

TRANSPORTATION IMPACT ANALYSIS

VILLAGE AT MORENO VALLEY PROJECT

CITY OF MORENO VALLEY

RIVERSIDE COUNTY, CALIFORNIA

LSA

September 2021

TRANSPORTATION IMPACT ANALYSIS

VILLAGE AT MORENO VALLEY PROJECT CITY OF MORENO VALLEY RIVERSIDE COUNTY, CALIFORNIA

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Project No. FXP1802



September 2021

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1.0 EXECUTIVE SUMMARY

The proposed Village at Moreno Valley Project will include a gas station with 18 fueling positions, a 5,427 square foot convenience store with a car wash, 11,000 square feet (sf) of retail, a total of 9,956 sf of fast food restaurant with a drive through window, a total of 4,500 sf of fast food restaurant without a drive through window, a 4,500 square foot restaurant, and two retail anchors with a total of 22,000 sf. The project will be located at the northwest corner of the intersection of Nason Street and Fir Avenue in the City of Moreno Valley (City). Both the current and proposed General Plan land use and zoning for the project site are Commercial and Community Commercial, respectively. As such, the project will not require a General Plan Amendment (GPA) or Zone Change (ZC). The project is anticipated to be fully built out by year 2023.

Access to the project site will be provided via three driveways: two on Fir Avenue, and one on Nason Street. Project Driveway 1 on Fir Avenue will operate as a full-access driveway. The other two driveways (Project Driveway 2 on Fir Avenue and Project Driveway 3 on Nason Street) will operate as right-in/right-out (RIRO) only driveways.

The project is anticipated to generate 574 net trips in the a.m. peak hour, 381 net trips in the p.m. peak hour, and 6,191 net daily trips.

The study area for the project was finalized as per the criteria stated in the City of Moreno Valley Transportation Engineering Division *Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment* (dated June 2020) and based on discussions with City staff during the scoping agreement process. As such, the study area includes fifteen intersections, including the three project driveway intersections.

Traffic conditions were examined for the weekday a.m. and p.m. peak hour conditions under the following scenarios:

- Existing conditions;
- Project Completion (2023) conditions; and
- Project Completion (2023) Plus Project conditions.

1.1 EXISTING CONDITIONS SUMMARY

Based on the criteria as discussed in the “Level of Service Procedures and Thresholds” section of this report, all intersections currently operate at a satisfactory LOS. Additionally, all freeway segments and ramp merge/diverge areas currently operate at a satisfactory LOS. Queues for some turn movements at study area intersections exceed the existing available turn-pocket storage lengths under existing conditions.

1.2 PROJECT COMPLETION (2023) CONDITIONS SUMMARY

Based on the criteria discussed in the “Level of Service Procedures and Thresholds” section of this report, all intersections are forecast to operate at a satisfactory LOS under project completion

conditions. However, under project completion plus project conditions, only the intersection of Morrison Street/Fir Avenue is forecast to operate at an unsatisfactory LOS. As such, based on the criteria stated in the City's TIA guidelines, the project is forecast to create an operational deficiency at this intersection. All other intersections are forecast to operate at a satisfactory LOS under project completion plus project conditions. Table 1-A lists improvements recommended at study intersections and the corresponding funding mechanisms. (Figures and tables are located at the end of each chapter). With the implementation of the improvements recommended in Table 1-A, the intersection of Morrison Street/Fir Avenue is forecast to operate at a satisfactory LOS.

Based on the criteria discussed in the "Level of Service Procedures and Thresholds" section of this report, all freeway segments and ramp merge/diverge areas are forecast to operate at a satisfactory LOS under both project completion without and plus project conditions.

Queues for some of the turn movements at study area intersections are forecast to exceed the existing available turn-pocket storage lengths under both project completion without and plus project conditions. It is to be noted that no improvement is feasible for the queuing deficiency for the northbound right turn movement at the intersection of Lasselle Street/Iris Avenue due to right-of-way constraints. As such, the queuing deficiency for this movement will continue to exist.

1.3 ACTIVE TRANSPORTATION AND PUBLIC TRANSIT ANALYSIS

The project does not conflict with any existing or proposed bicycle, pedestrian, or public transit facility. Therefore, it can be considered as conforming to all adopted plans, policies, and programs concerning these facilities and will not have a significant impact.

1.4 VEHICLE MILES TRAVELED ANALYSIS

Pursuant to the City's Vehicle Miles Traveled (VMT) analysis guidelines, projects located in a low VMT generating zone are exempted from a VMT assessment. As per the Western Riverside Council of Governments' (WRCOG's) Screening Tool, the project lies in a low VMT generating Traffic Analysis Zone (TAZ). Additionally, the project is consistent with the City's General Plan. Therefore, the project can be screened from a VMT analysis and will not have a significant VMT impact.

