393	285	154	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	33.0	33.0	60.1	39.3	39.3	47.4	45.0	42.2	55.7	57.3	39.2
Incr Delay (d2), s/veh	55.6	157.9	199.7	59.9	133.2	149.1	6.8	2.6	0.7	2.6	40.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.6	58.2	69.8	3.7	42.6	48.1	10.3	7.6	3.5	2.5	5.9	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	109.5	190.9	232.7	120.0	172.5	188.4	54.1	47.6	42.9	58.3	97.8	39.3
LnGrp LOS	F	F	F	F	F	F	D	D	D	E	F	D
Approach Vol, veh/h	3907			2689			1050			410		
Approach Delay, s/veh	192.6			174.8			51.1			66.2		
Approach LOS	F			F			D			E		
Timer - Assigned Phs	2			3			4			6		
Phs Duration (G+Y+Rc), s	33.2			10.4			66.4			16.2		
Change Period (Y+Rc), s	5.8			4.6			6.2			5.8		
Max Green Setting (Gmax), s	31.6			5.8			59.8			10.4		
Max Q Clear Time (g_c+I1), s	24.2			7.6			62.2			11.1		
Green Ext Time (p_c), s	2.7			0.0			0.0			0.0		

Intersection Summary

HCM 6th Ctrl Delay 161.8

HCM 6th LOS F

Notes

User approved volume balancing among the lanes for turning movement.

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

Timings
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	220	838	28	601	369	179	379	55	518	335
Future Volume (vph)	220	838	28	601	369	179	379	55	518	335
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4	3	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	7	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	9.6	30.8	30.8	9.6	39.5	39.5	9.6	16.5
Total Split (s)	30.0	51.4	9.6	31.0	31.0	26.0	42.0	42.0	17.0	33.0
Total Split (%)	25.0%	42.8%	8.0%	25.8%	25.8%	21.7%	35.0%	35.0%	14.2%	27.5%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effect Green (s)	18.8	44.1	5.2	25.8	25.8	16.0	24.7	24.7	12.8	21.4
Actuated g/C Ratio	0.18	0.42	0.05	0.25	0.25	0.15	0.24	0.24	0.12	0.21
v/c Ratio	0.78	0.82	0.19	0.78	0.64	0.75	0.51	0.13	2.71	0.77
Control Delay	60.1	33.4	56.3	45.8	12.3	61.7	36.7	0.6	805.4	43.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.1	33.4	56.3	45.8	12.3	61.7	36.7	0.6	805.4	43.1
LOS	E	C	E	D	B	E	D	A	F	D
Approach Delay		38.0		33.7			40.7			430.2
Approach LOS		D		C			D			F

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 104.1

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 2.71

Intersection Signal Delay: 139.8

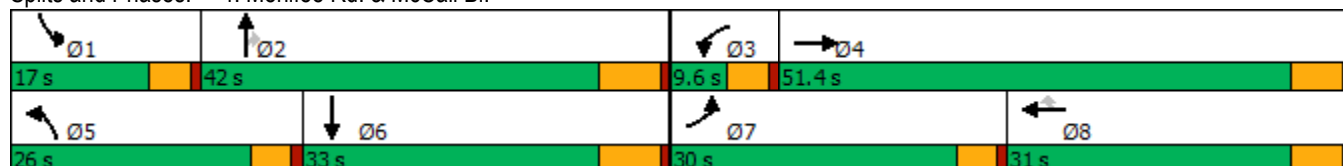
Intersection LOS: F

Intersection Capacity Utilization 93.5%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 4: Meniffee Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	838	218	28	601	369	179	379	55	518	335	167
Future Volume (veh/h)	220	838	218	28	601	369	179	379	55	518	335	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	250	952	201	32	683	384	203	431	32	589	381	73
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	1184	250	107	974	433	241	623	276	253	543	103
Arrive On Green	0.16	0.41	0.41	0.03	0.27	0.27	0.14	0.18	0.18	0.14	0.18	0.18
Sat Flow, veh/h	1781	2920	616	3456	3554	1582	1781	3554	1574	1781	2980	566
Grp Volume(v), veh/h	250	579	574	32	683	384	203	431	32	589	226	228
Grp Sat Flow(s),veh/h/ln	1781	1777	1760	1728	1777	1582	1781	1777	1574	1781	1777	1769
Q Serve(g_s), s	11.9	25.1	25.2	0.8	15.1	20.3	9.7	9.9	1.5	12.4	10.4	10.6
Cycle Q Clear(g_c), s	11.9	25.1	25.2	0.8	15.1	20.3	9.7	9.9	1.5	12.4	10.4	10.6
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	289	720	713	107	974	433	241	623	276	253	324	323
V/C Ratio(X)	0.87	0.80	0.81	0.30	0.70	0.89	0.84	0.69	0.12	2.33	0.70	0.71
Avail Cap(c_a), veh/h	518	928	919	198	1026	457	437	1445	640	253	539	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	22.9	22.9	41.4	28.5	30.4	36.8	33.8	30.3	37.4	33.4	33.5
Incr Delay (d2), s/veh	3.0	4.0	4.1	0.6	2.0	18.0	3.1	1.4	0.2	609.7	2.7	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	10.1	10.1	0.3	6.2	9.3	4.1	4.0	0.6	47.8	4.3	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	26.9	27.0	41.9	30.5	48.4	39.9	35.2	30.5	647.1	36.1	36.4
LnGrp LOS	D	C	C	D	C	D	D	D	C	F	D	D
Approach Vol, veh/h		1403			1099			666			1043	
Approach Delay, s/veh		29.0			37.1			36.4			381.2	
Approach LOS		C			D			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	21.8	7.3	41.2	16.4	22.4	18.8	29.7				
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	12.4	35.5	5.0	45.6	21.4	26.5	25.4	25.2				
Max Q Clear Time (g_c+I1), s	14.4	11.9	2.8	27.2	11.7	12.6	13.9	22.3				
Green Ext Time (p_c), s	0.0	2.5	0.0	6.9	0.2	1.9	0.3	1.6				
Intersection Summary												
HCM 6th Ctrl Delay				119.5								
HCM 6th LOS				F								

Timings

5: Meniffee Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

	←	↖	↑	↗	↘	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↖	↑↑	↖	↖	↑↑
Traffic Volume (vph)	211	180	537	249	242	460
Future Volume (vph)	211	180	537	249	242	460
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Detector Phase	8	8	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0
Minimum Split (s)	26.5	26.5	27.5	27.5	9.0	16.5
Total Split (s)	39.0	39.0	43.0	43.0	38.0	81.0
Total Split (%)	32.5%	32.5%	35.8%	35.8%	31.7%	67.5%
Yellow Time (s)	5.5	5.5	5.5	5.5	3.0	5.5
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)	6.5	6.5	6.5	6.5	4.0	6.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	Min	Min	None	Min
Act Effect Green (s)	15.0	15.0	18.0	18.0	15.8	38.0
Actuated g/C Ratio	0.22	0.22	0.27	0.27	0.24	0.57
v/c Ratio	0.55	0.37	0.58	0.42	0.60	0.23
Control Delay	30.9	6.9	24.7	5.7	30.8	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.9	6.9	24.7	5.7	30.8	7.5
LOS	C	A	C	A	C	A
Approach Delay	19.8		18.7			15.5
Approach LOS	B		B			B

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 66.7

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 17.7

Intersection LOS: B

Intersection Capacity Utilization 54.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Meniffee Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
5: Menifee Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	211	180	537	249	242	460
Future Volume (veh/h)	211	180	537	249	242	460
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	218	96	554	215	249	474
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	364	324	930	415	323	1869
Arrive On Green	0.20	0.20	0.26	0.26	0.18	0.53
Sat Flow, veh/h	1781	1585	3647	1585	1781	3647
Grp Volume(v), veh/h	218	96	554	215	249	474
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	1781	1777
Q Serve(g_s), s	5.3	2.5	6.6	5.6	6.4	3.5
Cycle Q Clear(g_c), s	5.3	2.5	6.6	5.6	6.4	3.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	364	324	930	415	323	1869
V/C Ratio(X)	0.60	0.30	0.60	0.52	0.77	0.25
Avail Cap(c_a), veh/h	1201	1069	2691	1200	1256	5492
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	17.4	16.2	15.6	15.2	18.8	6.2
Incr Delay (d2), s/veh	1.6	0.5	0.6	1.0	3.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.7	2.0	1.6	2.4	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.0	16.7	16.2	16.2	22.7	6.3
LnGrp LOS	B	B	B	B	C	A
Approach Vol, veh/h	314		769			723
Approach Delay, s/veh	18.3		16.2			12.0
Approach LOS	B		B			B
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	12.7	19.1			31.9	16.4
Change Period (Y+Rc), s	4.0	6.5			6.5	6.5
Max Green Setting (Gmax), s	34.0	36.5			74.5	32.5
Max Q Clear Time (g_c+l1), s	8.4	8.6			5.5	7.3
Green Ext Time (p_c), s	0.7	4.0			2.9	0.9
Intersection Summary						
HCM 6th Ctrl Delay			14.9			
HCM 6th LOS			B			

Timings
6: Meniffee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	600	2156	416	1646	75	313	351	535	106	243	499
Future Volume (vph)	600	2156	416	1646	75	313	351	535	106	243	499
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0
Minimum Split (s)	9.6	34.8	9.6	32.8	32.8	9.6	39.8	9.6	9.6	35.8	9.6
Total Split (s)	31.0	55.7	11.3	36.0	36.0	14.8	40.8	11.3	12.2	38.2	31.0
Total Split (%)	25.8%	46.4%	9.4%	30.0%	30.0%	12.3%	34.0%	9.4%	10.2%	31.8%	25.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.8	3.6	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.8	4.6	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effect Green (s)	26.5	50.1	6.7	30.3	30.3	10.2	18.6	26.5	7.6	16.0	43.7
Actuated g/C Ratio	0.25	0.48	0.06	0.29	0.29	0.10	0.18	0.25	0.07	0.15	0.42
v/c Ratio	1.46	1.10	2.06	1.22	0.15	1.02	0.61	1.23	0.90	0.49	0.78
Control Delay	250.5	80.5	518.8	138.7	0.5	101.2	43.2	146.3	105.5	42.7	29.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	250.5	80.5	518.8	138.7	0.5	101.2	43.2	146.3	105.5	42.7	29.3
LOS	F	F	F	F	A	F	D	F	F	D	C
Approach Delay		114.2		207.9			104.3			42.6	
Approach LOS		F		F			F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 104

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 2.06

Intersection Signal Delay: 131.9

Intersection LOS: F

Intersection Capacity Utilization 100.2%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 6: Meniffee Rd. & Newport Rd.

			
Ø1	Ø2	Ø3	Ø4
12.2 s	40.8 s	11.3 s	55.7 s
			
Ø5	Ø6	Ø7	Ø8
14.8 s	38.2 s	31 s	36 s

HCM 6th Signalized Intersection Summary
6: Menifee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Traffic Volume (veh/h)	600	2156	271	416	1646	75	313	351	535	106	243	499
Future Volume (veh/h)	600	2156	271	416	1646	75	313	351	535	106	243	499
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	659	2369	286	457	1809	47	344	386	518	116	267	362
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	1926	226	193	1285	393	294	1036	543	113	959	776
Arrive On Green	0.22	0.42	0.42	0.06	0.25	0.25	0.08	0.29	0.29	0.06	0.27	0.27
Sat Flow, veh/h	1781	4631	545	3456	5106	1563	3456	3554	1557	1781	3554	1583
Grp Volume(v), veh/h	659	1724	931	457	1809	47	344	386	518	116	267	362
Grp Sat Flow(s),veh/h/ln	1781	1702	1772	1728	1702	1563	1728	1777	1557	1781	1777	1583
Q Serve(g_s), s	26.4	49.9	49.9	6.7	30.2	2.8	10.2	10.4	35.0	7.6	7.1	18.1
Cycle Q Clear(g_c), s	26.4	49.9	49.9	6.7	30.2	2.8	10.2	10.4	35.0	7.6	7.1	18.1
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	1416	737	193	1285	393	294	1036	543	113	959	776
V/C Ratio(X)	1.68	1.22	1.26	2.37	1.41	0.12	1.17	0.37	0.95	1.03	0.28	0.47
Avail Cap(c_a), veh/h	392	1416	737	193	1285	393	294	1036	543	113	959	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.8	35.1	35.1	56.7	44.9	34.6	54.9	33.8	38.3	56.2	34.6	20.2
Incr Delay (d2), s/veh	317.7	104.9	129.1	631.6	188.2	0.1	107.1	0.2	27.6	92.5	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	45.8	39.9	46.5	19.8	34.6	1.0	8.7	4.4	18.3	6.2	3.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	364.5	139.9	164.1	688.2	233.1	34.8	162.0	34.0	65.9	148.7	34.7	20.7
LnGrp LOS	F	F	F	F	F	C	F	C	E	F	C	C
Approach Vol, veh/h		3314			2313			1248			745	
Approach Delay, s/veh		191.4			319.0			82.5			45.6	
Approach LOS		F			F			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.2	40.8	11.3	55.7	14.8	38.2	31.0	36.0				
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8				
Max Green Setting (Gmax), s	7.6	35.0	6.7	49.9	10.2	32.4	26.4	30.2				
Max Q Clear Time (g_c+I1), s	9.6	37.0	8.7	51.9	12.2	20.1	28.4	32.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			198.0									
HCM 6th LOS			F									

Timings

Salt Creek TA (JN:15470)

7: Lindenberger Rd. & Simpson Rd.

09/07/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	55	355	37	62	350	35	39	128	18	97	48
Future Volume (vph)	55	355	37	62	350	35	39	128	18	97	48
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2	1	6	
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	26.2	26.2	9.6	28.2	28.2	9.6	30.2	9.6	26.2	26.2
Total Split (s)	20.0	44.0	44.0	21.0	45.0	45.0	17.0	40.0	15.0	38.0	38.0
Total Split (%)	16.7%	36.7%	36.7%	17.5%	37.5%	37.5%	14.2%	33.3%	12.5%	31.7%	31.7%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min	Min
Act Effect Green (s)	7.9	20.9	20.9	8.1	21.1	21.1	7.2	16.0	6.3	13.4	13.4
Actuated g/C Ratio	0.12	0.33	0.33	0.13	0.33	0.33	0.11	0.25	0.10	0.21	0.21
v/c Ratio	0.29	0.68	0.07	0.32	0.35	0.07	0.23	0.30	0.12	0.29	0.13
Control Delay	37.0	27.5	0.2	36.9	19.1	0.2	37.4	14.9	38.4	30.2	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.0	27.5	0.2	36.9	19.1	0.2	37.4	14.9	38.4	30.2	0.7
LOS	D	C	A	D	B	A	D	B	D	C	A
Approach Delay		26.4			20.1			18.1		22.4	
Approach LOS		C			C			B		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 64.3

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 22.1

Intersection LOS: C

Intersection Capacity Utilization 52.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: Lindenberger Rd. & Simpson Rd.