1.5 LIST OF CHAPTER 1.0 TABLES

- Table 1-A: Recommended Improvements for Intersections and Funding Mechanisms

Table 1-A - Recommended Improvements for Intersections and Funding Mechanisms

Intersection	Project Completion (2023) Plus Project Improvements	Funding Mechanism	Improvements Covered by TUMF	Improvements Covered by Fair Share
2 . Morrison Street/Fir Avenue	Restripe the single 22 feet wide WBLTR lane to a dedicated left-turn lane (with a storage length of 75 feet) and a shared through-right lane, each 11 feet wide; restrict on-street parking along the westbound approach on Fir Avenue for 125 feet east of the intersection.	Fair Share	-	Restripe the single 22 feet wide WBLTR lane to a dedicated left-turn lane (with a storage length of 75 feet) and a shared through-right lane, each 11 feet wide; restrict on-street parking along the westbound approach on Fir Avenue for 125 feet east of the intersection.
6 . Nason Street/Fir Avenue	Remove portion of the raised median to extend the storage length for the NBL turn movement from 230 feet to 300 feet.	Fair Share	-	Remove portion of the raised median to extend the storage length for the NBL turn movement from 230 feet to 300 feet.
9 . Nason Street/Cottonwood Avenue	Extend storage length for the EBL turn movement from 90 feet to 140 feet.	Fair Share	-	Extend storage length for the EBL turn movement from 90 feet to 140 feet.

Notes:

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

L = Left; T = Through; R = Right

TUMF refers to the Transportation Uniform Mitigation Fee program.

2.0 INTRODUCTION

The Transportation Impact Analysis (TIA) has been prepared to assess the potential circulation impacts associated with the proposed Village at Moreno Valley Project (Case No. PEN20-0045, PEN20-0046, PEN20-0047, PEN20-0049, PEN20-0050, PEN20-0051, PEN20-0053) to be located at the northwest corner of Nason Street and Fir Avenue in the City of Moreno Valley. Figure 2-1 illustrates the regional and project location.

This report is intended to satisfy the requirements established by the City's TIA Guidelines (dated June 2020) and the California Department of Transportation (Caltrans), as well as the requirements for the disclosure of potential impacts and mitigation measures pursuant to CEQA. The scope of work for this TIA, including trip generation, trip distribution, study area, and analysis methodologies, has been approved by City staff via the Scoping Agreement process. A copy of the Scoping Agreement is included as Appendix A.

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

- Existing Conditions;
- Project Completion Conditions; and
- Project Completion Plus Project Conditions.

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

2.1 PROJECT DESCRIPTION

The proposed project will include a gas station with 18 fueling positions, a 5,427 square foot convenience store with a car wash, 11,000 sf of retail, a total of 9,956 sf of fast food restaurant with a drive through window, a total of 4,500 sf of fast food restaurant without a drive through window, a 4,500 square foot restaurant, and two retail anchors with a total of 22,000 sf. Figure 1-2 illustrates the conceptual site plan for the project.

The land use for the project site in the City's General Plan is Commercial and the Zoning is Community Commercial. The project does not include a GPA or ZC. The project is anticipated to be fully built out by year 2023. Project completion conditions have been analyzed for the full build out of the project.

Access to the project site would be provided via three driveways: two on Fir Avenue, and one on Nason Street. Only Project Driveway 1 on Fir Avenue will be a full-access driveway. The other two driveways (Project Driveway 2 on Fir Avenue and Project Driveway 3 on Nason Street) will operate as RIRO only driveways. Figure 2-2 illustrates the conceptual site plan for the project.

2.2 STUDY AREA

2.2.1 Study Intersections

The study area was approved by City staff via the City’s scoping agreement process (Appendix A). Based on the City’s TIA guidelines, a TIA is required to analyze all intersections of “Collector” or higher classification streets, with “Collector” or higher classification streets at which the project will add 50 or more peak hour trips. Per the Scoping Agreement (Appendix A), intersections analyzed in this study and their jurisdictions are as follows:

1. Lasselle Street/Iris Avenue (Moreno Valley);
2. Morrison Street/Fir Avenue (Moreno Valley);
3. Morrison Street/Eucalyptus Avenue (Moreno Valley);
4. Nason Street/Elder Avenue – State Route 60 (SR-60) Westbound Ramps (Caltrans);
5. Nason Street/SR-60 Eastbound Ramps (Caltrans);
6. Nason Street/Fir Avenue (Moreno Valley);
7. Nason Street/Eucalyptus Avenue (Moreno Valley);
8. Nason Street/Dracaea Avenue (Moreno Valley);
9. Nason Street/Cottonwood Avenue (Moreno Valley);
10. Nason Street/Alessandro Boulevard (Moreno Valley);
11. Nason Street/Cactus Avenue (Moreno Valley);
12. Nason Street – Hillrose Lane/Iris Avenue (Moreno Valley);
13. Project Driveway 1/Fir Avenue (Moreno Valley);
14. Project Driveway 2/Fir Avenue (Moreno Valley); and
15. Nason Street/Project Driveway 3 (Moreno Valley).

Figure 2-3 illustrates the locations of all study intersections.