			
Ø1	Ø2	Ø3	Ø4
15 s	40 s	21 s	44 s
			
Ø5	Ø6	Ø7	Ø8
17 s	38 s	20 s	45 s

HCM 6th Signalized Intersection Summary
7: Lindenberger Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	355	37	62	350	35	39	128	106	18	97	48
Future Volume (veh/h)	55	355	37	62	350	35	39	128	106	18	97	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	408	28	71	402	33	45	147	79	21	111	32
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	527	447	110	1017	454	82	494	250	45	369	306
Arrive On Green	0.06	0.28	0.28	0.06	0.29	0.29	0.05	0.22	0.22	0.03	0.20	0.20
Sat Flow, veh/h	1781	1870	1585	1781	3554	1585	1781	2268	1150	1781	1870	1555
Grp Volume(v), veh/h	63	408	28	71	402	33	45	113	113	21	111	32
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1585	1781	1777	1641	1781	1870	1555
Q Serve(g_s), s	1.8	10.5	0.7	2.0	4.8	0.8	1.3	2.8	3.0	0.6	2.6	0.9
Cycle Q Clear(g_c), s	1.8	10.5	0.7	2.0	4.8	0.8	1.3	2.8	3.0	0.6	2.6	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	102	527	447	110	1017	454	82	387	357	45	369	306
V/C Ratio(X)	0.62	0.77	0.06	0.65	0.40	0.07	0.55	0.29	0.32	0.47	0.30	0.10
Avail Cap(c_a), veh/h	525	1353	1147	559	2640	1177	423	1150	1062	355	1139	947
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	17.2	13.7	24.0	15.0	13.6	24.4	17.1	17.2	25.1	17.9	17.2
Incr Delay (d2), s/veh	2.2	2.5	0.1	2.4	0.2	0.1	2.1	0.4	0.5	2.8	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.8	0.2	0.8	1.5	0.2	0.5	1.0	1.0	0.3	1.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	19.7	13.8	26.3	15.3	13.7	26.5	17.5	17.7	27.9	18.4	17.3
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h	499				506				271			
Approach Delay, s/veh	20.2				16.7				19.1			
Approach LOS	C				B				B			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.9	17.6	7.8	20.9	7.0	16.5	7.6	21.2				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	10.4	33.8	16.4	37.8	12.4	31.8	15.4	38.8				
Max Q Clear Time (g_c+I1), s	2.6	5.0	4.0	12.5	3.3	4.6	3.8	6.8				
Green Ext Time (p_c), s	0.0	1.1	0.0	2.3	0.0	0.6	0.0	2.5				
Intersection Summary												
HCM 6th Ctrl Delay	18.7											
HCM 6th LOS	B											

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	454	29	20	417	17	12
Future Vol, veh/h	454	29	20	417	17	12
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	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	493	32	22	453	18	13

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	525	0	780	263
Stage 1	-	-	-	-	509	-
Stage 2	-	-	-	-	271	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1038	-	332	735
Stage 1	-	-	-	-	569	-
Stage 2	-	-	-	-	750	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1038	-	325	735
Mov Cap-2 Maneuver	-	-	-	-	498	-
Stage 1	-	-	-	-	569	-
Stage 2	-	-	-	-	734	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	11.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	575	-	-	1038	-
HCM Lane V/C Ratio	0.055	-	-	0.021	-
HCM Control Delay (s)	11.6	-	-	8.5	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Timings
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	169	488	298	135	126	128
Future Volume (vph)	169	488	298	135	126	128
Turn Type	Prot	pm+ov	Prot	NA	NA	Perm
Protected Phases	4	5	5	2	6	
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	6
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	16.2	9.6	9.6	16.2	43.2	43.2
Total Split (s)	46.0	17.0	17.0	74.0	57.0	57.0
Total Split (%)	38.3%	14.2%	14.2%	61.7%	47.5%	47.5%
Yellow Time (s)	5.2	3.6	3.6	5.2	5.2	5.2
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)	6.2	4.6	4.6	6.2	6.2	6.2
Lead/Lag		Lead	Lead		Lag	Lag
Lead-Lag Optimize?		Yes	Yes		Yes	Yes
Recall Mode	None	None	None	Min	Min	Min
Act Effect Green (s)	11.7	31.0	12.7	31.7	14.1	14.1
Actuated g/C Ratio	0.21	0.55	0.23	0.56	0.25	0.25
v/c Ratio	0.53	0.31	0.44	0.15	0.16	0.29
Control Delay	27.5	1.7	23.5	6.2	16.2	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.5	1.7	23.5	6.2	16.2	4.9
LOS	C	A	C	A	B	A
Approach Delay	8.3			18.1	10.5	
Approach LOS	A			B	B	

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 56.4	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 11.9	Intersection LOS: B
Intersection Capacity Utilization 43.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 9: Briggs Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
9: Briggs Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	169	488	298	135	126	128
Future Volume (veh/h)	169	488	298	135	126	128
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	194	561	343	155	145	147
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	414	1065	517	921	856	378
Arrive On Green	0.23	0.23	0.15	0.49	0.24	0.24
Sat Flow, veh/h	1781	2790	3456	1870	3647	1569
Grp Volume(v), veh/h	194	561	343	155	145	147
Grp Sat Flow(s),veh/h/ln	1781	1395	1728	1870	1777	1569
Q Serve(g_s), s	4.2	7.0	4.2	2.1	1.5	3.5
Cycle Q Clear(g_c), s	4.2	7.0	4.2	2.1	1.5	3.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	414	1065	517	921	856	378
V/C Ratio(X)	0.47	0.53	0.66	0.17	0.17	0.39
Avail Cap(c_a), veh/h	1574	2882	951	2815	4007	1769
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	14.9	10.8	18.1	6.3	13.5	14.3
Incr Delay (d2), s/veh	0.3	0.2	1.5	0.1	0.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.7	1.4	0.5	0.4	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.2	10.9	19.5	6.4	13.6	15.0
LnGrp LOS	B	B	B	A	B	B
Approach Vol, veh/h	755			498	292	
Approach Delay, s/veh	12.0			15.5	14.3	
Approach LOS	B			B	B	
Timer - Assigned Phs	2		4		5	6
Phs Duration (G+Y+Rc), s	28.4		16.7		11.3	17.0
Change Period (Y+Rc), s	6.2		6.2		4.6	6.2
Max Green Setting (Gmax), s	67.8		39.8		12.4	50.8
Max Q Clear Time (g_c+I1), s	4.1		9.0		6.2	5.5
Green Ext Time (p_c), s	0.8		1.5		0.6	1.3
Intersection Summary						
HCM 6th Ctrl Delay			13.6			
HCM 6th LOS			B			

Intersection

Intersection Delay, s/veh 478

Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	111	298	58	29	293	691	34	35	17	824	59	110
Future Vol, veh/h	111	298	58	29	293	691	34	35	17	824	59	110
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	119	320	63	32	315	743	37	38	18	886	64	118
Number of Lanes	1	1	1	0	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	3	3	2
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	3	2	3	1
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	2	3	1	3
HCM Control Delay	35.9	709.8	22.5	489.6
HCM LOS	E	F	C	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	3%	100%	0%	0%
Vol Thru, %	0%	67%	0%	100%	0%	29%	0%	100%	0%
Vol Right, %	0%	33%	0%	0%	100%	68%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	52	111	298	58	1013	824	59	110
LT Vol	34	0	111	0	0	29	824	0	0
Through Vol	0	35	0	298	0	293	0	59	0
RT Vol	0	17	0	0	58	691	0	0	110
Lane Flow Rate	37	57	119	320	63	1090	886	64	118
Geometry Grp	8	8	7	7	7	8	8	8	8
Degree of Util (X)	0.111	0.158	0.287	0.726	0.131	2.511	2.225	0.152	0.258
Departure Headway (Hd)	17.585	16.725	13.88	13.326	12.55	10.367	12.01	11.475	10.726
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	205	216	261	276	288	360	310	315	337
Service Time	15.285	14.425	11.58	11.026	10.25	8.067	9.71	9.175	8.426
HCM Lane V/C Ratio	0.18	0.264	0.456	1.159	0.219	3.028	2.858	0.203	0.35
HCM Control Delay	22.5	22.5	22.1	44.7	17.1	709.8	587	16.2	17.1
HCM Lane LOS	C	C	C	E	C	F	F	C	C
HCM 95th-tile Q	0.4	0.5	1.2	5.1	0.4	70.2	50.8	0.5	1

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕			↕			↕	
Traffic Vol, veh/h	0	896	243	213	711	0	302	113	327	1	71	0
Future Vol, veh/h	0	896	243	213	711	0	302	113	327	1	71	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	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	-	-	205	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	963	261	229	765	0	325	122	352	1	76	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	765	0	0	1224	0	0	2224	2186	963	2554	2447	765
Stage 1	-	-	-	-	-	-	963	963	-	1223	1223	-
Stage 2	-	-	-	-	-	-	1261	1223	-	1331	1224	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	848	-	-	570	-	-	~ 31	~ 46	~ 310	18	~ 31	403
Stage 1	-	-	-	-	-	-	~ 307	334	-	219	252	-
Stage 2	-	-	-	-	-	-	~ 209	252	-	190	252	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	848	-	-	570	-	-	-	~ 14	~ 310	-	~ 9	403
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	~ 14	-	-	~ 9	-
Stage 1	-	-	-	-	-	-	~ 307	334	-	219	~ 76	-
Stage 2	-	-	-	-	-	-	-	~ 76	-	-	252	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			3.6								
HCM LOS							-			-		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	-	848	-	-	570	-	-	-				
HCM Lane V/C Ratio	-	-	-	-	0.402	-	-	-				
HCM Control Delay (s)	-	0	-	-	15.5	0	-	-				
HCM Lane LOS	-	A	-	-	C	A	-	-				
HCM 95th %tile Q(veh)	-	0	-	-	1.9	-	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Timings
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	176	238	59	73	168	49	90	1305	51	840
Future Volume (vph)	176	238	59	73	168	49	90	1305	51	840
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.2	29.2	9.6	29.2	29.2	9.6	29.2	9.6	27.2
Total Split (s)	20.0	35.0	35.0	17.0	32.0	32.0	19.0	55.0	13.0	49.0
Total Split (%)	16.7%	29.2%	29.2%	14.2%	26.7%	26.7%	15.8%	45.8%	10.8%	40.8%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	14.2	24.2	24.2	9.0	16.5	16.5	10.1	49.4	7.1	46.6
Actuated g/C Ratio	0.13	0.23	0.23	0.08	0.15	0.15	0.09	0.46	0.07	0.44
v/c Ratio	0.81	0.61	0.14	0.53	0.64	0.14	0.59	0.99	0.47	0.74
Control Delay	72.9	46.3	0.6	62.6	53.4	0.8	62.7	50.6	64.5	30.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.9	46.3	0.6	62.6	53.4	0.8	62.7	50.6	64.5	30.8
LOS	E	D	A	E	D	A	E	D	E	C
Approach Delay		50.5			46.9			51.3		32.4
Approach LOS		D			D			D		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 106.8

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 44.8

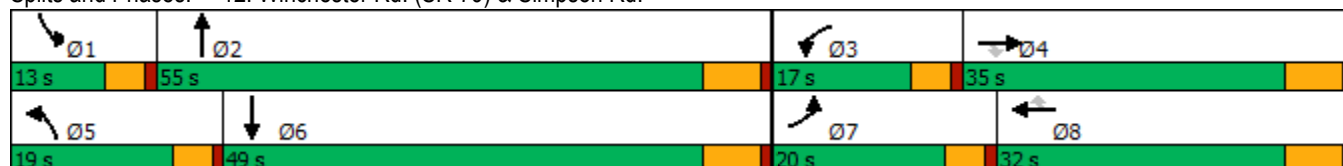
Intersection LOS: D

Intersection Capacity Utilization 83.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 12: Winchester Rd. (SR-79) & Simpson Rd.



HCM 6th Signalized Intersection Summary
12: Winchester Rd. (SR-79) & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	238	59	73	168	49	90	1305	167	51	840	184
Future Volume (veh/h)	176	238	59	73	168	49	90	1305	167	51	840	184
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	191	259	31	79	183	41	98	1418	108	55	913	159
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	225	372	315	102	243	205	125	1592	121	72	1348	235
Arrive On Green	0.13	0.20	0.20	0.06	0.13	0.13	0.07	0.48	0.48	0.04	0.45	0.45
Sat Flow, veh/h	1781	1870	1583	1781	1870	1574	1781	3348	254	1781	3024	526
Grp Volume(v), veh/h	191	259	31	79	183	41	98	750	776	55	536	536
Grp Sat Flow(s),veh/h/ln	1781	1870	1583	1781	1870	1574	1781	1777	1825	1781	1777	1774
Q Serve(g_s), s	10.0	12.2	1.5	4.1	8.9	2.2	5.1	36.3	36.8	2.9	22.7	22.7
Cycle Q Clear(g_c), s	10.0	12.2	1.5	4.1	8.9	2.2	5.1	36.3	36.8	2.9	22.7	22.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.30
Lane Grp Cap(c), veh/h	225	372	315	102	243	205	125	845	868	72	792	791
V/C Ratio(X)	0.85	0.70	0.10	0.78	0.75	0.20	0.79	0.89	0.89	0.77	0.68	0.68
Avail Cap(c_a), veh/h	289	568	481	233	509	428	271	915	939	158	802	801
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.6	35.3	31.0	44.1	39.8	36.8	43.4	22.6	22.7	45.0	20.8	20.8
Incr Delay (d2), s/veh	14.1	2.3	0.1	4.7	4.7	0.5	4.1	10.0	10.5	6.2	2.3	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	5.4	0.6	1.9	4.2	0.8	2.3	15.4	16.1	1.3	8.8	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.7	37.6	31.1	48.8	44.4	37.3	47.4	32.6	33.2	51.2	23.1	23.1
LnGrp LOS	D	D	C	D	D	D	D	C	C	D	C	C
Approach Vol, veh/h	481			303			1624			1127		
Approach Delay, s/veh	44.0			44.6			33.8			24.5		
Approach LOS	D			D			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.4	51.3	10.0	25.1	11.2	48.5	16.6	18.5				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	8.4	48.8	12.4	28.8	14.4	42.8	15.4	25.8				
Max Q Clear Time (g_c+I1), s	4.9	38.8	6.1	14.2	7.1	24.7	12.0	10.9				
Green Ext Time (p_c), s	0.0	6.3	0.0	1.1	0.1	6.0	0.1	0.8				
Intersection Summary												
HCM 6th Ctrl Delay	33.1											
HCM 6th LOS	C											

APPENDIX 6.3: OPENING YEAR (2029) 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)

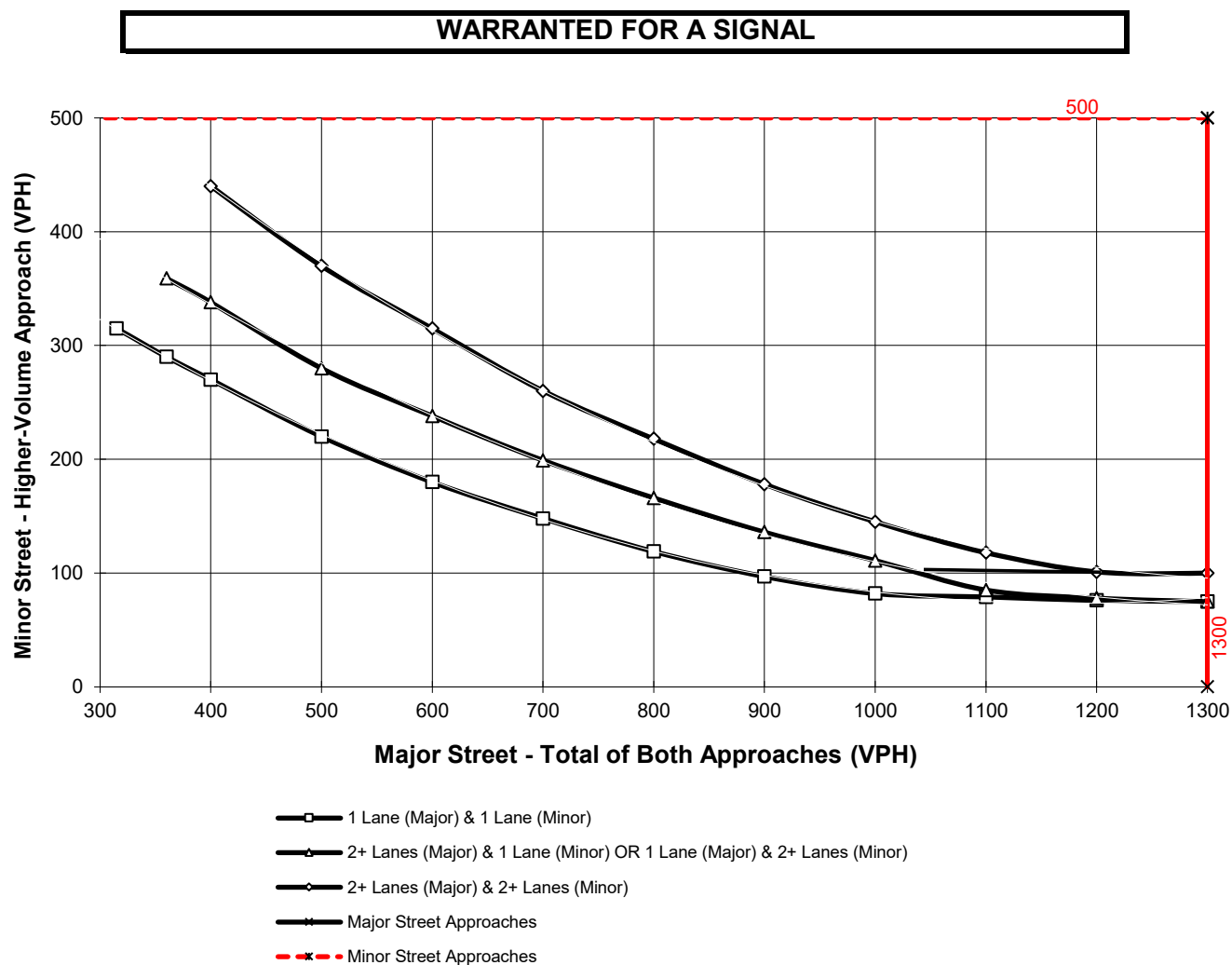
Traffic Conditions = **Opening Year (2029) Without Project Conditions - Weekday PM Peak Hour**

Major Street Name = **Simpson Rd.**

Total of Both Approaches (VPH) = **2010**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Leon Rd.**

High Volume Approach (VPH) = **732**
Number of Approach Lanes Minor Street = **1**



*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

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APPENDIX 6.4: OPENING YEAR (2029) WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	CALC	TRAFFIC CONDITIONS	2029 With Project
Jurisdiction: <u>City of Menifee</u>				CHK	<u>CP</u>	DATE <u>08/24/23</u>
Major Street: <u>Simpson Rd.</u>						DATE <u>08/24/23</u>
Minor Street: <u>Street A</u>					Critical Approach Speed (Major)	<u>45</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>11,733</u> vpd				Minor Street Future ADT = <u>389</u> vpd		
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);						☒
						or
In built up area of isolated community of < 10,000 population						☐

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN		RURAL		Minimum Requirements			
CONDITION A - Minimum Vehicular Volume		XX		EADT			
Satisfied		Not Satisfied		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Major Street		Minor Street		Urban	Rural	Urban	Rural
1 11,733		1 389		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		XX		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied		Not Satisfied		Urban	Rural	Urban	Rural
Major Street		Minor Street					
1 11,733		1 389		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		XX		2 CONDITIONS		2 CONDITIONS	
Satisfied		Not Satisfied		80%		80%	
No one condition satisfied, but following conditions fulfilled 80% of more		A					
		23%					
		B					
		46%					

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 (2029) WITHOUT PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

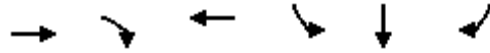
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Queues

Salt Creek TA (JN:15470)

09/07/2023

1: I-215 SB Ramps & Newport Rd.



Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1969	896	2450	408	417	419
v/c Ratio	0.42	0.48	0.70	0.80	0.78	0.79
Control Delay	12.3	0.9	17.2	51.6	47.6	47.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.3	0.9	17.2	51.6	47.6	47.8
Queue Length 50th (ft)	181	0	393	292	280	282
Queue Length 95th (ft)	249	0	543	369	358	360
Internal Link Dist (ft)	617		509		864	
Turn Bay Length (ft)						425
Base Capacity (vph)	4685	1863	3514	659	677	677
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	0.42	0.48	0.70	0.62	0.62	0.62
Intersection Summary						

Queues

Salt Creek TA (JN:15470)

2: I-215 NB Ramps & Newport Rd.

09/07/2023



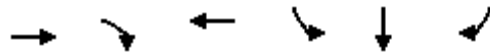
Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	1723	3143	682	427	405	395
v/c Ratio	0.52	0.72	0.44	0.73	0.84	0.65
Control Delay	16.6	20.1	0.9	43.0	50.4	37.0
Queue Delay	0.0	0.4	0.0	0.0	0.0	0.0
Total Delay	16.6	20.5	0.9	43.0	50.4	37.0
Queue Length 50th (ft)	256	419	0	289	297	242
Queue Length 95th (ft)	356	550	0	357	386	307
Internal Link Dist (ft)	414	635			1057	
Turn Bay Length (ft)						475
Base Capacity (vph)	3287	4382	1548	752	611	769
Starvation Cap Reductn	0	637	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	0.52	0.84	0.44	0.57	0.66	0.51
Intersection Summary						

Queues

Salt Creek TA (JN:15470)

09/07/2023

1: I-215 SB Ramps & Newport Rd.



Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	3073	627	2900	653	614	599
v/c Ratio	0.78	0.34	0.98	0.93	0.86	0.83
Control Delay	24.9	0.5	41.7	57.1	45.6	43.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.9	0.5	41.7	57.1	45.6	43.7
Queue Length 50th (ft)	472	0	~733	471	409	394
Queue Length 95th (ft)	511	0	#861	#700	#605	550
Internal Link Dist (ft)	617		509		864	
Turn Bay Length (ft)						425
Base Capacity (vph)	3929	1863	2947	721	738	738
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	0.78	0.34	0.98	0.91	0.83	0.81

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

Salt Creek TA (JN:15470)

2: I-215 NB Ramps & Newport Rd.

09/07/2023



Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	3114	2921	620	688	650	632
v/c Ratio	1.10	0.77	0.40	0.93	1.09	0.84
Control Delay	79.1	25.6	0.8	55.9	96.6	43.0
Queue Delay	0.0	0.7	0.0	0.0	0.0	0.0
Total Delay	79.1	26.3	0.8	55.9	96.6	43.0
Queue Length 50th (ft)	~910	442	0	504	~607	421
Queue Length 95th (ft)	#985	479	0	#747	#863	#625
Internal Link Dist (ft)	414	635			1057	
Turn Bay Length (ft)						475
Base Capacity (vph)	2840	3787	1548	737	598	753
Starvation Cap Reductn	0	465	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	1.10	0.88	0.40	0.93	1.09	0.84

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.

APPENDIX 6.6: OPENING YEAR (2029) WITH PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

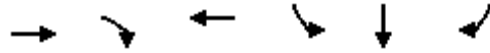
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Queues

Salt Creek TA (JN:15470)

09/07/2023

1: I-215 SB Ramps & Newport Rd.



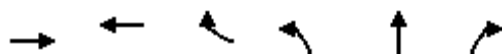
Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1969	896	2450	408	417	419
v/c Ratio	0.42	0.48	0.70	0.80	0.78	0.79
Control Delay	12.3	0.9	17.2	51.6	47.6	47.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.3	0.9	17.2	51.6	47.6	47.8
Queue Length 50th (ft)	181	0	393	292	280	282
Queue Length 95th (ft)	249	0	543	369	358	360
Internal Link Dist (ft)	617		509		864	
Turn Bay Length (ft)						425
Base Capacity (vph)	4685	1863	3514	659	677	677
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	0.42	0.48	0.70	0.62	0.62	0.62
Intersection Summary						

Queues

Salt Creek TA (JN:15470)

2: I-215 NB Ramps & Newport Rd.

09/07/2023



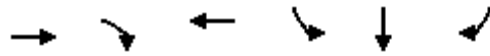
Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	1723	3205	682	432	410	407
v/c Ratio	0.53	0.74	0.44	0.72	0.84	0.66
Control Delay	16.9	20.8	0.9	42.6	50.2	37.1
Queue Delay	0.0	0.5	0.0	0.0	0.0	0.0
Total Delay	16.9	21.4	0.9	42.6	50.2	37.1
Queue Length 50th (ft)	259	438	0	292	301	250
Queue Length 95th (ft)	356	569	0	362	395	318
Internal Link Dist (ft)	414	635			1057	
Turn Bay Length (ft)						475
Base Capacity (vph)	3262	4350	1548	752	609	769
Starvation Cap Reductn	0	615	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	0.53	0.86	0.44	0.57	0.67	0.53
Intersection Summary						

Queues

Salt Creek TA (JN:15470)

09/07/2023

1: I-215 SB Ramps & Newport Rd.



Lane Group	EBT	EBR	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	3073	627	2900	653	614	599
v/c Ratio	0.78	0.34	0.98	0.93	0.86	0.83
Control Delay	24.9	0.5	41.7	57.1	45.6	43.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.9	0.5	41.7	57.1	45.6	43.7
Queue Length 50th (ft)	472	0	~733	471	409	394
Queue Length 95th (ft)	511	0	#861	#700	#605	550
Internal Link Dist (ft)	617		509		864	
Turn Bay Length (ft)						425
Base Capacity (vph)	3929	1863	2947	721	738	738
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	0.78	0.34	0.98	0.91	0.83	0.81

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

Salt Creek TA (JN:15470)

2: I-215 NB Ramps & Newport Rd.

09/07/2023



Lane Group	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	3114	2963	620	712	671	658
v/c Ratio	1.10	0.78	0.40	0.97	1.13	0.87
Control Delay	79.1	26.0	0.8	61.9	110.7	46.2
Queue Delay	0.0	0.8	0.0	0.0	0.0	0.0
Total Delay	79.1	26.7	0.8	61.9	110.7	46.2
Queue Length 50th (ft)	~910	453	0	533	~648	449
Queue Length 95th (ft)	#985	491	0	#787	#905	#670
Internal Link Dist (ft)	414	635			1057	
Turn Bay Length (ft)						475
Base Capacity (vph)	2840	3787	1548	737	595	753
Starvation Cap Reductn	0	461	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	1.10	0.89	0.40	0.97	1.13	0.87

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.

**APPENDIX 6.7: OPENING YEAR (2029) WITHOUT PROJECT
CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS
WITH IMPROVEMENTS**

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Timings
3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  	 	 		 	 	 
Traffic Volume (vph)	189	1776	317	95	2699	648	70	97	110	96	363
Future Volume (vph)	189	1776	317	95	2699	648	70	97	110	96	363
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8	2	2		6	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	2	2	2	6	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.2	31.2	9.6	34.8	36.8	36.8	36.8	15.8	15.8	9.6
Total Split (s)	11.0	62.9	62.9	12.1	64.0	39.2	39.2	39.2	15.8	15.8	11.0
Total Split (%)	8.5%	48.4%	48.4%	9.3%	49.2%	30.2%	30.2%	30.2%	12.2%	12.2%	8.5%
Yellow Time (s)	3.6	5.2	5.2	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	5.8	5.8	5.8	5.8	5.8	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag						Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes						Yes
Recall Mode	None	Min	Min	None	Min	None	None	None	None	None	None
Act Effect Green (s)	6.4	57.5	57.5	6.9	58.3	24.4	24.4	24.4	10.0	10.0	22.3
Actuated g/C Ratio	0.05	0.47	0.47	0.06	0.48	0.20	0.20	0.20	0.08	0.08	0.18
v/c Ratio	1.02	0.68	0.35	0.48	1.06	0.68	0.73	0.24	0.38	0.63	0.57
Control Delay	128.6	27.2	4.7	64.9	68.7	49.7	58.7	6.3	58.3	74.2	40.3
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	128.6	27.4	4.7	64.9	68.7	49.7	58.7	6.3	58.3	74.2	40.3
LOS	F	C	A	E	E	D	E	A	E	E	D
Approach Delay		32.7			68.6		47.2			49.5	
Approach LOS		C			E		D			D	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 121.2

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.06

Intersection Signal Delay: 51.8

Intersection LOS: D

Intersection Capacity Utilization 94.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Antelope Rd. & Newport Rd.

 Ø2	 Ø6	 Ø3	 Ø4
39.2 s	15.8 s	12.1 s	62.9 s
		 Ø7	 Ø8
		11 s	64 s

HCM 6th Signalized Intersection Summary

3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	1776	317	95	2699	120	648	70	97	110	96	363
Future Volume (veh/h)	189	1776	317	95	2699	120	648	70	97	110	96	363
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	191	1794	281	96	2726	76	570	191	37	111	97	110
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	2783	786	148	2631	73	687	361	302	296	156	433
Arrive On Green	0.05	0.50	0.50	0.04	0.48	0.48	0.19	0.19	0.19	0.08	0.08	0.08
Sat Flow, veh/h	3563	5611	1585	3563	5432	150	3563	1870	1564	3563	1870	3170
Grp Volume(v), veh/h	191	1794	281	96	1870	932	570	191	37	111	97	110
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1841	1781	1870	1564	1781	1870	1585
Q Serve(g_s), s	6.4	28.5	13.1	3.2	58.2	58.2	18.5	11.0	2.4	3.5	6.0	3.7
Cycle Q Clear(g_c), s	6.4	28.5	13.1	3.2	58.2	58.2	18.5	11.0	2.4	3.5	6.0	3.7
Prop In Lane	1.00		1.00	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	2783	786	148	1812	892	687	361	302	296	156	433
V/C Ratio(X)	1.01	0.64	0.36	0.65	1.03	1.05	0.83	0.53	0.12	0.37	0.62	0.25
Avail Cap(c_a), veh/h	190	2783	786	222	1812	892	990	520	435	296	156	433
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	22.4	18.6	56.7	31.0	31.0	46.6	43.6	40.1	52.1	53.3	46.4
Incr Delay (d2), s/veh	67.1	0.5	0.3	1.8	29.8	42.8	4.1	1.2	0.2	0.8	7.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	11.6	4.5	1.4	31.5	34.2	8.3	5.1	0.9	1.6	3.1	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	124.0	23.0	18.8	58.5	60.8	73.8	50.7	44.8	40.3	52.9	60.8	46.7
LnGrp LOS	F	C	B	E	F	F	D	D	D	D	E	D
Approach Vol, veh/h	2266			2898			798			318		
Approach Delay, s/veh	31.0			64.9			48.8			53.2		
Approach LOS	C			E			D			D		
Timer - Assigned Phs	2			3			4			6		
Phs Duration (G+Y+Rc), s	29.0			9.6			65.8			15.8		
Change Period (Y+Rc), s	5.8			4.6			6.2			5.8		
Max Green Setting (Gmax), s	33.4			7.5			56.7			10.0		
Max Q Clear Time (g_c+I1), s	20.5			5.2			30.5			8.0		
Green Ext Time (p_c), s	2.7			0.0			15.5			0.3		
Intersection Summary												
HCM 6th Ctrl Delay				50.0								
HCM 6th LOS				D								
Notes												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings

4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	128	580	51	822	561	347	360	44	365	392
Future Volume (vph)	128	580	51	822	561	347	360	44	365	392
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4	3	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	7	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	9.6	30.8	30.8	9.6	39.5	39.5	9.6	16.5
Total Split (s)	14.8	46.2	10.4	41.8	41.8	31.0	42.0	42.0	21.4	32.4
Total Split (%)	12.3%	38.5%	8.7%	34.8%	34.8%	25.8%	35.0%	35.0%	17.8%	27.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effect Green (s)	10.2	42.1	5.6	35.5	35.5	26.4	34.9	34.9	16.6	25.1
Actuated g/C Ratio	0.09	0.35	0.05	0.30	0.30	0.22	0.29	0.29	0.14	0.21
v/c Ratio	1.03	0.83	0.38	0.90	0.87	1.08	0.42	0.10	0.93	0.92
Control Delay	134.5	38.6	62.4	52.0	27.2	111.2	35.4	0.4	77.1	60.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	134.5	38.6	62.4	52.0	27.2	111.2	35.4	0.4	77.1	60.4
LOS	F	D	E	D	C	F	D	A	E	E
Approach Delay		50.6		42.6			68.3			66.9
Approach LOS		D		D			E			E

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 118.7

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.08

Intersection Signal Delay: 54.7

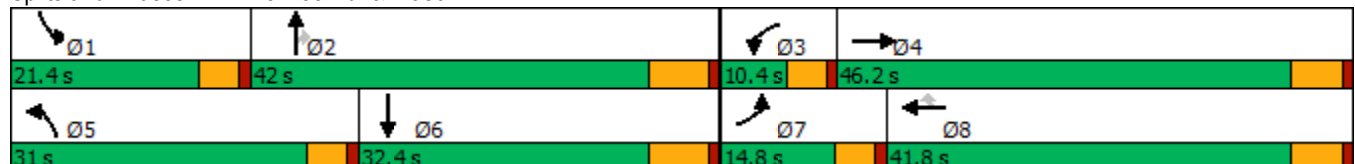
Intersection LOS: D

Intersection Capacity Utilization 84.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 4: Meniffee Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	580	320	51	822	561	347	360	44	365	392	177
Future Volume (veh/h)	128	580	320	51	822	561	347	360	44	365	392	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	156	707	312	62	1002	336	423	439	21	445	478	88
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	868	383	131	1126	477	415	977	436	500	560	102
Arrive On Green	0.09	0.35	0.35	0.04	0.30	0.30	0.23	0.27	0.27	0.14	0.19	0.19
Sat Flow, veh/h	1781	2460	1085	3456	3741	1585	1781	3554	1585	3456	2999	549
Grp Volume(v), veh/h	156	538	481	62	1002	336	423	439	21	445	282	284
Grp Sat Flow(s),veh/h/ln	1781	1870	1675	1728	1870	1585	1781	1777	1585	1728	1777	1772
Q Serve(g_s), s	9.9	29.6	29.6	2.0	29.0	21.3	26.4	11.6	1.1	14.3	17.4	17.6
Cycle Q Clear(g_c), s	9.9	29.6	29.6	2.0	29.0	21.3	26.4	11.6	1.1	14.3	17.4	17.6
Prop In Lane	1.00		0.65	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	160	660	591	131	1126	477	415	977	436	500	332	331
V/C Ratio(X)	0.97	0.81	0.81	0.47	0.89	0.70	1.02	0.45	0.05	0.89	0.85	0.86
Avail Cap(c_a), veh/h	160	666	597	177	1188	503	415	1113	496	512	406	405
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	33.3	33.3	53.4	37.8	35.2	43.5	34.0	30.2	47.6	44.6	44.7
Incr Delay (d2), s/veh	62.7	7.6	8.4	1.0	8.4	4.2	49.3	0.3	0.0	16.7	13.5	14.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	14.1	12.8	0.9	13.9	8.4	16.6	4.8	0.4	7.0	8.5	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	114.1	40.9	41.7	54.4	46.2	39.3	92.8	34.3	30.2	64.3	58.0	59.0
LnGrp LOS	F	D	D	D	D	D	F	C	C	E	E	E
Approach Vol, veh/h	1175			1400			883			1011		
Approach Delay, s/veh	51.0			44.9			62.2			61.1		
Approach LOS	D			D			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.0	37.7	8.9	45.8	31.0	27.7	14.8	39.9				
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	16.8	35.5	5.8	40.4	26.4	25.9	10.2	36.0				
Max Q Clear Time (g_c+I1), s	16.3	13.6	4.0	31.6	28.4	19.6	11.9	31.0				
Green Ext Time (p_c), s	0.1	2.5	0.0	4.0	0.0	1.6	0.0	3.1				
Intersection Summary												
HCM 6th Ctrl Delay	53.6											
HCM 6th LOS	D											

Timings

Salt Creek TA (JN:15470)

6: Meniffee Rd. & Newport Rd.