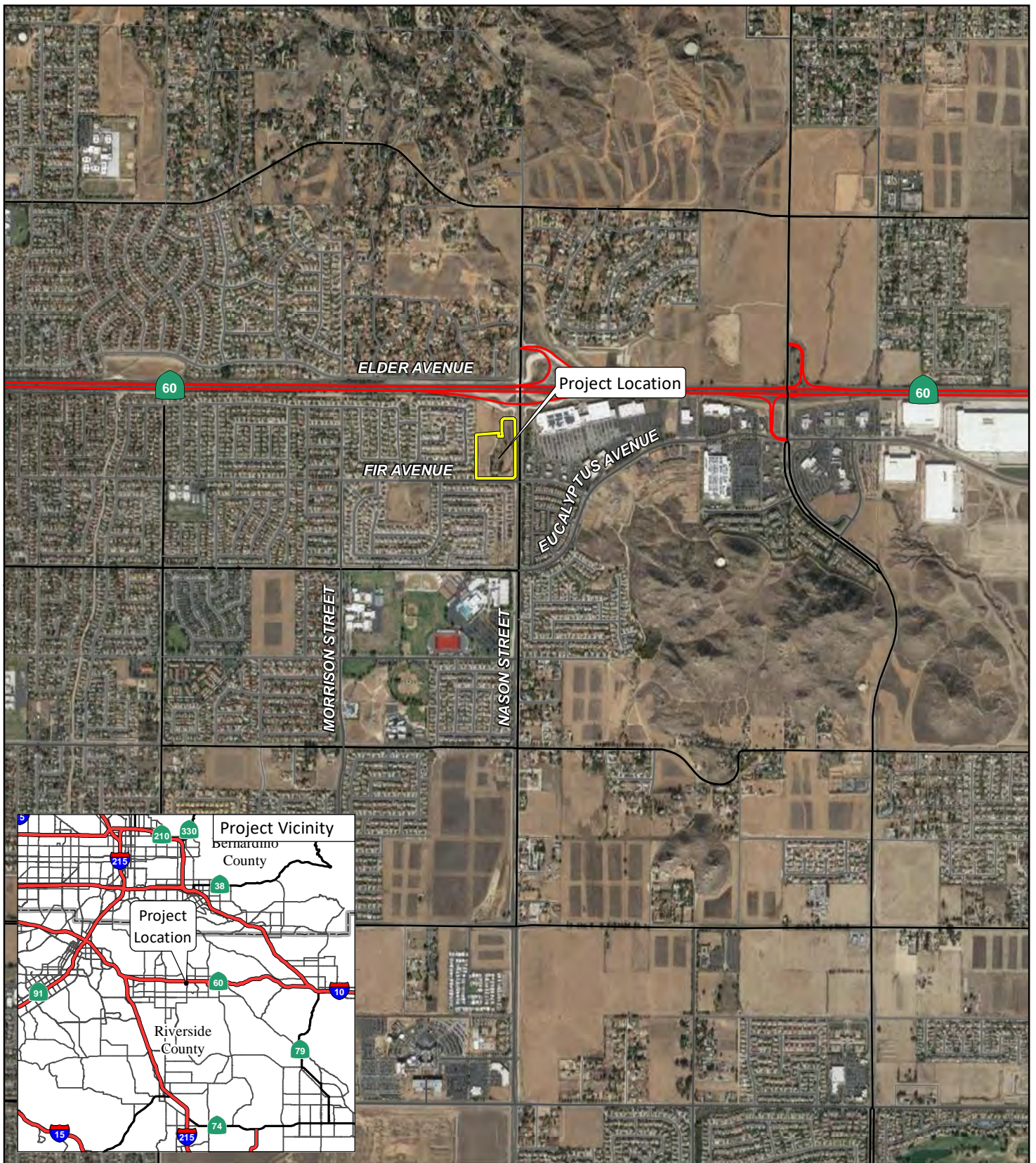
2.2.2 Freeway Analysis

For purposes of this analysis, a merge/diverge analysis was conducted at ramp junctions where the project adds 50 or more peak hour trips. Additionally, freeway segments with more than 100 two-way peak hour project trips were included in this analysis. Table 2-A lists the freeway segments and ramp merge/diverge areas included in this analysis.

2.3 LIST OF CHAPTER 2.0 FIGURES AND TABLES

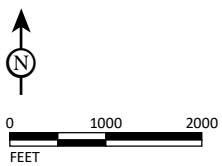
- Figure 2-1: Regional and Project Location
- Figure 2-2: Conceptual Site Plan

-
- Figure 2-3: Study Area Intersections
 - Table 2-A: Freeway Segments and Ramp Merge/Diverge Areas