09/07/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	333	1511	472	1795	69	263	215	301	134	341	575
Future Volume (vph)	333	1511	472	1795	69	263	215	301	134	341	575
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0
Minimum Split (s)	9.6	34.8	9.6	32.8	32.8	9.6	39.8	9.6	9.6	35.8	9.6
Total Split (s)	24.0	49.0	18.0	43.0	43.0	12.0	40.0	18.0	13.0	41.0	24.0
Total Split (%)	20.0%	40.8%	15.0%	35.8%	35.8%	10.0%	33.3%	15.0%	10.8%	34.2%	20.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.8	3.6	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.8	4.6	4.6	5.8	4.6
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effect Green (s)	19.5	42.5	14.4	37.4	37.4	7.4	17.0	32.6	8.5	18.0	38.7
Actuated g/C Ratio	0.19	0.41	0.14	0.36	0.36	0.07	0.16	0.32	0.08	0.17	0.37
v/c Ratio	1.11	0.83	1.06	0.99	0.12	1.15	0.39	0.58	1.03	0.58	1.02
Control Delay	121.8	31.5	101.5	50.4	0.3	146.1	39.6	16.0	132.0	42.4	62.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	121.8	31.5	101.5	50.4	0.3	146.1	39.6	16.0	132.0	42.4	62.5
LOS	F	C	F	D	A	F	D	B	F	D	E
Approach Delay		46.3		59.2			66.4			64.8	
Approach LOS		D		E			E			E	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103.3

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.15

Intersection Signal Delay: 56.8

Intersection LOS: E

Intersection Capacity Utilization 91.0%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 6: Meniffee Rd. & Newport Rd.

			
13 s	40 s	49 s	18 s
			
12 s	41 s	43 s	24 s

HCM 6th Signalized Intersection Summary
6: Menifee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

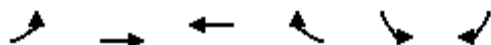
09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Traffic Volume (veh/h)	333	1511	185	472	1795	69	263	215	301	134	341	575
Future Volume (veh/h)	333	1511	185	472	1795	69	263	215	301	134	341	575
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	370	1679	192	524	1994	51	292	239	244	149	379	378
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	339	1979	226	554	2050	571	259	589	495	147	626	559
Arrive On Green	0.19	0.40	0.40	0.16	0.37	0.37	0.07	0.16	0.16	0.08	0.17	0.17
Sat Flow, veh/h	1781	4946	564	3563	5611	1564	3563	3741	1579	1781	3741	1538
Grp Volume(v), veh/h	370	1269	602	524	1994	51	292	239	244	149	379	378
Grp Sat Flow(s),veh/h/ln	1781	1870	1769	1781	1870	1564	1781	1870	1579	1781	1870	1538
Q Serve(g_s), s	19.4	31.3	31.5	14.8	35.6	1.5	7.4	5.9	2.4	8.4	9.6	3.9
Cycle Q Clear(g_c), s	19.4	31.3	31.5	14.8	35.6	1.5	7.4	5.9	2.4	8.4	9.6	3.9
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	339	1497	708	554	2050	571	259	589	495	147	626	559
V/C Ratio(X)	1.09	0.85	0.85	0.95	0.97	0.09	1.13	0.41	0.49	1.01	0.61	0.68
Avail Cap(c_a), veh/h	339	1587	750	554	2050	571	259	1256	777	147	1293	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.2	27.7	27.8	42.6	31.8	10.7	47.2	38.6	13.6	46.7	39.3	12.9
Incr Delay (d2), s/veh	75.2	4.3	8.9	25.0	14.0	0.1	94.8	0.5	0.8	78.0	1.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.2	13.7	14.0	8.2	17.5	0.8	6.6	2.6	2.8	6.8	4.3	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	116.4	32.0	36.6	67.6	45.8	10.7	142.0	39.1	14.3	124.7	40.2	14.3
LnGrp LOS	F	C	D	E	D	B	F	D	B	F	D	B
Approach Vol, veh/h		2241			2569			775			906	
Approach Delay, s/veh		47.2			49.6			70.1			43.3	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	21.8	20.4	46.6	12.0	22.8	24.0	43.0				
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8				
Max Green Setting (Gmax), s	8.4	34.2	13.4	43.2	7.4	35.2	19.4	37.2				
Max Q Clear Time (g_c+I1), s	10.4	7.9	16.8	33.5	9.4	11.6	21.4	37.6				
Green Ext Time (p_c), s	0.0	2.2	0.0	7.2	0.0	3.7	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			50.3									
HCM 6th LOS			D									

Timings
10: Simpson Rd. & Briggs Rd.

Salt Creek TA (JN:15470)

09/07/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	197	295	269	685	530	152
Future Volume (vph)	197	295	269	685	530	152
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		1	
Permitted Phases				8		1
Detector Phase	7	4	8	8	1	1
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	9.6	16.2	28.2	28.2	9.6	9.6
Total Split (s)	29.0	83.0	54.0	54.0	37.0	37.0
Total Split (%)	24.2%	69.2%	45.0%	45.0%	30.8%	30.8%
Yellow Time (s)	3.6	5.2	5.2	5.2	3.6	3.6
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)	4.6	6.2	6.2	6.2	4.6	4.6
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effect Green (s)	13.2	37.4	19.3	19.3	16.2	16.2
Actuated g/C Ratio	0.20	0.57	0.30	0.30	0.25	0.25
v/c Ratio	0.59	0.29	0.52	0.74	0.66	0.31
Control Delay	33.2	8.1	24.1	7.3	27.7	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.2	8.1	24.1	7.3	27.7	6.5
LOS	C	A	C	A	C	A
Approach Delay		18.2	12.0		22.9	
Approach LOS		B	B		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 65.2

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 16.9

Intersection LOS: B

Intersection Capacity Utilization 62.3%

ICU Level of Service B

Analysis Period (min) 15

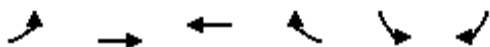
Splits and Phases: 10: Simpson Rd. & Briggs Rd.



HCM 6th Signalized Intersection Summary
10: Simpson Rd. & Briggs Rd.

Salt Creek TA (JN:15470)

09/07/2023

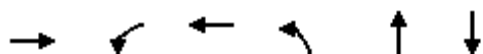


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	197	295	269	685	530	152
Future Volume (veh/h)	197	295	269	685	530	152
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	210	314	286	362	564	119
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	268	1036	573	486	757	347
Arrive On Green	0.15	0.55	0.31	0.31	0.22	0.22
Sat Flow, veh/h	1781	1870	1870	1585	3456	1585
Grp Volume(v), veh/h	210	314	286	362	564	119
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1728	1585
Q Serve(g_s), s	5.4	4.3	6.0	9.8	7.2	3.0
Cycle Q Clear(g_c), s	5.4	4.3	6.0	9.8	7.2	3.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	268	1036	573	486	757	347
V/C Ratio(X)	0.78	0.30	0.50	0.75	0.74	0.34
Avail Cap(c_a), veh/h	914	3021	1880	1593	2355	1080
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	19.5	5.7	13.5	14.8	17.3	15.7
Incr Delay (d2), s/veh	1.9	0.2	0.7	2.3	0.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.8	1.9	0.3	2.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.4	5.9	14.2	17.1	17.9	15.9
LnGrp LOS	C	A	B	B	B	B
Approach Vol, veh/h		524	648		683	
Approach Delay, s/veh		12.1	15.8		17.5	
Approach LOS		B	B		B	
Timer - Assigned Phs			4		6	7
Phs Duration (G+Y+Rc), s			32.5		15.0	11.8
Change Period (Y+Rc), s			6.2		4.6	4.6
Max Green Setting (Gmax), s			76.8		32.4	24.4
Max Q Clear Time (g_c+I1), s			6.3		9.2	7.4
Green Ext Time (p_c), s			1.7		1.2	0.2
Intersection Summary						
HCM 6th Ctrl Delay			15.4			
HCM 6th LOS			B			

Timings
11: Leon Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023



Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø1	Ø7
Lane Configurations	↑↑	↵	↑↑	↵	↑	↑		
Traffic Volume (vph)	591	301	797	157	38	96		
Future Volume (vph)	591	301	797	157	38	96		
Turn Type	NA	Prot	NA	Prot	NA	NA		
Protected Phases	4	3	8	5	2	6	1	7
Permitted Phases								
Detector Phase	4	3	8	5	2	6		
Switch Phase								
Minimum Initial (s)	10.0	5.0	10.0	5.0	10.0	10.0	5.0	5.0
Minimum Split (s)	28.2	9.6	28.2	9.6	28.2	28.2	9.6	9.6
Total Split (s)	40.1	30.2	60.7	19.0	40.1	30.7	9.6	9.6
Total Split (%)	33.4%	25.2%	50.6%	15.8%	33.4%	25.6%	8%	8%
Yellow Time (s)	5.2	3.6	5.2	3.6	5.2	5.2	3.6	3.6
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		
Total Lost Time (s)	6.2	4.6	6.2	4.6	6.2	6.2		
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	Min	None	None
Act Effect Green (s)	33.5	24.6	62.7	13.7	31.7	13.3		
Actuated g/C Ratio	0.31	0.23	0.59	0.13	0.30	0.12		
v/c Ratio	0.89	0.87	0.45	0.81	0.35	0.49		
Control Delay	45.0	62.9	13.8	73.6	10.7	51.3		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	45.0	62.9	13.8	73.6	10.7	51.3		
LOS	D	E	B	E	B	D		
Approach Delay	45.0		27.2		40.2	51.3		
Approach LOS	D		C		D	D		

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 106.8

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 36.3

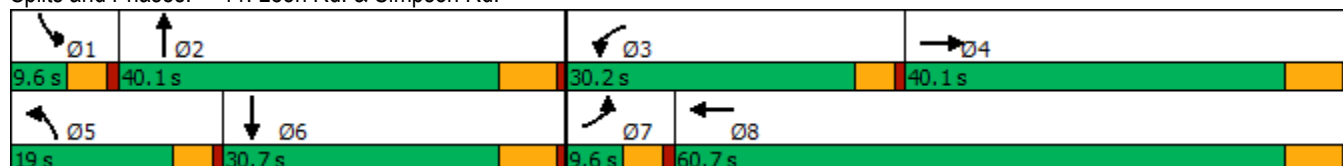
Intersection LOS: D

Intersection Capacity Utilization 70.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 11: Leon Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
11: Leon Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	591	235	301	797	0	157	38	139	0	96	0
Future Volume (veh/h)	0	591	235	301	797	0	157	38	139	0	96	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	695	276	354	938	0	185	45	164	0	113	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	795	316	389	2089	0	219	99	359	2	201	0
Arrive On Green	0.00	0.32	0.32	0.22	0.59	0.00	0.12	0.28	0.28	0.00	0.11	0.00
Sat Flow, veh/h	1781	2483	986	1781	3647	0	1781	353	1286	1781	1870	0
Grp Volume(v), veh/h	0	497	474	354	938	0	185	0	209	0	113	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1693	1781	1777	0	1781	0	1639	1781	1870	0
Q Serve(g_s), s	0.0	24.6	24.6	18.1	13.8	0.0	9.5	0.0	9.8	0.0	5.4	0.0
Cycle Q Clear(g_c), s	0.0	24.6	24.6	18.1	13.8	0.0	9.5	0.0	9.8	0.0	5.4	0.0
Prop In Lane	1.00		0.58	1.00		0.00	1.00		0.78	1.00		0.00
Lane Grp Cap(c), veh/h	2	569	542	389	2089	0	219	0	458	2	201	0
V/C Ratio(X)	0.00	0.87	0.87	0.91	0.45	0.00	0.85	0.00	0.46	0.00	0.56	0.00
Avail Cap(c_a), veh/h	95	646	615	489	2089	0	275	0	596	95	491	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	29.9	29.9	35.6	10.8	0.0	40.0	0.0	27.8	0.0	39.6	0.0
Incr Delay (d2), s/veh	0.0	11.6	12.1	16.5	0.2	0.0	14.8	0.0	0.7	0.0	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.4	10.9	9.1	4.4	0.0	4.8	0.0	3.7	0.0	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	41.6	42.1	52.1	10.9	0.0	54.9	0.0	28.5	0.0	42.0	0.0
LnGrp LOS	A	D	D	D	B	A	D	A	C	A	D	A
Approach Vol, veh/h		971			1292			394			113	
Approach Delay, s/veh		41.8			22.2			40.9			42.0	
Approach LOS		D			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	0.0	32.3	25.0	36.1	16.1	16.2	0.0	61.0				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	5.0	33.9	25.6	33.9	14.4	24.5	5.0	54.5				
Max Q Clear Time (g_c+I1), s	0.0	11.8	20.1	26.6	11.5	7.4	0.0	15.8				
Green Ext Time (p_c), s	0.0	1.1	0.3	3.2	0.1	0.4	0.0	6.9				
Intersection Summary												
HCM 6th Ctrl Delay			32.5									
HCM 6th LOS			C									

Timings
3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  	 	 		 		 
Traffic Volume (vph)	521	2863	496	150	2264	697	180	207	158	133	439
Future Volume (vph)	521	2863	496	150	2264	697	180	207	158	133	439
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8	2	2		6	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	2	2	2	6	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.2	31.2	9.6	34.8	36.8	36.8	36.8	15.8	15.8	9.6
Total Split (s)	20.0	66.0	66.0	10.0	56.0	38.2	38.2	38.2	15.8	15.8	20.0
Total Split (%)	15.4%	50.8%	50.8%	7.7%	43.1%	29.4%	29.4%	29.4%	12.2%	12.2%	15.4%
Yellow Time (s)	3.6	5.2	5.2	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	5.8	5.8	5.8	5.8	5.8	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag						Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes						Yes
Recall Mode	None	Min	Min	None	Min	None	None	None	None	None	None
Act Effect Green (s)	15.4	59.9	59.9	5.4	50.3	28.7	28.7	28.7	10.0	10.0	26.6
Actuated g/C Ratio	0.12	0.47	0.47	0.04	0.40	0.23	0.23	0.23	0.08	0.08	0.21
v/c Ratio	1.23	1.10	0.57	1.01	1.13	0.74	0.81	0.45	0.57	0.93	0.62
Control Delay	169.1	85.4	12.6	136.3	102.1	51.2	63.6	15.7	65.7	114.7	39.7
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	169.1	85.6	12.6	136.3	102.1	51.2	63.6	15.7	65.7	114.7	39.7
LOS	F	F	B	F	F	D	E	B	E	F	D
Approach Delay		87.5			104.1		47.8			59.0	
Approach LOS		F			F		D			E	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 126.4

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.23

Intersection Signal Delay: 85.0

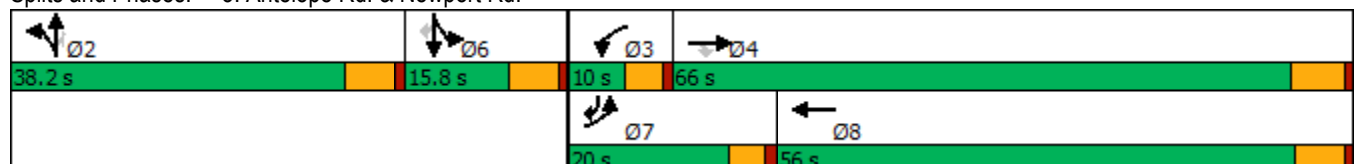
Intersection LOS: F

Intersection Capacity Utilization 107.4%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 3: Antelope Rd. & Newport Rd.



HCM 6th Signalized Intersection Summary

3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	521	2863	496	150	2264	184	697	180	207	158	133	439
Future Volume (veh/h)	521	2863	496	150	2264	184	697	180	207	158	133	439
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	532	2921	327	153	2310	50	654	264	104	161	136	113
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	438	2694	747	153	2191	47	778	408	343	284	149	638
Arrive On Green	0.16	0.62	0.62	0.06	0.52	0.52	0.22	0.22	0.22	0.08	0.08	0.08
Sat Flow, veh/h	3563	5611	1556	3563	5472	118	3563	1870	1570	3563	1870	3112
Grp Volume(v), veh/h	532	2921	327	153	1577	783	654	264	104	161	136	113
Grp Sat Flow(s),veh/h/ln	1781	1870	1556	1781	1870	1849	1781	1870	1570	1781	1870	1556
Q Serve(g_s), s	15.4	60.2	13.6	5.4	50.2	50.2	22.0	16.1	7.0	5.5	9.0	3.8
Cycle Q Clear(g_c), s	15.4	60.2	13.6	5.4	50.2	50.2	22.0	16.1	7.0	5.5	9.0	3.8
Prop In Lane	1.00		1.00	1.00		0.06	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	438	2694	747	153	1498	740	778	408	343	284	149	638
V/C Ratio(X)	1.22	1.08	0.44	1.00	1.05	1.06	0.84	0.65	0.30	0.57	0.91	0.18
Avail Cap(c_a), veh/h	438	2694	747	153	1498	740	921	483	406	284	149	638
HCM Platoon Ratio	1.30	1.30	1.30	1.30	1.30	1.30	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.7	23.6	14.8	59.2	30.1	30.1	46.9	44.6	41.0	55.6	57.2	41.4
Incr Delay (d2), s/veh	116.4	45.1	0.4	71.7	38.6	49.3	6.2	2.3	0.5	2.6	48.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.4	30.8	4.1	3.9	26.9	28.8	10.1	7.5	2.7	2.5	6.2	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	169.0	68.6	15.2	130.8	68.6	79.4	53.1	46.9	41.5	58.2	105.6	41.5
LnGrp LOS	F	F	B	F	F	F	D	D	D	E	F	D
Approach Vol, veh/h	3780			2513			1022			410		
Approach Delay, s/veh	78.1			75.7			50.3			69.3		
Approach LOS	E			E			D			E		
Timer - Assigned Phs	2			3			4			6		
Phs Duration (G+Y+Rc), s	33.2			10.0			66.4			15.8		
Change Period (Y+Rc), s	5.8			4.6			6.2			5.8		
Max Green Setting (Gmax), s	32.4			5.4			59.8			10.0		
Max Q Clear Time (g_c+I1), s	24.0			7.4			62.2			11.0		
Green Ext Time (p_c), s	2.8			0.0			0.0			0.0		

Intersection Summary

HCM 6th Ctrl Delay 73.2

HCM 6th LOS E

Notes

User approved volume balancing among the lanes for turning movement.

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

Timings
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	220	809	28	584	357	179	379	55	498	335
Future Volume (vph)	220	809	28	584	357	179	379	55	498	335
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4	3	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	7	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	9.6	30.8	30.8	9.6	39.5	39.5	9.6	16.5
Total Split (s)	16.0	38.0	9.6	31.6	31.6	26.4	41.4	41.4	31.0	46.0
Total Split (%)	13.3%	31.7%	8.0%	26.3%	26.3%	22.0%	34.5%	34.5%	25.8%	38.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effect Green (s)	11.7	34.4	5.1	23.3	23.3	15.2	18.8	18.8	19.9	23.4
Actuated g/C Ratio	0.12	0.36	0.05	0.24	0.24	0.16	0.20	0.20	0.21	0.24
v/c Ratio	1.16	0.89	0.17	0.73	0.59	0.72	0.62	0.15	0.79	0.65
Control Delay	152.0	40.3	51.1	40.1	7.6	55.1	39.7	0.7	46.1	31.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	152.0	40.3	51.1	40.1	7.6	55.1	39.7	0.7	46.1	31.9
LOS	F	D	D	D	A	E	D	A	D	C
Approach Delay		60.0		28.5			40.7			38.9
Approach LOS		E		C			D			D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 95.6

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 43.4

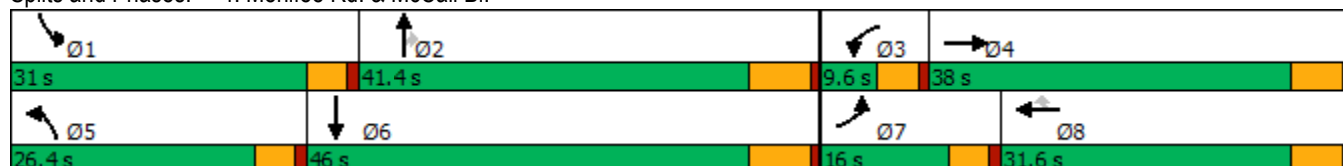
Intersection LOS: D

Intersection Capacity Utilization 78.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Meniffee Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	809	218	28	584	357	179	379	55	498	335	167
Future Volume (veh/h)	220	809	218	28	584	357	179	379	55	498	335	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	250	919	163	32	664	207	203	431	32	566	381	73
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	1062	188	108	893	378	242	630	279	664	696	132
Arrive On Green	0.14	0.34	0.34	0.03	0.24	0.24	0.14	0.18	0.18	0.19	0.23	0.23
Sat Flow, veh/h	1781	3094	548	3456	3741	1581	1781	3554	1574	3456	2980	566
Grp Volume(v), veh/h	250	555	527	32	664	207	203	431	32	566	226	228
Grp Sat Flow(s),veh/h/ln	1781	1870	1772	1728	1870	1581	1781	1777	1574	1728	1777	1769
Q Serve(g_s), s	11.4	23.3	23.3	0.8	13.8	9.6	9.3	9.5	1.4	13.3	9.4	9.5
Cycle Q Clear(g_c), s	11.4	23.3	23.3	0.8	13.8	9.6	9.3	9.5	1.4	13.3	9.4	9.5
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	242	642	608	108	893	378	242	630	279	664	415	413
V/C Ratio(X)	1.03	0.87	0.87	0.30	0.74	0.55	0.84	0.68	0.11	0.85	0.54	0.55
Avail Cap(c_a), veh/h	242	717	679	206	1149	486	462	1476	654	1086	836	832
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	25.8	25.8	39.8	29.6	28.0	35.4	32.3	29.0	32.8	28.3	28.3
Incr Delay (d2), s/veh	67.0	10.0	10.5	0.6	1.9	1.2	3.0	1.3	0.2	1.8	1.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	11.1	10.6	0.3	6.0	3.5	3.9	3.8	0.5	5.2	3.7	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	103.3	35.8	36.3	40.3	31.5	29.2	38.4	33.7	29.2	34.6	29.4	29.5
LnGrp LOS	F	D	D	D	C	C	D	C	C	C	C	C
Approach Vol, veh/h		1332			903			666			1020	
Approach Delay, s/veh		48.7			31.3			34.9			32.3	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.7	21.4	7.2	34.6	16.0	26.1	16.0	25.9				
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	26.4	34.9	5.0	32.2	21.8	39.5	11.4	25.8				
Max Q Clear Time (g_c+I1), s	15.3	11.5	2.8	25.3	11.3	11.5	13.4	15.8				
Green Ext Time (p_c), s	0.8	2.5	0.0	3.5	0.2	2.3	0.0	3.4				
Intersection Summary												
HCM 6th Ctrl Delay				38.1								
HCM 6th LOS				D								

Timings
6: Meniffee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	532	2156	416	1646	75	313	331	535	106	231	459
Future Volume (vph)	532	2156	416	1646	75	313	331	535	106	231	459
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0
Minimum Split (s)	9.6	34.8	9.6	32.8	32.8	9.6	35.8	9.6	9.6	33.8	9.6
Total Split (s)	33.0	55.0	17.0	39.0	39.0	14.0	37.0	17.0	11.0	34.0	33.0
Total Split (%)	27.5%	45.8%	14.2%	32.5%	32.5%	11.7%	30.8%	14.2%	9.2%	28.3%	27.5%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.8	3.6	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.8	4.6	4.6	5.8	4.6
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	Min	None	None	None	None	None	None
Act Effect Green (s)	28.5	49.4	12.4	33.3	33.3	9.4	17.6	31.3	6.4	14.6	44.4
Actuated g/C Ratio	0.27	0.46	0.12	0.31	0.31	0.09	0.16	0.29	0.06	0.14	0.42
v/c Ratio	1.21	1.02	1.08	1.02	0.14	1.08	0.58	1.06	1.08	0.49	0.71
Control Delay	149.1	52.9	114.1	62.5	0.5	120.6	44.6	80.1	158.2	45.3	19.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	149.1	52.9	114.1	62.5	0.5	120.6	44.6	80.1	158.2	45.3	19.1
LOS	F	D	F	E	A	F	D	F	F	D	B
Approach Delay		70.2		70.4			80.9			45.2	
Approach LOS		E		E			F			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 106.8

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.21

Intersection Signal Delay: 69.2

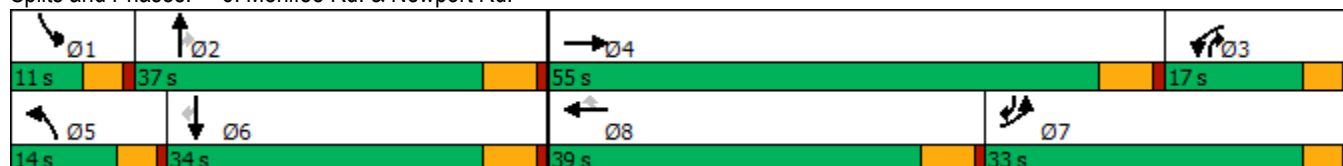
Intersection LOS: E

Intersection Capacity Utilization 99.4%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 6: Meniffee Rd. & Newport Rd.



HCM 6th Signalized Intersection Summary 6: Menifee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

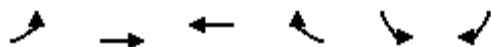
09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Traffic Volume (veh/h)	532	2156	271	416	1646	75	313	331	535	106	231	459
Future Volume (veh/h)	532	2156	271	416	1646	75	313	331	535	106	231	459
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	572	2318	49	447	1770	77	337	356	269	114	248	413
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	488	2528	53	472	1797	501	323	536	432	110	428	615
Arrive On Green	0.41	0.69	0.46	0.20	0.48	0.32	0.14	0.21	0.14	0.09	0.17	0.11
Sat Flow, veh/h	1781	5475	115	3563	5611	1563	3563	3741	1547	1781	3741	1581
Grp Volume(v), veh/h	572	1582	785	447	1770	77	337	356	269	114	248	413
Grp Sat Flow(s),veh/h/ln	1781	1870	1850	1781	1870	1563	1781	1870	1547	1781	1870	1581
Q Serve(g_s), s	28.4	36.8	37.6	12.8	32.2	2.8	9.4	9.0	2.3	6.4	6.3	5.0
Cycle Q Clear(g_c), s	28.4	36.8	37.6	12.8	32.2	2.8	9.4	9.0	2.3	6.4	6.3	5.0
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	488	1728	854	472	1797	501	323	536	432	110	428	615
V/C Ratio(X)	1.17	0.92	0.92	0.95	0.98	0.15	1.04	0.66	0.62	1.04	0.58	0.67
Avail Cap(c_a), veh/h	488	1776	878	472	1797	501	323	1126	676	110	1018	864
HCM Platoon Ratio	1.50	1.50	1.00	1.50	1.50	1.00	1.50	1.50	1.00	1.50	1.50	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	14.2	15.0	41.2	26.7	14.6	44.8	38.4	17.4	47.0	40.6	11.2
Incr Delay (d2), s/veh	97.3	7.8	14.4	28.2	17.7	0.1	61.7	1.4	1.5	96.0	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.8	9.4	11.8	6.8	13.7	1.3	6.6	3.9	3.9	5.6	2.8	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	127.9	22.0	29.4	69.4	44.3	14.7	106.5	39.8	18.9	143.0	41.9	12.5
LnGrp LOS	F	C	C	E	D	B	F	D	B	F	D	B
Approach Vol, veh/h		2939			2294			962			775	
Approach Delay, s/veh		44.6			48.2			57.3			41.1	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	20.6	18.3	53.7	14.0	17.6	33.0	39.0				
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8				
Max Green Setting (Gmax), s	6.4	31.2	12.4	49.2	9.4	28.2	28.4	33.2				
Max Q Clear Time (g_c+I1), s	8.4	11.0	14.8	39.6	11.4	8.3	30.4	34.2				
Green Ext Time (p_c), s	0.0	2.9	0.0	8.2	0.0	2.8	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			47.2									
HCM 6th LOS			D									

Timings
10: Simpson Rd. & Briggs Rd.

Salt Creek TA (JN:15470)

09/07/2023



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	105	292	283	691	824	100
Future Volume (vph)	105	292	283	691	824	100
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		1	
Permitted Phases				8		1
Detector Phase	7	4	8	8	1	1
Switch Phase						
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	9.6	16.2	28.2	28.2	9.6	9.6
Total Split (s)	20.0	72.6	52.6	52.6	47.4	47.4
Total Split (%)	16.7%	60.5%	43.8%	43.8%	39.5%	39.5%
Yellow Time (s)	3.6	5.2	5.2	5.2	3.6	3.6
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)	4.6	6.2	6.2	6.2	4.6	4.6
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Recall Mode	None	None	None	None	None	None
Act Effect Green (s)	10.0	32.7	21.5	21.5	24.4	24.4
Actuated g/C Ratio	0.14	0.47	0.31	0.31	0.35	0.35
v/c Ratio	0.44	0.36	0.53	0.74	0.73	0.17
Control Delay	38.8	12.8	26.1	7.3	25.7	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.8	12.8	26.1	7.3	25.7	5.3
LOS	D	B	C	A	C	A
Approach Delay		19.7	12.7		23.5	
Approach LOS		B	B		C	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 69.3

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 18.3

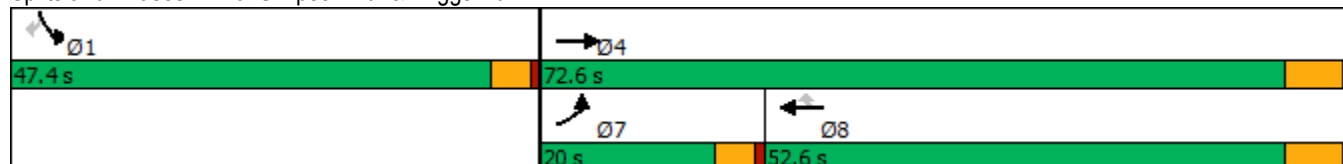
Intersection LOS: B

Intersection Capacity Utilization 57.6%

ICU Level of Service B

Analysis Period (min) 15

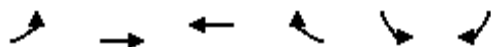
Splits and Phases: 10: Simpson Rd. & Briggs Rd.



HCM 6th Signalized Intersection Summary
10: Simpson Rd. & Briggs Rd.

Salt Creek TA (JN:15470)

09/07/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	105	292	283	691	824	100
Future Volume (veh/h)	105	292	283	691	824	100
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	113	314	304	394	886	81
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	146	913	598	507	1070	491
Arrive On Green	0.08	0.49	0.32	0.32	0.31	0.31
Sat Flow, veh/h	1781	1870	1870	1585	3456	1585
Grp Volume(v), veh/h	113	314	304	394	886	81
Grp Sat Flow(s),veh/h/ln	1781	1870	1870	1585	1728	1585
Q Serve(g_s), s	3.3	5.5	7.0	12.0	12.7	2.0
Cycle Q Clear(g_c), s	3.3	5.5	7.0	12.0	12.7	2.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	146	913	598	507	1070	491
V/C Ratio(X)	0.77	0.34	0.51	0.78	0.83	0.17
Avail Cap(c_a), veh/h	514	2327	1626	1378	2771	1271
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	24.0	8.4	14.7	16.4	17.1	13.4
Incr Delay (d2), s/veh	3.2	0.2	0.7	2.6	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.5	2.4	10.2	3.9	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.2	8.6	15.4	19.1	17.8	13.5
LnGrp LOS	C	A	B	B	B	B
Approach Vol, veh/h		427	698		967	
Approach Delay, s/veh		13.6	17.5		17.4	
Approach LOS		B	B		B	
Timer - Assigned Phs			4		6	7
Phs Duration (G+Y+Rc), s			32.3		21.1	9.0
Change Period (Y+Rc), s			6.2		4.6	4.6
Max Green Setting (Gmax), s			66.4		42.8	15.4
Max Q Clear Time (g_c+I1), s			7.5		14.7	5.3
Green Ext Time (p_c), s			1.7		1.8	0.1
Intersection Summary						
HCM 6th Ctrl Delay			16.6			
HCM 6th LOS			B			

Timings
11: Leon Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

	→	↖	←	↙	↑	↘	↓	
Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT	Ø7
Lane Configurations	↑↑	↖	↑↑	↖	↑	↖	↑	
Traffic Volume (vph)	879	213	682	292	113	1	71	
Future Volume (vph)	879	213	682	292	113	1	71	
Turn Type	NA	Prot	NA	Prot	NA	Prot	NA	
Protected Phases	4	3	8	5	2	1	6	7
Permitted Phases								
Detector Phase	4	3	8	5	2	1	6	
Switch Phase								
Minimum Initial (s)	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	28.2	9.6	28.2	9.6	28.2	9.6	28.2	9.6
Total Split (s)	44.0	20.0	54.4	26.0	46.4	9.6	30.0	9.6
Total Split (%)	36.7%	16.7%	45.3%	21.7%	38.7%	8.0%	25.0%	8%
Yellow Time (s)	5.2	3.6	5.2	3.6	5.2	3.6	5.2	3.6
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)	6.2	4.6	6.2	4.6	6.2	4.6	6.2	
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min	None
Act Effect Green (s)	37.9	15.4	57.9	21.5	37.1	5.0	12.8	
Actuated g/C Ratio	0.35	0.14	0.53	0.20	0.34	0.05	0.12	
v/c Ratio	0.99	0.92	0.39	0.90	0.73	0.01	0.35	
Control Delay	59.8	86.5	16.5	73.4	30.6	53.0	48.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	59.8	86.5	16.5	73.4	30.6	53.0	48.3	
LOS	E	F	B	E	C	D	D	
Approach Delay	59.8		33.2		47.7		48.4	
Approach LOS	E		C		D		D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 109.2