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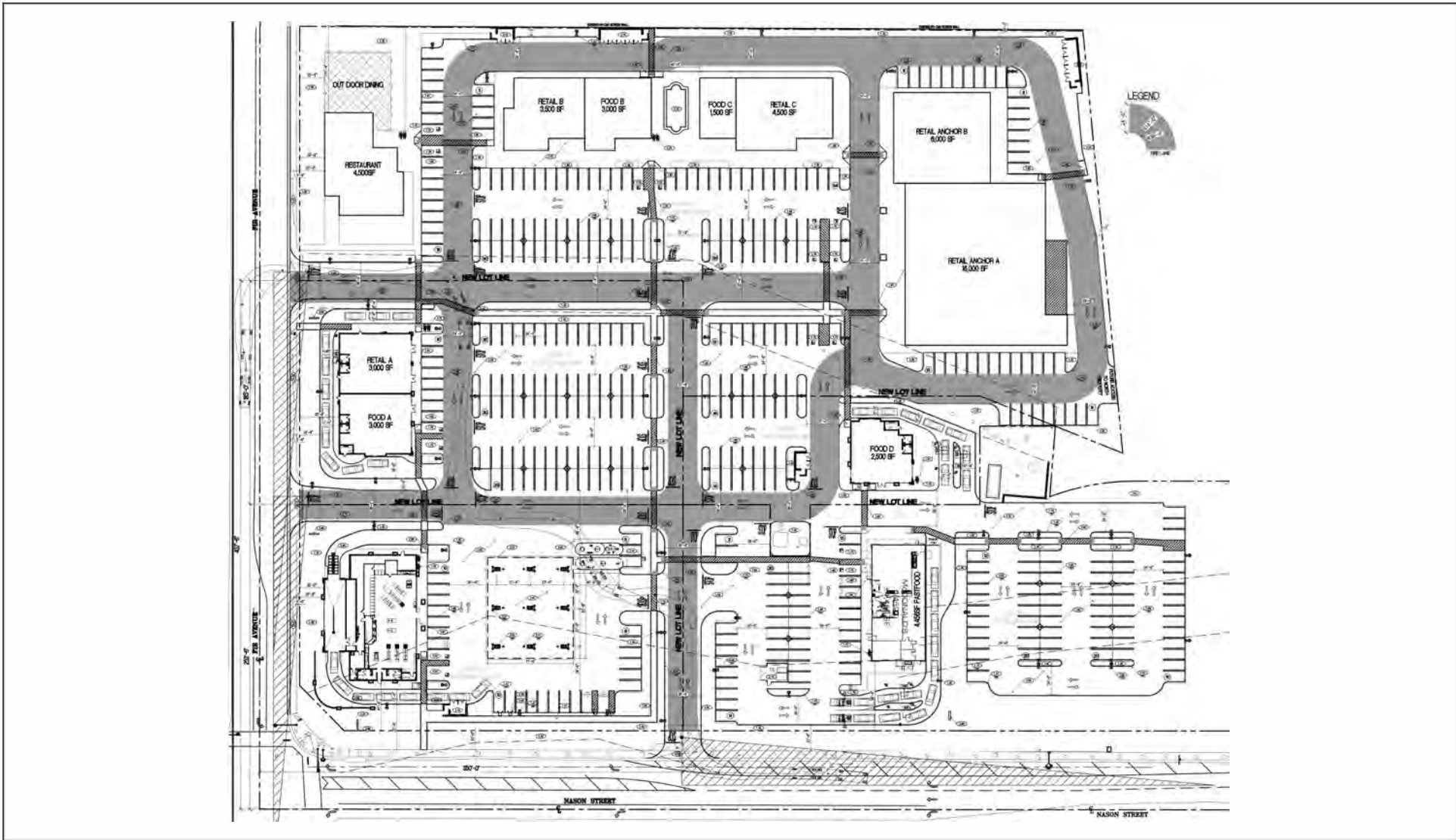
FIGURE 2-1



SOURCE: Riverside County, 2016; Google Earth, 2018.

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Village at Moreno Valley Project
 Transportation Impact Analysis
 Regional and Project Location



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FIGURE 2-2



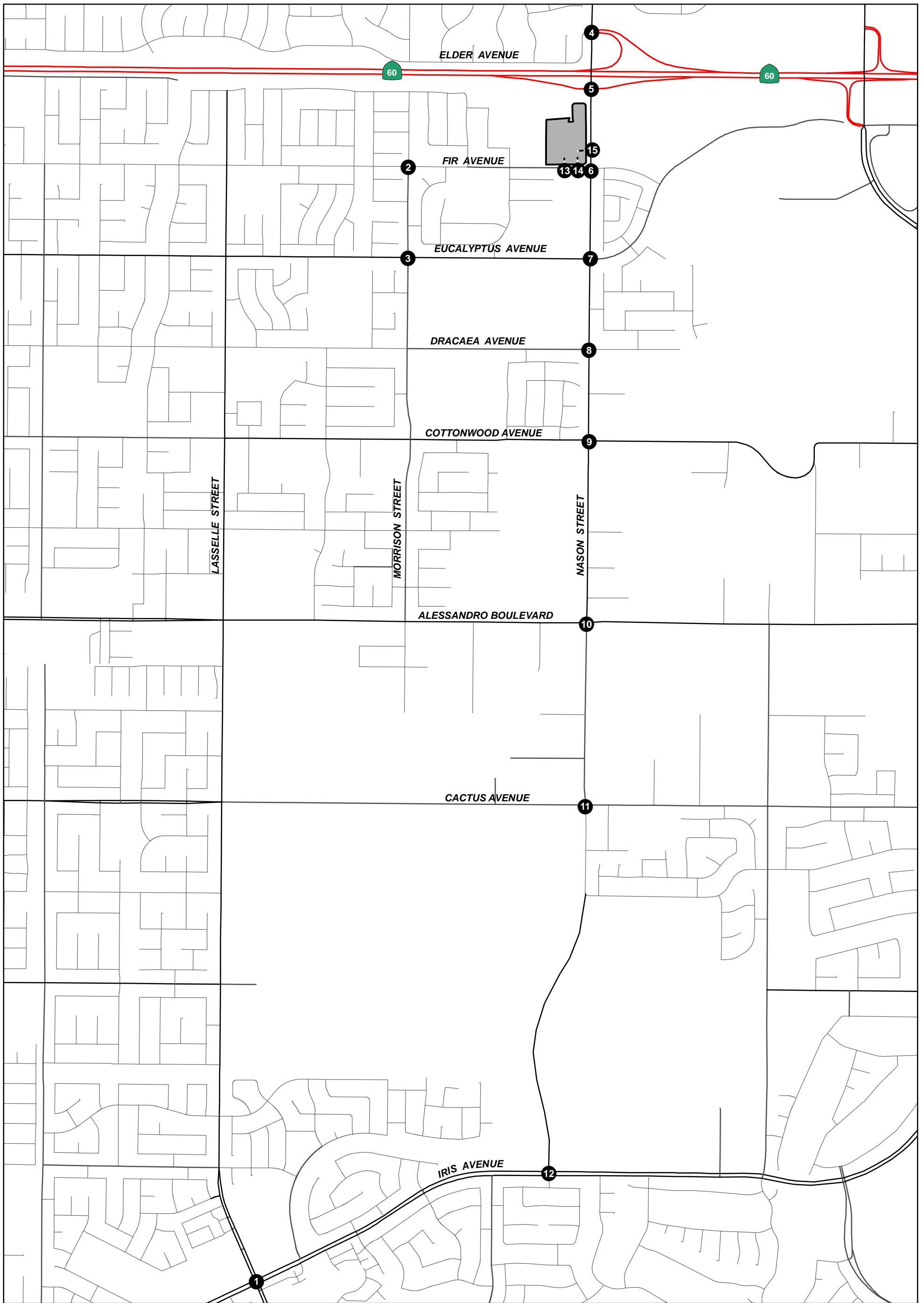
NO SCALE

SOURCE: CJC Design, Inc.

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Village at Moreno Valley Project
 Transportation Impact Analysis

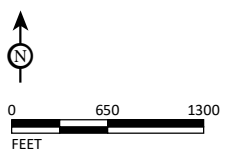
Conceptual Site Plan



LSA

LEGEND

- Project Site
- Study Area Intersection
- Project Driveway



SOURCE: Riverside County, 2016

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FIGURE 2-3

Table 2-A - Freeway Segments and Ramp Merge/Diverge Areas

Freeway Segments and Merge/Diverge Areas	Mainline/Mixed Flow Lanes	HOV Lanes ¹
State Route 60		
<u>Eastbound</u>		
1 West of Nason Street Off-Ramp	2	1
2 Nason Street Off-Ramp	2	1
3 Between Nason Street Off-Ramp and Nason Street On-Ramp	2	1
4 Nason Street On-Ramp	2	1
5 East of Nason Street On-Ramp	3	1
<u>Westbound</u>		
6 East of Nason Street Off-Ramp	3	1
7 Nason Street Off-Ramp	2	1
8 Between Nason Street Off-Ramp and Nason Street on-Ramp	2	1
9 Nason Street On-Ramp	2	1
10 West of Nason Street On-Ramp	2	1

Notes:

¹ HOV lanes only in operation from Monday to Friday between 6 a.m. and 10 a.m., and between 3 p.m. and 7 p.m.

3.0 LEVEL OF SERVICE ANALYSIS METHODOLOGY

3.1 LEVEL OF SERVICE DEFINITIONS

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

A complete description of the meaning of LOS can be found in the Transportation Research Board Special Report 209, *Highway Capacity Manual* (HCM). The HCM establishes LOS A through F for intersections. A description of LOS for signalized and unsignalized intersections is summarized in Table 3-A.

Table 3-B shows the LOS criteria for unsignalized and signalized intersections. For all study area intersections, the *Highway Capacity Manual 6th Edition* (HCM 6) analysis methodologies were used to determine intersection LOS. Intersection LOS was calculated using Synchro 10 software, which uses the HCM 6 methodologies.

Basic freeway segments have uniform traffic conditions and roadway characteristics. The measure used to provide an estimate of LOS is density, where density is calculated from the average vehicle flow rate per lane and the average speed. Table 3-C shows the correlation between LOS and flow density. LOS A represents a freeway segment with density less than or equal to 11 passenger cars per mile per lane (pc/mi/ln). LOS F represents a freeway segment with density greater than 45 pc/mi/ln.

Based on the HCM, the LOS for freeway ramps is determined by traffic flow density. Table 3-D shows the correlation between LOS and traffic flow density defined in HCM for merge and diverge segments. LOS A represents traffic flow density less than or equal to 10 pc/mi/ln (all vehicles will be converted to the equivalent of passenger cars). LOS F represents overflow conditions with high density and congestion.

For basic freeway segments and ramp merge/diverge study areas, the Highway Capacity 7 Software (HCS 7) was used. The software calculates LOS for basic freeway segments and ramp merge/diverge areas using the HCM 6 methodologies.