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 47.9

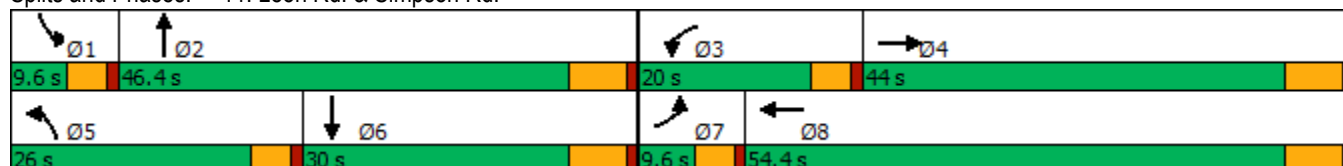
Intersection LOS: D

Intersection Capacity Utilization 83.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 11: Leon Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
11: Leon Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	879	237	213	682	0	292	113	327	1	71	0
Future Volume (veh/h)	0	879	237	213	682	0	292	113	327	1	71	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	945	24	229	733	0	314	122	218	1	76	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	1124	29	263	1828	0	348	181	324	2	201	0
Arrive On Green	0.00	0.32	0.32	0.15	0.51	0.00	0.20	0.30	0.30	0.00	0.11	0.00
Sat Flow, veh/h	1781	3541	90	1781	3647	0	1781	602	1075	1781	1870	0
Grp Volume(v), veh/h	0	474	495	229	733	0	314	0	340	1	76	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1854	1781	1777	0	1781	0	1677	1781	1870	0
Q Serve(g_s), s	0.0	23.1	23.1	11.7	11.7	0.0	16.0	0.0	16.5	0.1	3.5	0.0
Cycle Q Clear(g_c), s	0.0	23.1	23.1	11.7	11.7	0.0	16.0	0.0	16.5	0.1	3.5	0.0
Prop In Lane	1.00		0.05	1.00		0.00	1.00		0.64	1.00		0.00
Lane Grp Cap(c), veh/h	2	564	589	263	1828	0	348	0	506	2	201	0
V/C Ratio(X)	0.00	0.84	0.84	0.87	0.40	0.00	0.90	0.00	0.67	0.41	0.38	0.00
Avail Cap(c_a), veh/h	96	722	753	295	1841	0	410	0	724	96	478	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	29.6	29.6	38.8	13.8	0.0	36.6	0.0	28.5	46.4	38.6	0.0
Incr Delay (d2), s/veh	0.0	7.1	6.8	20.3	0.1	0.0	19.0	0.0	1.6	36.1	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.1	10.5	6.3	4.1	0.0	8.3	0.0	6.3	0.0	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	36.6	36.4	59.1	14.0	0.0	55.6	0.0	30.0	82.5	39.8	0.0
LnGrp LOS	A	D	D	E	B	A	E	A	C	F	D	A
Approach Vol, veh/h	969				962				654			
Approach Delay, s/veh	36.5				24.7				42.3			
Approach LOS	D				C				D			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.7	34.3	18.3	35.7	22.8	16.2	0.0	54.1				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	5.0	40.2	15.4	37.8	21.4	23.8	5.0	48.2				
Max Q Clear Time (g_c+I1), s	2.1	18.5	13.7	25.1	18.0	5.5	0.0	13.7				
Green Ext Time (p_c), s	0.0	1.8	0.1	4.4	0.2	0.2	0.0	4.9				
Intersection Summary												
HCM 6th Ctrl Delay	33.8											
HCM 6th LOS	C											

**APPENDIX 6.8: OPENING YEAR (2029) WITH PROJECT CONDITIONS
INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH
IMPROVEMENTS**

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Timings
3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  	 			 		 
Traffic Volume (vph)	189	1797	317	95	2759	648	70	97	110	96	363
Future Volume (vph)	189	1797	317	95	2759	648	70	97	110	96	363
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8	2	2		6	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	2	2	2	6	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.2	31.2	9.6	34.8	36.8	36.8	36.8	15.8	15.8	9.6
Total Split (s)	11.0	62.9	62.9	12.1	64.0	39.2	39.2	39.2	15.8	15.8	11.0
Total Split (%)	8.5%	48.4%	48.4%	9.3%	49.2%	30.2%	30.2%	30.2%	12.2%	12.2%	8.5%
Yellow Time (s)	3.6	5.2	5.2	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	5.8	5.8	5.8	5.8	5.8	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag						Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes						Yes
Recall Mode	None	Min	Min	None	Min	None	None	None	None	None	None
Act Effect Green (s)	6.4	57.5	57.5	6.9	58.3	24.4	24.4	24.4	10.0	10.0	22.3
Actuated g/C Ratio	0.05	0.47	0.47	0.06	0.48	0.20	0.20	0.20	0.08	0.08	0.18
v/c Ratio	1.02	0.69	0.36	0.48	1.09	0.68	0.73	0.24	0.38	0.63	0.57
Control Delay	128.6	27.4	4.8	64.9	77.3	49.7	58.7	6.3	58.3	74.2	40.3
Queue Delay	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	128.6	27.6	4.8	64.9	77.3	49.7	58.7	6.3	58.3	74.2	40.3
LOS	F	C	A	E	E	D	E	A	E	E	D
Approach Delay		32.8			76.9		47.2			49.5	
Approach LOS		C			E		D			D	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 121.2

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.09

Intersection Signal Delay: 55.7

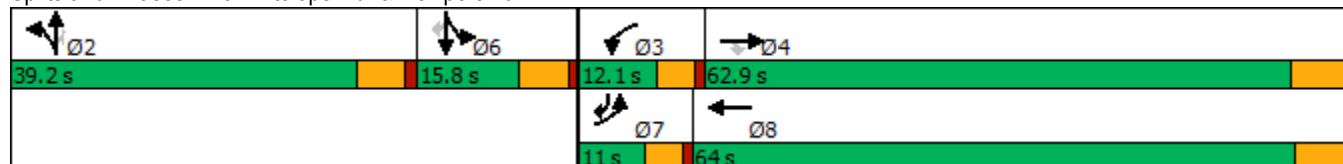
Intersection LOS: E

Intersection Capacity Utilization 95.4%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Antelope Rd. & Newport Rd.



HCM 6th Signalized Intersection Summary 3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	1797	317	95	2759	120	648	70	97	110	96	363
Future Volume (veh/h)	189	1797	317	95	2759	120	648	70	97	110	96	363
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	191	1815	281	96	2787	76	570	191	37	111	97	110
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	2783	786	148	2633	71	687	361	302	296	156	433
Arrive On Green	0.05	0.50	0.50	0.04	0.48	0.48	0.19	0.19	0.19	0.08	0.08	0.08
Sat Flow, veh/h	3563	5611	1585	3563	5436	147	3563	1870	1564	3563	1870	3170
Grp Volume(v), veh/h	191	1815	281	96	1909	954	570	191	37	111	97	110
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1842	1781	1870	1564	1781	1870	1585
Q Serve(g_s), s	6.4	29.0	13.1	3.2	58.2	58.2	18.5	11.0	2.4	3.5	6.0	3.7
Cycle Q Clear(g_c), s	6.4	29.0	13.1	3.2	58.2	58.2	18.5	11.0	2.4	3.5	6.0	3.7
Prop In Lane	1.00		1.00	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	2783	786	148	1812	892	687	361	302	296	156	433
V/C Ratio(X)	1.01	0.65	0.36	0.65	1.05	1.07	0.83	0.53	0.12	0.37	0.62	0.25
Avail Cap(c_a), veh/h	190	2783	786	222	1812	892	990	520	435	296	156	433
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	22.6	18.6	56.7	31.0	31.0	46.6	43.6	40.1	52.1	53.3	46.4
Incr Delay (d2), s/veh	67.1	0.5	0.3	1.8	37.0	50.4	4.1	1.2	0.2	0.8	7.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	11.8	4.5	1.4	33.3	36.1	8.3	5.1	0.9	1.6	3.1	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	124.0	23.1	18.8	58.5	68.0	81.4	50.7	44.8	40.3	52.9	60.8	46.7
LnGrp LOS	F	C	B	E	F	F	D	D	D	D	E	D
Approach Vol, veh/h	2287			2959			798			318		
Approach Delay, s/veh	31.0			72.0			48.8			53.2		
Approach LOS	C			E			D			D		
Timer - Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	29.0			9.6			15.8			11.0		
Change Period (Y+Rc), s	5.8			4.6			5.8			4.6		
Max Green Setting (Gmax), s	33.4			7.5			10.0			6.4		
Max Q Clear Time (g_c+I1), s	20.5			5.2			8.0			8.4		
Green Ext Time (p_c), s	2.7			0.0			0.3			0.0		
Intersection Summary												
HCM 6th Ctrl Delay	53.4											
HCM 6th LOS	D											
Notes												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings

Salt Creek TA (JN:15470)

4: Meniffee Rd. & McCall Bl.

09/07/2023

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	128	589	51	848	578	347	360	44	371	392
Future Volume (vph)	128	589	51	848	578	347	360	44	371	392
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4	3	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	7	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	9.6	30.8	30.8	9.6	39.5	39.5	9.6	16.5
Total Split (s)	14.8	46.2	10.4	41.8	41.8	31.0	42.0	42.0	21.4	32.4
Total Split (%)	12.3%	38.5%	8.7%	34.8%	34.8%	25.8%	35.0%	35.0%	17.8%	27.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effect Green (s)	10.2	42.5	5.6	36.0	36.0	26.4	34.8	34.8	16.8	25.2
Actuated g/C Ratio	0.09	0.36	0.05	0.30	0.30	0.22	0.29	0.29	0.14	0.21
v/c Ratio	1.03	0.83	0.39	0.92	0.90	1.08	0.43	0.10	0.94	0.92
Control Delay	135.7	39.0	62.5	54.1	30.3	113.1	35.6	0.4	79.1	60.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	135.7	39.0	62.5	54.1	30.3	113.1	35.6	0.4	79.1	60.8
LOS	F	D	E	D	C	F	D	A	E	E
Approach Delay		51.0		45.1			69.3			68.0
Approach LOS		D		D			E			E

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 119.3

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.08

Intersection Signal Delay: 56.0

Intersection LOS: E

Intersection Capacity Utilization 84.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 4: Meniffee Rd. & McCall Bl.

			
Ø1	Ø2	Ø3	Ø4
21.4 s	42 s	10.4 s	46.2 s
			
Ø5	Ø6	Ø7	Ø8
31 s	32.4 s	14.8 s	41.8 s

HCM 6th Signalized Intersection Summary
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	589	320	51	848	578	347	360	44	371	392	177
Future Volume (veh/h)	128	589	320	51	848	578	347	360	44	371	392	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	156	718	312	62	1034	357	423	439	21	452	478	88
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	881	383	130	1140	483	412	964	430	505	559	102
Arrive On Green	0.09	0.36	0.36	0.04	0.30	0.30	0.23	0.27	0.27	0.15	0.19	0.19
Sat Flow, veh/h	1781	2473	1074	3456	3741	1585	1781	3554	1585	3456	2999	549
Grp Volume(v), veh/h	156	543	487	62	1034	357	423	439	21	452	282	284
Grp Sat Flow(s),veh/h/ln	1781	1870	1677	1728	1870	1585	1781	1777	1585	1728	1777	1772
Q Serve(g_s), s	10.0	30.1	30.1	2.0	30.3	23.1	26.4	11.7	1.1	14.7	17.5	17.7
Cycle Q Clear(g_c), s	10.0	30.1	30.1	2.0	30.3	23.1	26.4	11.7	1.1	14.7	17.5	17.7
Prop In Lane	1.00		0.64	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	159	667	598	130	1140	483	412	964	430	505	331	330
V/C Ratio(X)	0.98	0.81	0.81	0.48	0.91	0.74	1.03	0.46	0.05	0.89	0.85	0.86
Avail Cap(c_a), veh/h	159	667	598	176	1180	500	412	1105	493	509	403	402
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.9	33.3	33.3	53.8	38.1	35.6	43.9	34.6	30.7	47.9	44.9	45.0
Incr Delay (d2), s/veh	65.0	7.7	8.5	1.0	10.0	5.6	51.4	0.3	0.0	17.6	13.8	14.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	14.3	13.0	0.9	14.8	9.3	16.8	4.8	0.4	7.2	8.6	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	116.9	41.0	41.8	54.8	48.2	41.2	95.2	34.9	30.8	65.5	58.7	59.7
LnGrp LOS	F	D	D	D	D	D	F	C	C	E	E	E
Approach Vol, veh/h	1186			1453			883			1018		
Approach Delay, s/veh	51.3			46.7			63.7			62.0		
Approach LOS	D			D			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.3	37.5	8.9	46.5	31.0	27.8	14.8	40.6				
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	16.8	35.5	5.8	40.4	26.4	25.9	10.2	36.0				
Max Q Clear Time (g_c+I1), s	16.7	13.7	4.0	32.1	28.4	19.7	12.0	32.3				
Green Ext Time (p_c), s	0.0	2.4	0.0	3.9	0.0	1.5	0.0	2.5				
Intersection Summary												
HCM 6th Ctrl Delay	54.6											
HCM 6th LOS	D											

Timings
6: Meniffee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	354	1511	472	1795	69	263	221	301	134	358	635
Future Volume (vph)	354	1511	472	1795	69	263	221	301	134	358	635
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0
Minimum Split (s)	9.6	34.8	9.6	32.8	32.8	9.6	39.8	9.6	9.6	35.8	9.6
Total Split (s)	24.0	49.0	18.0	43.0	43.0	12.0	40.0	18.0	13.0	41.0	24.0
Total Split (%)	20.0%	40.8%	15.0%	35.8%	35.8%	10.0%	33.3%	15.0%	10.8%	34.2%	20.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.8	3.6	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.8	4.6	4.6	5.8	4.6
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None
Act Effect Green (s)	19.5	42.5	14.4	37.4	37.4	7.4	17.4	33.0	8.4	18.4	39.1
Actuated g/C Ratio	0.19	0.41	0.14	0.36	0.36	0.07	0.17	0.32	0.08	0.18	0.38
v/c Ratio	1.18	0.83	1.07	0.99	0.12	1.15	0.39	0.57	1.03	0.60	1.12
Control Delay	147.1	31.8	103.9	51.6	0.3	147.8	39.5	15.9	133.4	42.6	95.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	147.1	31.8	103.9	51.6	0.3	147.8	39.5	15.9	133.4	42.6	95.0
LOS	F	C	F	D	A	F	D	B	F	D	F
Approach Delay		51.6		60.6			66.7			82.9	
Approach LOS		D		E			E			F	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 103.7

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.18

Intersection Signal Delay: 62.4

Intersection LOS: E

Intersection Capacity Utilization 94.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 6: Meniffee Rd. & Newport Rd.

 Ø1	 Ø2	 Ø4	 Ø3
13 s	40 s	49 s	18 s
 Ø5	 Ø6	 Ø8	 Ø7
12 s	41 s	43 s	24 s

HCM 6th Signalized Intersection Summary
6: Menifee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Traffic Volume (veh/h)	354	1511	185	472	1795	69	263	221	301	134	358	635
Future Volume (veh/h)	354	1511	185	472	1795	69	263	221	301	134	358	635
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	393	1679	192	524	1994	51	292	246	244	149	398	445
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	1970	225	545	2033	566	257	615	502	146	652	568
Arrive On Green	0.19	0.40	0.40	0.15	0.36	0.36	0.07	0.16	0.16	0.08	0.17	0.17
Sat Flow, veh/h	1781	4946	564	3563	5611	1564	3563	3741	1579	1781	3741	1539
Grp Volume(v), veh/h	393	1269	602	524	1994	51	292	246	244	149	398	445
Grp Sat Flow(s),veh/h/ln	1781	1870	1769	1781	1870	1564	1781	1870	1579	1781	1870	1539
Q Serve(g_s), s	19.4	31.7	31.9	15.0	36.1	1.6	7.4	6.0	2.4	8.4	10.1	4.9
Cycle Q Clear(g_c), s	19.4	31.7	31.9	15.0	36.1	1.6	7.4	6.0	2.4	8.4	10.1	4.9
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	337	1490	704	545	2033	566	257	615	502	146	652	568
V/C Ratio(X)	1.17	0.85	0.86	0.96	0.98	0.09	1.14	0.40	0.49	1.02	0.61	0.78
Avail Cap(c_a), veh/h	337	1574	744	545	2033	566	257	1246	768	146	1282	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.6	28.1	28.2	43.2	32.4	11.0	47.6	38.4	13.5	47.1	39.2	13.5
Incr Delay (d2), s/veh	102.9	4.5	9.3	28.9	15.7	0.1	98.3	0.4	0.7	80.7	0.9	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.7	14.0	14.2	8.5	18.0	0.8	6.7	2.7	2.8	6.9	4.5	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	144.5	32.7	37.5	72.1	48.1	11.0	146.0	38.8	14.3	127.8	40.1	16.6
LnGrp LOS	F	C	D	E	D	B	F	D	B	F	D	B
Approach Vol, veh/h		2264			2569			782			992	
Approach Delay, s/veh		53.4			52.2			71.2			42.7	
Approach LOS		D			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	22.7	20.3	46.7	12.0	23.7	24.0	43.0				
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8				
Max Green Setting (Gmax), s	8.4	34.2	13.4	43.2	7.4	35.2	19.4	37.2				
Max Q Clear Time (g_c+I1), s	10.4	8.0	17.0	33.9	9.4	12.1	21.4	38.1				
Green Ext Time (p_c), s	0.0	2.2	0.0	7.0	0.0	4.1	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			53.4									
HCM 6th LOS			D									

Timings
10: Briggs Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	206	304	18	9	272	685	51	51	530	18
Future Volume (vph)	206	304	18	9	272	685	51	51	530	18
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	28.2	28.2	9.6	28.2	28.2	9.6	28.2	9.6	28.2
Total Split (s)	23.0	51.4	51.4	9.6	38.0	38.0	13.9	31.0	28.0	45.1
Total Split (%)	19.2%	42.8%	42.8%	8.0%	31.7%	31.7%	11.6%	25.8%	23.3%	37.6%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	15.6	40.7	40.7	5.2	21.9	21.9	7.3	12.3	19.5	27.1
Actuated g/C Ratio	0.17	0.44	0.44	0.06	0.24	0.24	0.08	0.13	0.21	0.30
v/c Ratio	0.73	0.39	0.03	0.10	0.65	0.78	0.39	0.33	0.77	0.31
Control Delay	53.8	20.4	0.1	51.7	40.2	9.4	53.7	35.8	43.8	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.8	20.4	0.1	51.7	40.2	9.4	53.7	35.8	43.8	8.1
LOS	D	C	A	D	D	A	D	D	D	A
Approach Delay		32.7			18.4			42.9		35.0
Approach LOS		C			B			D		C