3.2 LEVEL OF SERVICE PROCEDURES AND THRESHOLDS

Study intersections analyzed in this report are under the jurisdiction of the City of Moreno Valley and Caltrans. The City uses both LOS C and LOS D as its minimum level of service criteria for intersections. As per the City's TIA Guidelines, LOS D is applicable for intersections adjacent to freeway on/off ramps and employment-generating land uses while LOS C is applicable for all other intersections. Figure 3-1 illustrates the LOS standards for intersections within the City.

Caltrans considers an acceptable LOS to be between LOS C and D at all intersections under its jurisdiction (delay of 45 seconds at signalized intersections and delay of 30 seconds at unsignalized intersections).

However, for basic freeway segments and ramp merge/diverge areas, the *Caltrans Guide for the Preparation of Traffic Impact Studies* (2002) states that transition between LOS C and D may not be feasible and allows the local jurisdictions to set the LOS threshold based on local conditions.

Caltrans does not have LOS standards for basic freeway segments and ramp merge/diverge areas. Consequently, most jurisdictions in Riverside County do not use the Caltrans Measure of Effectiveness (MOE) as it is not attainable in most areas of Southern California. Instead, most jurisdictions require LOS E, which is in accordance with Riverside County Congestion Management Program (CMP) guidelines, dated December 2011. Therefore, LOS E has been used as the acceptable LOS for freeway segments and ramp merge/diverge areas.

At study intersections under the jurisdiction of the City, the operating requirements pursuant to the City's TIA guidelines are as follows:

3.2.1 City Study Intersections - Signalized

- Any signalized study intersection operating at an acceptable LOS without project traffic at which the addition of project traffic causes the intersection to degrade to unacceptable LOS shall identify improvements to provide acceptable LOS.
- Any signalized study intersection that is operating at an unacceptable LOS without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

3.2.2 City Study Intersections - Unsignalized

Operational improvements are required if the study determines that either section a) or both sections b) and c) occur:

- a) The addition of project-related traffic causes the intersection to degrade from an acceptable LOS to unacceptable LOS.

OR

- b) The project adds 5.0 seconds or more of delay to an intersection that is already projected to operate without project traffic at unacceptable LOS,

AND

- c) The intersection meets the peak hour traffic signal warrant after the addition of project traffic.

If the conditions above are satisfied, improvements should be identified that achieve the following:

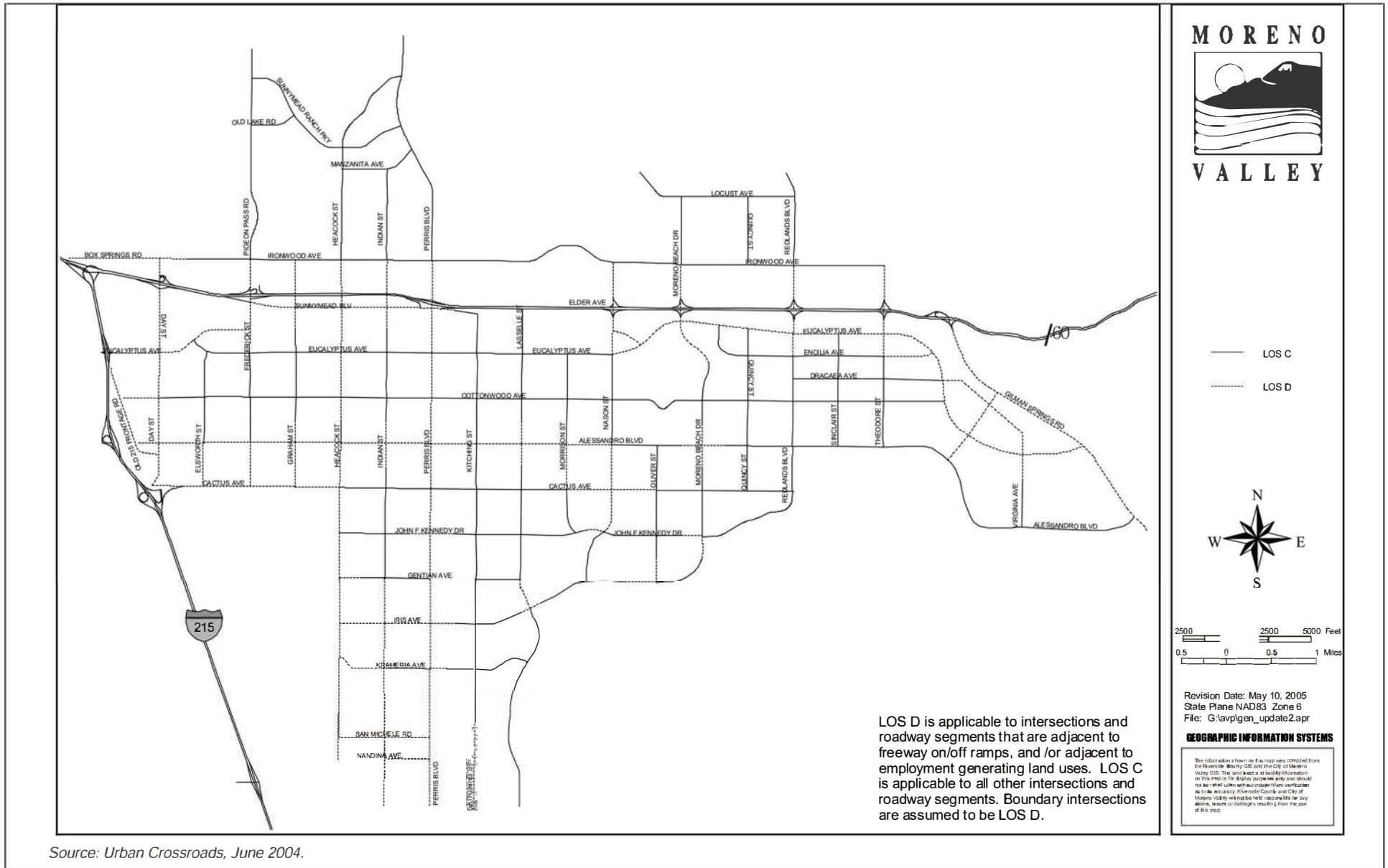
- LOS D or better for case a) above or to pre-project LOS and delay for case b) above.