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 91.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 28.0

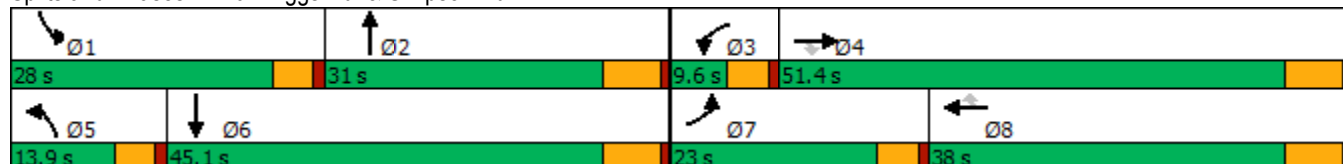
Intersection LOS: C

Intersection Capacity Utilization 76.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 10: Briggs Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
10: Briggs Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

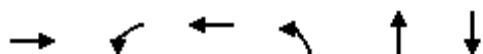
09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	304	18	9	272	685	51	51	26	530	18	155
Future Volume (veh/h)	206	304	18	9	272	685	51	51	26	530	18	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	219	323	16	10	289	362	55	55	17	564	20	122
Peak Hour Factor	0.94	0.94	0.92	0.92	0.94	0.94	0.92	0.92	0.92	0.94	0.92	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	752	638	22	503	427	78	170	53	664	62	379
Arrive On Green	0.15	0.40	0.40	0.01	0.27	0.27	0.04	0.12	0.12	0.19	0.27	0.27
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1371	424	3456	228	1392
Grp Volume(v), veh/h	219	323	16	10	289	362	55	0	72	564	0	142
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	0	1794	1728	0	1620
Q Serve(g_s), s	9.6	10.0	0.5	0.4	10.7	17.4	2.4	0.0	2.9	12.7	0.0	5.6
Cycle Q Clear(g_c), s	9.6	10.0	0.5	0.4	10.7	17.4	2.4	0.0	2.9	12.7	0.0	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		0.86
Lane Grp Cap(c), veh/h	259	752	638	22	503	427	78	0	223	664	0	442
V/C Ratio(X)	0.84	0.43	0.03	0.45	0.57	0.85	0.70	0.00	0.32	0.85	0.00	0.32
Avail Cap(c_a), veh/h	408	1052	891	111	740	627	206	0	553	1006	0	784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.5	17.4	14.5	39.4	25.4	27.8	37.9	0.0	32.1	31.3	0.0	23.3
Incr Delay (d2), s/veh	5.2	0.4	0.0	5.2	1.0	7.2	4.2	0.0	0.8	2.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.8	0.2	0.2	4.4	6.7	1.1	0.0	1.2	5.1	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	17.7	14.5	44.7	26.4	35.0	42.1	0.0	32.9	34.1	0.0	23.7
LnGrp LOS	D	B	B	D	C	D	D	A	C	C	A	C
Approach Vol, veh/h	558		661				127		706			
Approach Delay, s/veh	25.9		31.4				36.9		32.1			
Approach LOS	C		C				D		C			
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.1	16.2	5.6	38.5	8.1	28.1	16.3	27.8				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	23.4	24.8	5.0	45.2	9.3	38.9	18.4	31.8				
Max Q Clear Time (g_c+I1), s	14.7	4.9	2.4	12.0	4.4	7.6	11.6	19.4				
Green Ext Time (p_c), s	0.8	0.2	0.0	1.8	0.0	0.7	0.2	2.2				
Intersection Summary												
HCM 6th Ctrl Delay	30.5											
HCM 6th LOS	C											

Timings
11: Leon Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023



Lane Group	EBT	WBL	WBT	NBL	NBT	SBT	Ø1	Ø7
Lane Configurations	↑↑	↑	↑↑	↑	↑	↑		
Traffic Volume (vph)	617	301	806	160	38	96		
Future Volume (vph)	617	301	806	160	38	96		
Turn Type	NA	Prot	NA	Prot	NA	NA		
Protected Phases	4	3	8	5	2	6	1	7
Permitted Phases								
Detector Phase	4	3	8	5	2	6		
Switch Phase								
Minimum Initial (s)	10.0	5.0	10.0	5.0	10.0	10.0	5.0	5.0
Minimum Split (s)	28.2	9.6	28.2	9.6	28.2	28.2	9.6	9.6
Total Split (s)	40.1	30.2	60.7	19.0	40.1	30.7	9.6	9.6
Total Split (%)	33.4%	25.2%	50.6%	15.8%	33.4%	25.6%	8%	8%
Yellow Time (s)	5.2	3.6	5.2	3.6	5.2	5.2	3.6	3.6
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		
Total Lost Time (s)	6.2	4.6	6.2	4.6	6.2	6.2		
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	Min	None	None
Act Effect Green (s)	34.0	24.6	63.2	13.9	31.8	13.3		
Actuated g/C Ratio	0.32	0.23	0.59	0.13	0.30	0.12		
v/c Ratio	0.92	0.88	0.46	0.82	0.35	0.49		
Control Delay	47.9	63.8	13.9	75.1	10.7	51.5		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	47.9	63.8	13.9	75.1	10.7	51.5		
LOS	D	E	B	E	B	D		
Approach Delay	47.9		27.4		41.2	51.5		
Approach LOS	D		C		D	D		

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 107.4

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 37.7

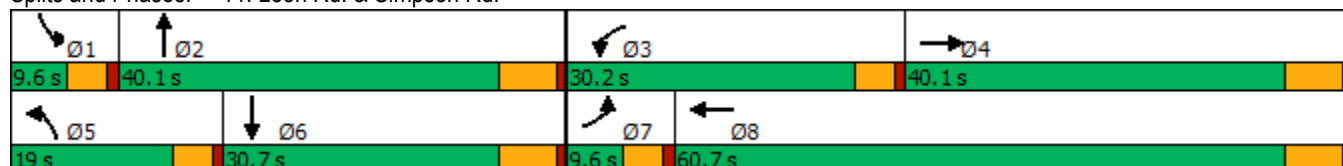
Intersection LOS: D

Intersection Capacity Utilization 71.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 11: Leon Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
11: Leon Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	617	244	301	806	0	160	38	139	0	96	0
Future Volume (veh/h)	0	617	244	301	806	0	160	38	139	0	96	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	726	287	354	948	0	188	45	164	0	113	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	813	321	388	2107	0	221	98	356	2	196	0
Arrive On Green	0.00	0.33	0.33	0.22	0.59	0.00	0.12	0.28	0.28	0.00	0.10	0.00
Sat Flow, veh/h	1781	2487	983	1781	3647	0	1781	353	1286	1781	1870	0
Grp Volume(v), veh/h	0	519	494	354	948	0	188	0	209	0	113	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1693	1781	1777	0	1781	0	1639	1781	1870	0
Q Serve(g_s), s	0.0	26.5	26.5	18.5	14.1	0.0	9.9	0.0	10.1	0.0	5.5	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	18.5	14.1	0.0	9.9	0.0	10.1	0.0	5.5	0.0
Prop In Lane	1.00		0.58	1.00		0.00	1.00		0.78	1.00		0.00
Lane Grp Cap(c), veh/h	2	581	554	388	2107	0	221	0	454	2	196	0
V/C Ratio(X)	0.00	0.89	0.89	0.91	0.45	0.00	0.85	0.00	0.46	0.00	0.58	0.00
Avail Cap(c_a), veh/h	93	632	602	478	2107	0	269	0	582	93	480	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	30.5	30.5	36.4	10.8	0.0	40.9	0.0	28.6	0.0	40.7	0.0
Incr Delay (d2), s/veh	0.0	14.3	14.9	17.6	0.2	0.0	16.6	0.0	0.7	0.0	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	12.6	12.1	9.4	4.6	0.0	5.1	0.0	3.8	0.0	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	44.8	45.4	54.0	10.9	0.0	57.5	0.0	29.3	0.0	43.3	0.0
LnGrp LOS	A	D	D	D	B	A	E	A	C	A	D	A
Approach Vol, veh/h	1013			1302			397			113		
Approach Delay, s/veh	45.1			22.6			42.6			43.3		
Approach LOS	D			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	0.0	32.6	25.4	37.4	16.4	16.2	0.0	62.7				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	5.0	33.9	25.6	33.9	14.4	24.5	5.0	54.5				
Max Q Clear Time (g_c+I1), s	0.0	12.1	20.5	28.5	11.9	7.5	0.0	16.1				
Green Ext Time (p_c), s	0.0	1.0	0.3	2.7	0.1	0.4	0.0	7.0				
Intersection Summary												
HCM 6th Ctrl Delay	34.3											
HCM 6th LOS	C											

Timings
3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  	 	 		 	 	 
Traffic Volume (vph)	521	2931	496	150	2304	697	180	207	158	133	439
Future Volume (vph)	521	2931	496	150	2304	697	180	207	158	133	439
Turn Type	Prot	NA	Perm	Prot	NA	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8	2	2		6	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	4	3	8	2	2	2	6	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	31.2	31.2	9.6	34.8	36.8	36.8	36.8	15.8	15.8	9.6
Total Split (s)	20.0	66.0	66.0	10.0	56.0	38.2	38.2	38.2	15.8	15.8	20.0
Total Split (%)	15.4%	50.8%	50.8%	7.7%	43.1%	29.4%	29.4%	29.4%	12.2%	12.2%	15.4%
Yellow Time (s)	3.6	5.2	5.2	3.6	4.8	4.8	4.8	4.8	4.8	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	5.8	5.8	5.8	5.8	5.8	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag						Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes						Yes
Recall Mode	None	Min	Min	None	Min	None	None	None	None	None	None
Act Effect Green (s)	15.4	59.9	59.9	5.4	50.3	28.7	28.7	28.7	10.0	10.0	26.6
Actuated g/C Ratio	0.12	0.47	0.47	0.04	0.40	0.23	0.23	0.23	0.08	0.08	0.21
v/c Ratio	1.23	1.13	0.57	1.01	1.15	0.74	0.81	0.45	0.57	0.93	0.62
Control Delay	169.1	96.0	13.0	136.3	109.6	51.2	63.6	15.7	65.7	114.7	39.7
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	169.1	96.2	13.0	136.3	109.6	51.2	63.6	15.7	65.7	114.7	39.7
LOS	F	F	B	F	F	D	E	B	E	F	D
Approach Delay		95.4			111.1		47.8			59.0	
Approach LOS		F			F		D			E	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 126.4

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.23

Intersection Signal Delay: 91.0

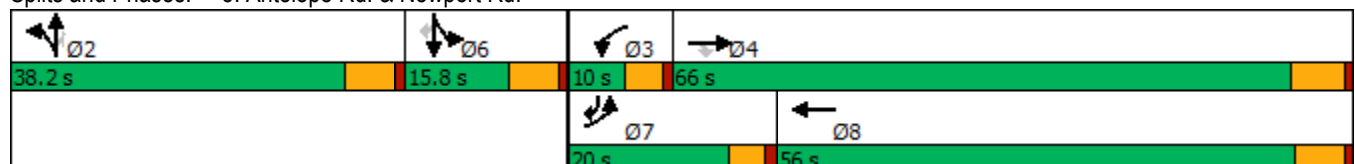
Intersection LOS: F

Intersection Capacity Utilization 108.2%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 3: Antelope Rd. & Newport Rd.



HCM 6th Signalized Intersection Summary

3: Antelope Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	521	2931	496	150	2304	184	697	180	207	158	133	439
Future Volume (veh/h)	521	2931	496	150	2304	184	697	180	207	158	133	439
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	532	2991	327	153	2351	50	654	264	104	161	136	113
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	438	2694	747	153	2192	46	778	408	343	284	149	638
Arrive On Green	0.16	0.62	0.62	0.06	0.52	0.52	0.22	0.22	0.22	0.08	0.08	0.08
Sat Flow, veh/h	3563	5611	1556	3563	5474	116	3563	1870	1570	3563	1870	3112
Grp Volume(v), veh/h	532	2991	327	153	1604	797	654	264	104	161	136	113
Grp Sat Flow(s),veh/h/ln	1781	1870	1556	1781	1870	1849	1781	1870	1570	1781	1870	1556
Q Serve(g_s), s	15.4	60.2	13.6	5.4	50.2	50.2	22.0	16.1	7.0	5.5	9.0	3.8
Cycle Q Clear(g_c), s	15.4	60.2	13.6	5.4	50.2	50.2	22.0	16.1	7.0	5.5	9.0	3.8
Prop In Lane	1.00		1.00	1.00		0.06	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	438	2694	747	153	1498	741	778	408	343	284	149	638
V/C Ratio(X)	1.22	1.11	0.44	1.00	1.07	1.08	0.84	0.65	0.30	0.57	0.91	0.18
Avail Cap(c_a), veh/h	438	2694	747	153	1498	741	921	483	406	284	149	638
HCM Platoon Ratio	1.30	1.30	1.30	1.30	1.30	1.30	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.7	23.6	14.8	59.2	30.1	30.1	46.9	44.6	41.0	55.6	57.2	41.4
Incr Delay (d2), s/veh	116.4	55.5	0.4	71.7	44.8	55.4	6.2	2.3	0.5	2.6	48.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.4	33.4	4.1	3.9	28.2	30.0	10.1	7.5	2.7	2.5	6.2	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	169.0	79.1	15.2	130.8	74.9	85.5	53.1	46.9	41.5	58.2	105.6	41.5
LnGrp LOS	F	F	B	F	F	F	D	D	D	E	F	D
Approach Vol, veh/h	3850			2554			1022			410		
Approach Delay, s/veh	86.1			81.6			50.3			69.3		
Approach LOS	F			F			D			E		
Timer - Assigned Phs	2			3			4			6		
Phs Duration (G+Y+Rc), s	33.2			10.0			66.4			15.8		
Change Period (Y+Rc), s	5.8			4.6			6.2			5.8		
Max Green Setting (Gmax), s	32.4			5.4			59.8			10.0		
Max Q Clear Time (g_c+I1), s	24.0			7.4			62.2			11.0		
Green Ext Time (p_c), s	2.8			0.0			0.0			0.0		
Intersection Summary												
HCM 6th Ctrl Delay	79.1											
HCM 6th LOS	E											
Notes												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings

Salt Creek TA (JN:15470)

4: Meniffee Rd. & McCall Bl.

09/07/2023

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	220	838	28	601	369	179	379	55	518	335
Future Volume (vph)	220	838	28	601	369	179	379	55	518	335
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4	3	8		5	2		1	6
Permitted Phases					8			2		
Detector Phase	7	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	29.8	9.6	30.8	30.8	9.6	39.5	39.5	9.6	16.5
Total Split (s)	16.0	38.0	9.6	31.6	31.6	26.4	41.4	41.4	31.0	46.0
Total Split (%)	13.3%	31.7%	8.0%	26.3%	26.3%	22.0%	34.5%	34.5%	25.8%	38.3%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	None	Min
Act Effect Green (s)	11.6	34.9	5.1	23.9	23.9	15.3	18.9	18.9	20.5	24.1
Actuated g/C Ratio	0.12	0.36	0.05	0.25	0.25	0.16	0.20	0.20	0.21	0.25
v/c Ratio	1.18	0.91	0.18	0.74	0.60	0.73	0.62	0.15	0.81	0.64
Control Delay	159.3	42.7	51.5	40.8	7.6	56.0	40.3	0.7	47.0	31.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	159.3	42.7	51.5	40.8	7.6	56.0	40.3	0.7	47.0	31.7
LOS	F	D	D	D	A	E	D	A	D	C
Approach Delay		62.8		28.8			41.3			39.5
Approach LOS		E		C			D			D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 96.8

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.18

Intersection Signal Delay: 44.7

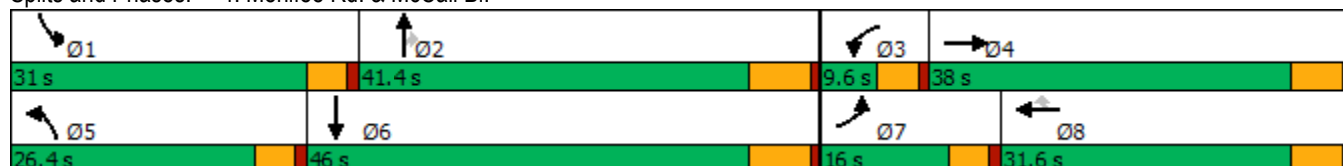
Intersection LOS: D

Intersection Capacity Utilization 79.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Meniffee Rd. & McCall Bl.