3.2.3 Caltrans Facilities

Caltrans does not have any operational deficiency criteria for study intersections, basic freeway segments, and ramp merge/diverge areas. Therefore, it has been considered that an operational deficiency occurs when the project causes an unsatisfactory condition (deteriorate from LOS A through D to E or F for intersections or deteriorate from LOS A through E to F for basic freeway segments and ramp merge/diverge areas) or when the project contributes to an existing deficiency.

3.3 LIST OF CHAPTER 3.0 FIGURES AND TABLES

- Figure 3-1: City of Moreno Valley LOS Standards
- Table 3-A: Intersection Level of Service Definitions
- Table 3-B: Level of Service Criteria for Unsignalized and Signalized Intersections
- Table 3-C: Level of Service Criteria for Freeway Segments
- Table 3-D: Level of Service Criteria for Merge and Diverge Segments



LSA

FIGURE 3-1

Table 3-A: Intersection Level of Service Definitions

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

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

Table 3-B: Level of Service Criteria for Unsignalized and Signalized Intersections

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

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

Table 3-C: Level of Service Criteria for Freeway Segments

LOS	Density (pc/mi/ln)
A	≤ 11
B	$> 11 - 18$
C	$> 18 - 26$
D	$> 26 - 35$
E	$> 35 - 45$
F	Demand exceeds capacity OR density > 45

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

Table 3-D: Level of Service Criteria for Merge and Diverge Segments

LOS	Density (pc/mi/ln)
A	≤ 10
B	$> 10-20$
C	$> 20-28$
D	$> 28-35$
E	> 35
F	Demand exceeds capacity

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

4.0 EXISTING CONDITIONS

4.1 EXISTING ROADWAY NETWORK

Figure 4-1 illustrates existing study intersection geometrics and traffic control. Within the City of Moreno Valley, all major roadways are classified based on the City's Circulation Plan. Figure 4-2 illustrates the street classifications defined by the City's Circulation Plan. Following is a brief description of major roadways within the study area:

- **Lasselle Street:** Within the study area, Lasselle Street is designated as an "Arterial" in the City's Circulation Plan. Between Gentian Avenue and College Drive, Lasselle Street is a four-lane Arterial with raised medians. Currently, bike lanes are intermittently present along both directions of Lasselle Street within the study area. There is no provision for on-street parking.
- **Morrison Street:** Within the study area, Morrison Street has no designation in the City's Circulation Plan. Between Fir Avenue and Eucalyptus Avenue, Morrison Street is a four-lane undivided road. There are no bike lanes along both directions of this segment. There is also no provision for on-street parking.
- **Nason Street:** Within the study area, Nason Street has multiple designations in the City's Circulation Plan. Between Elder Avenue – SR-60 Westbound Ramps and Dracaea Avenue, Nason Street is designated as "Divided Arterial – 4 lane". Between Dracaea Avenue and Alessandro Boulevard, Nason Street is designated as an "Arterial." Between Alessandro Boulevard and Delphinium Avenue, Nason Street is designated as "Divided Major Arterial – Reduced Cross Section." Between Delphinium Avenue and Iris Avenue, Nason Street is designated as an "Arterial." There are bike lanes along both directions of Nason Street within the study area. However, there is no provision for on-street parking.
- **Elder Avenue:** Elder Avenue is a local street and has no designation in the City's Circulation Plan. Between Chukar Lane and Nason Street, Elder Avenue is a two-lane undivided road. There are bike lanes along both directions of this segment. There is no provision for on-street parking.
- **Fir Avenue:** Within the study area, Fir Avenue has no designation in the City's Circulation Plan. Between Morrison Street and Nason Street, Fir Avenue is a two-lane undivided road. There are no bike lanes along both directions of this segment. There is provision for on-street parking on both sides of this segment.
- **Eucalyptus Avenue:** Within the study area, Eucalyptus Avenue is designated as an "Arterial" in the City's Circulation Plan. Between Morrison Street and Nason Street, Eucalyptus Avenue is a four-lane divided Arterial with a two-way left-turn lane (TWLTL) median. There are no bike lanes along both directions of this segment. There is no provision for on-street parking on the northern side of this segment, but there is provision for on-street parking on the southern side of this segment.
- **Dracaea Avenue:** Dracaea Avenue is a local street and has no designation in the City's Circulation Plan. Between Mascot Lane and Mill Creek Road, Dracaea Avenue is a two-lane undivided road. There are no bike lanes along both directions of this segment. There is provision for on-street parking on both sides of this segment.