HCM 6th Signalized Intersection Summary
4: Meniffee Rd. & McCall Bl.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	838	218	28	601	369	179	379	55	518	335	167
Future Volume (veh/h)	220	838	218	28	601	369	179	379	55	518	335	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	250	952	163	32	683	220	203	431	32	589	381	73
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	235	1076	184	107	916	387	241	625	277	684	711	135
Arrive On Green	0.13	0.35	0.35	0.03	0.24	0.24	0.14	0.18	0.18	0.20	0.24	0.24
Sat Flow, veh/h	1781	3112	533	3456	3741	1581	1781	3554	1574	3456	2980	566
Grp Volume(v), veh/h	250	572	543	32	683	220	203	431	32	589	226	228
Grp Sat Flow(s),veh/h/ln	1781	1870	1775	1728	1870	1581	1781	1777	1574	1728	1777	1769
Q Serve(g_s), s	11.4	24.9	24.9	0.8	14.6	10.5	9.6	9.8	1.5	14.2	9.6	9.7
Cycle Q Clear(g_c), s	11.4	24.9	24.9	0.8	14.6	10.5	9.6	9.8	1.5	14.2	9.6	9.7
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	235	647	614	107	916	387	241	625	277	684	424	422
V/C Ratio(X)	1.06	0.88	0.88	0.30	0.75	0.57	0.84	0.69	0.12	0.86	0.53	0.54
Avail Cap(c_a), veh/h	235	698	662	200	1119	473	450	1437	637	1057	813	810
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	26.6	26.6	40.9	30.1	28.6	36.4	33.3	29.9	33.4	28.7	28.7
Incr Delay (d2), s/veh	76.0	12.3	13.0	0.6	2.2	1.3	3.1	1.4	0.2	2.9	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	12.2	11.7	0.3	6.4	3.9	4.0	4.0	0.5	5.7	3.8	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	113.5	38.9	39.6	41.5	32.3	29.9	39.5	34.7	30.1	36.3	29.7	29.8
LnGrp LOS	F	D	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1365			935			666			1043	
Approach Delay, s/veh		52.8			32.1			35.9			33.5	
Approach LOS		D			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.7	21.7	7.3	35.6	16.3	27.1	16.0	26.9				
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8				
Max Green Setting (Gmax), s	26.4	34.9	5.0	32.2	21.8	39.5	11.4	25.8				
Max Q Clear Time (g_c+I1), s	16.2	11.8	2.8	26.9	11.6	11.7	13.4	16.6				
Green Ext Time (p_c), s	0.9	2.5	0.0	2.9	0.2	2.3	0.0	3.4				
Intersection Summary												
HCM 6th Ctrl Delay			40.1									
HCM 6th LOS			D									

Timings
6: Meniffee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

											
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	600	2156	416	1646	75	313	351	535	106	243	499
Future Volume (vph)	600	2156	416	1646	75	313	351	535	106	243	499
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0
Minimum Split (s)	9.6	34.8	9.6	32.8	32.8	9.6	35.8	9.6	9.6	33.8	9.6
Total Split (s)	33.0	55.0	17.0	39.0	39.0	14.0	37.0	17.0	11.0	34.0	33.0
Total Split (%)	27.5%	45.8%	14.2%	32.5%	32.5%	11.7%	30.8%	14.2%	9.2%	28.3%	27.5%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	4.8	3.6	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	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	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	5.8	4.6	4.6	5.8	4.6
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Min	Min	None	None	None	None	None	None
Act Effect Green (s)	28.5	49.4	12.4	33.3	33.3	9.4	18.0	31.6	6.4	15.0	44.7
Actuated g/C Ratio	0.27	0.46	0.12	0.31	0.31	0.09	0.17	0.30	0.06	0.14	0.42
v/c Ratio	1.37	1.03	1.09	1.02	0.14	1.08	0.60	1.05	1.08	0.50	0.77
Control Delay	212.6	54.0	115.3	63.5	0.5	121.8	45.1	78.1	159.5	45.5	22.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	212.6	54.0	115.3	63.5	0.5	121.8	45.1	78.1	159.5	45.5	22.0
LOS	F	D	F	E	A	F	D	E	F	D	C
Approach Delay		85.5		71.3			79.9			45.9	
Approach LOS		F		E			E			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 107.1

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.37

Intersection Signal Delay: 75.7

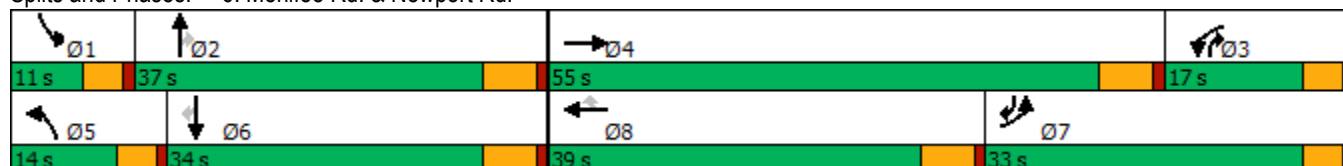
Intersection LOS: E

Intersection Capacity Utilization 100.1%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 6: Meniffee Rd. & Newport Rd.



HCM 6th Signalized Intersection Summary
6: Menifee Rd. & Newport Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  		 	  		 	 			 	
Traffic Volume (veh/h)	600	2156	271	416	1646	75	313	351	535	106	243	499
Future Volume (veh/h)	600	2156	271	416	1646	75	313	351	535	106	243	499
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	645	2318	49	447	1770	77	337	377	269	114	261	456
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	485	2520	53	466	1787	498	321	554	436	109	446	620
Arrive On Green	0.41	0.69	0.46	0.20	0.48	0.32	0.14	0.22	0.15	0.09	0.18	0.12
Sat Flow, veh/h	1781	5475	115	3563	5611	1563	3563	3741	1548	1781	3741	1581
Grp Volume(v), veh/h	645	1582	785	447	1770	77	337	377	269	114	261	456
Grp Sat Flow(s),veh/h/ln	1781	1870	1850	1781	1870	1563	1781	1870	1548	1781	1870	1581
Q Serve(g_s), s	28.4	37.3	38.1	13.0	32.6	2.8	9.4	9.6	2.3	6.4	6.7	5.7
Cycle Q Clear(g_c), s	28.4	37.3	38.1	13.0	32.6	2.8	9.4	9.6	2.3	6.4	6.7	5.7
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	485	1722	851	466	1787	498	321	554	436	109	446	620
V/C Ratio(X)	1.33	0.92	0.92	0.96	0.99	0.15	1.05	0.68	0.62	1.04	0.59	0.73
Avail Cap(c_a), veh/h	485	1766	873	466	1787	498	321	1120	671	109	1012	860
HCM Platoon Ratio	1.50	1.50	1.00	1.50	1.50	1.00	1.50	1.50	1.00	1.50	1.50	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	14.5	15.3	41.6	27.1	14.8	45.1	38.3	17.4	47.3	40.4	11.6
Incr Delay (d2), s/veh	161.7	8.1	14.9	31.3	19.0	0.1	63.6	1.5	1.4	97.9	1.2	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	31.5	9.8	12.2	7.1	14.1	1.3	6.6	4.1	3.9	5.6	2.9	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	192.5	22.6	30.2	72.9	46.0	15.0	108.6	39.8	18.8	145.2	41.7	13.7
LnGrp LOS	F	C	C	E	D	B	F	D	B	F	D	B
Approach Vol, veh/h		3012			2294			983			831	
Approach Delay, s/veh		60.9			50.2			57.7			40.5	
Approach LOS		E			D			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	21.2	18.2	53.8	14.0	18.2	33.0	39.0				
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8				
Max Green Setting (Gmax), s	6.4	31.2	12.4	49.2	9.4	28.2	28.4	33.2				
Max Q Clear Time (g_c+I1), s	8.4	11.6	15.0	40.1	11.4	8.7	30.4	34.6				
Green Ext Time (p_c), s	0.0	3.0	0.0	7.9	0.0	3.1	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			54.6									
HCM 6th LOS			D									

Timings
10: Briggs Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	111	298	58	29	293	691	34	35	824	59
Future Volume (vph)	111	298	58	29	293	691	34	35	824	59
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA
Protected Phases	7	4		3	8		5	2	1	6
Permitted Phases			4			8				
Detector Phase	7	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	9.6	28.2	28.2	9.6	28.2	28.2	9.6	28.2	9.6	28.2
Total Split (s)	15.7	39.7	39.7	11.0	35.0	35.0	11.4	29.3	40.0	57.9
Total Split (%)	13.1%	33.1%	33.1%	9.2%	29.2%	29.2%	9.5%	24.4%	33.3%	48.3%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	5.2	3.6	5.2
All-Red Time (s)	1.0	1.0	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	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	6.2	4.6	6.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	Min
Act Effect Green (s)	10.0	31.9	31.9	6.0	23.1	23.1	6.2	12.2	29.2	40.0
Actuated g/C Ratio	0.10	0.33	0.33	0.06	0.24	0.24	0.06	0.13	0.30	0.41
v/c Ratio	0.65	0.52	0.10	0.29	0.71	0.79	0.33	0.23	0.86	0.24
Control Delay	62.9	32.9	0.3	56.6	44.9	9.7	57.0	33.3	42.1	11.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.9	32.9	0.3	56.6	44.9	9.7	57.0	33.3	42.1	11.4
LOS	E	C	A	E	D	A	E	C	D	B
Approach Delay		35.9			21.2			42.7		36.9
Approach LOS		D			C			D		D

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 96.7

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 30.7

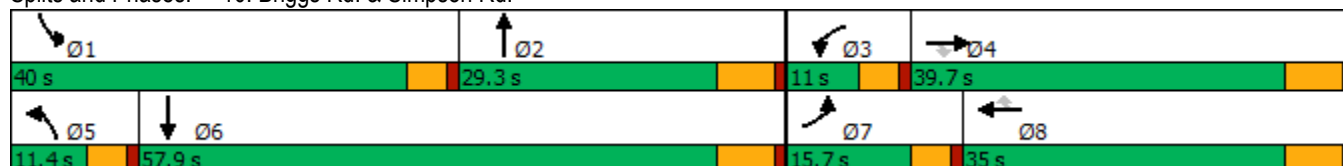
Intersection LOS: C

Intersection Capacity Utilization 71.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 10: Briggs Rd. & Simpson Rd.



HCM 6th Signalized Intersection Summary
10: Briggs Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	298	58	29	293	691	34	35	17	824	59	110
Future Volume (veh/h)	111	298	58	29	293	691	34	35	17	824	59	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	119	320	47	32	315	394	37	38	13	886	64	91
Peak Hour Factor	0.93	0.93	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.93	0.92	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	620	525	55	520	441	60	149	51	986	254	361
Arrive On Green	0.08	0.33	0.33	0.03	0.28	0.28	0.03	0.11	0.11	0.29	0.36	0.36
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1332	456	3456	698	993
Grp Volume(v), veh/h	119	320	47	32	315	394	37	0	51	886	0	155
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	0	1788	1728	0	1692
Q Serve(g_s), s	5.9	12.4	1.8	1.6	13.1	21.4	1.8	0.0	2.3	22.1	0.0	5.8
Cycle Q Clear(g_c), s	5.9	12.4	1.8	1.6	13.1	21.4	1.8	0.0	2.3	22.1	0.0	5.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.59
Lane Grp Cap(c), veh/h	149	620	525	55	520	441	60	0	200	986	0	615
V/C Ratio(X)	0.80	0.52	0.09	0.59	0.61	0.89	0.62	0.00	0.26	0.90	0.00	0.25
Avail Cap(c_a), veh/h	221	699	593	127	601	509	135	0	461	1365	0	976
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.3	24.2	20.6	42.9	28.1	31.1	42.7	0.0	36.4	30.8	0.0	20.0
Incr Delay (d2), s/veh	6.8	0.7	0.1	3.7	1.3	16.4	3.8	0.0	0.7	5.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	5.1	0.6	0.7	5.6	9.4	0.8	0.0	1.0	9.1	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.1	24.8	20.7	46.5	29.4	47.5	46.6	0.0	37.1	35.9	0.0	20.2
LnGrp LOS	D	C	C	D	C	D	D	A	D	D	A	C
Approach Vol, veh/h		486			741			88			1041	
Approach Delay, s/veh		29.9			39.8			41.1			33.6	
Approach LOS		C			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	30.2	16.2	7.3	35.9	7.6	38.8	12.1	31.1				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	35.4	23.1	6.4	33.5	6.8	51.7	11.1	28.8				
Max Q Clear Time (g_c+I1), s	24.1	4.3	3.6	14.4	3.8	7.8	7.9	23.4				
Green Ext Time (p_c), s	1.5	0.1	0.0	1.7	0.0	0.8	0.0	1.5				
Intersection Summary												
HCM 6th Ctrl Delay			35.0									
HCM 6th LOS			D									

Timings
11: Leon Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

	→	↖	←	↗	↑	↘	↓	
Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT	Ø7
Lane Configurations	↑↑	↖	↑↑	↗	↑	↘	↓	
Traffic Volume (vph)	896	213	711	302	113	1	71	
Future Volume (vph)	896	213	711	302	113	1	71	
Turn Type	NA	Prot	NA	Prot	NA	Prot	NA	
Protected Phases	4	3	8	5	2	1	6	7
Permitted Phases								
Detector Phase	4	3	8	5	2	1	6	
Switch Phase								
Minimum Initial (s)	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	28.2	9.6	28.2	9.6	28.2	9.6	28.2	9.6
Total Split (s)	44.0	20.0	54.4	26.0	46.4	9.6	30.0	9.6
Total Split (%)	36.7%	16.7%	45.3%	21.7%	38.7%	8.0%	25.0%	8%
Yellow Time (s)	5.2	3.6	5.2	3.6	5.2	3.6	5.2	3.6
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)	6.2	4.6	6.2	4.6	6.2	4.6	6.2	
Lead/Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	Min	None	Min	None
Act Effect Green (s)	37.9	15.4	57.9	21.5	37.1	5.0	12.8	
Actuated g/C Ratio	0.35	0.14	0.53	0.20	0.34	0.05	0.12	
v/c Ratio	1.01	0.92	0.41	0.94	0.73	0.01	0.35	
Control Delay	64.5	86.5	16.7	79.0	30.6	53.0	48.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	64.5	86.5	16.7	79.0	30.6	53.0	48.3	
LOS	E	F	B	E	C	D	D	
Approach Delay	64.5		32.8		50.3		48.4	
Approach LOS	E		C		D		D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 109.2

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 50.3

Intersection LOS: D

Intersection Capacity Utilization 84.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 11: Leon Rd. & Simpson Rd.

↖ Ø1	↑ Ø2	↗ Ø3	→ Ø4
9.6 s	46.4 s	20 s	44 s
↖ Ø5	↓ Ø6	↗ Ø7	↖ Ø8
26 s	30 s	9.6 s	54.4 s

HCM 6th Signalized Intersection Summary
11: Leon Rd. & Simpson Rd.

Salt Creek TA (JN:15470)

09/07/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	896	243	213	711	0	302	113	327	1	71	0
Future Volume (veh/h)	0	896	243	213	711	0	302	113	327	1	71	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	963	30	229	765	0	325	122	218	1	76	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	1131	35	262	1836	0	357	183	327	2	196	0
Arrive On Green	0.00	0.32	0.32	0.15	0.52	0.00	0.20	0.30	0.30	0.00	0.10	0.00
Sat Flow, veh/h	1781	3518	110	1781	3647	0	1781	602	1075	1781	1870	0
Grp Volume(v), veh/h	0	486	507	229	765	0	325	0	340	1	76	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1851	1781	1777	0	1781	0	1677	1781	1870	0
Q Serve(g_s), s	0.0	24.4	24.4	12.0	12.7	0.0	17.0	0.0	16.9	0.1	3.6	0.0
Cycle Q Clear(g_c), s	0.0	24.4	24.4	12.0	12.7	0.0	17.0	0.0	16.9	0.1	3.6	0.0
Prop In Lane	1.00		0.06	1.00		0.00	1.00		0.64	1.00		0.00
Lane Grp Cap(c), veh/h	2	571	595	262	1836	0	357	0	510	2	196	0
V/C Ratio(X)	0.00	0.85	0.85	0.87	0.42	0.00	0.91	0.00	0.67	0.41	0.39	0.00
Avail Cap(c_a), veh/h	93	703	732	287	1836	0	399	0	706	93	466	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	30.3	30.3	39.9	14.2	0.0	37.3	0.0	29.0	47.7	39.9	0.0
Incr Delay (d2), s/veh	0.0	8.3	8.0	21.8	0.2	0.0	21.7	0.0	1.5	36.1	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.8	11.2	6.5	4.4	0.0	9.1	0.0	6.5	0.0	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	38.5	38.3	61.6	14.4	0.0	59.0	0.0	30.5	83.8	41.2	0.0
LnGrp LOS	A	D	D	E	B	A	E	A	C	F	D	A
Approach Vol, veh/h	993			994			665			77		
Approach Delay, s/veh	38.4			25.3			44.5			41.7		
Approach LOS	D			C			D			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	4.7	35.2	18.6	36.9	23.8	16.2	0.0	55.6				
Change Period (Y+Rc), s	4.6	6.2	4.6	6.2	4.6	6.2	4.6	6.2				
Max Green Setting (Gmax), s	5.0	40.2	15.4	37.8	21.4	23.8	5.0	48.2				
Max Q Clear Time (g_c+I1), s	2.1	18.9	14.0	26.4	19.0	5.6	0.0	14.7				
Green Ext Time (p_c), s	0.0	1.8	0.0	4.3	0.1	0.2	0.0	5.2				
Intersection Summary												
HCM 6th Ctrl Delay	35.2											
HCM 6th LOS	D											

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