- **Cottonwood Avenue:** Within the study area, Cottonwood Avenue is designated as a “Minor Arterial” in the City’s Circulation Plan. Between Athletics Drive and Nason Street, Cottonwood Avenue is a three-lane undivided Minor Arterial. There are bike routes along both directions of this segment. There is no provision for on-street parking on both sides of this segment. Between Nason Street and Martha Crawford Street, Nason Street is a two-lane undivided Minor Arterial. There are no bike lanes along both directions of this segment. There is no provision for on-street parking on the northern side of this segment, but there is provision for on-street parking on the southern side of this segment.
- **Alessandro Boulevard:** Within the study area, Alessandro Boulevard has multiple designations in the City’s Circulation Plan. Between Country Squire Drive and Nason Street, Alessandro Boulevard is designated as a “Divided Major Arterial.” Between Nason Street and Marion Road, Alessandro Boulevard is designated as “Divided Arterial – 4 lane.” At present, both these segments are not built out to their full cross sections. There are no bike lanes along both directions of Alessandro Boulevard within the study area. There is also no provision for on-street parking.
- **Cactus Avenue:** Within the study area, Cactus Avenue is designated as a “Minor Arterial” in the City’s Circulation Plan. Between Lasselle Street and Nason Street, Cactus Avenue is a four-lane divided Minor Arterial. A striped median exists for the western part of this segment, while a TWLTL exists for the eastern part. There are bike lanes along both directions of this segment. There is no provision for on-street parking. Between Nason Street and Lynn Lee Lane, Cactus Avenue is a two-lane divided Minor Arterial. There are no bike lanes along both directions of this segment. There is no provision for on-street parking.
- **Iris Avenue:** Within the study area, Iris Avenue is designated as a “Divided Major Arterial” in the City’s Circulation Plan. Between Lasselle Street and Nason Street – Hillrose Lane, Iris Avenue is a six-lane Divided Major Arterial with a raised median. There are bike lanes in both directions of this segment. There is no provision for on-street parking.

4.2 PROJECT DESIGN FEATURES

The project will be implementing improvements along its frontage on Fir Avenue as illustrated in Figure 4-3. As shown in Figure 4-3, the project would be widening Fir Avenue to its full cross-section, extending the eastbound left-turn pocket at Nason Street up to 275 feet, and constructing curb, gutter, and sidewalk along the project frontage on Fir Avenue. Additionally, the project will be extending the eastbound left-turn lane by adding a two-way-left-turn lane along the project frontage approximately up to 75 feet west of Project Driveway 1. These improvements will allow left-turn ingress movements at Project Driveway 1 as well as provide sufficient stacking for eastbound left-turns at the intersection of Nason Street/Fir Avenue.

Figure 4-4 illustrates study intersection geometrics and traffic control under ‘plus project’ conditions.

4.3 EXISTING BIKE FACILITIES

Figure 4-5 illustrates the existing and proposed bikeways in the City, per the City of Moreno Valley *Bicycle Master Plan*, dated November 2014. At present, bike lanes exist along both directions of

Nason Street and Iris Avenue within the study area. Bike facilities do not exist along Morrison Street, Fir Avenue, or Eucalyptus Avenue within the study area. However, a bicycle boulevard has been proposed along Fir Avenue between Morrison Street and Nason Street, and bike lanes have been proposed along Eucalyptus Avenue between Morrison Street and Nason Street in the City's *Bicycle Master Plan*.

4.4 EXISTING TRANSIT FACILITIES

Riverside Transit Agency (RTA) is the Consolidated Transportation Service Agency for western Riverside County and is responsible for coordinating transit services throughout the approximately 2,500-square mile service area. RTA provides both local and regional services throughout the region with 33 fixed routes, five CommuterLink express routes, and Dial-A-Ride services using 334 vehicles. RTA Local bus routes 20, 31, and 41 operates within the study area, connecting Moreno Valley to neighboring communities including Banning, Beaumont, Hemet, Perris, Riverside, and San Jacinto.

4.5 EXISTING PEDESTRIAN FACILITIES

The City of Moreno Valley considers other methods and modes of transportation to improve mobility around the region while creating environmental benefits, health benefits, and economic benefits for the City. Figure 4-6 illustrates the Master Plan of Trails within the City. These trails include bikeways and multiuse trails readily available and planned for both pedestrian and cyclist usage. Although there are no current or proposed trails within the study area, currently paved sidewalks are provided on both sides of Fir Avenue and Nason Street, with the exception of the north side of Fir Avenue along the project frontage. With the implementation of the project, paved sidewalks will be added to the north side of Fir Avenue along the project frontage, providing direct, safe, and convenient access for visitors arriving at the project site on foot.

4.6 EXISTING TRAFFIC VOLUMES

4.6.1 Study Intersections

Traffic volumes for existing conditions are typically developed using existing count data collected at study intersections. Due to the current school and office closures statewide because of COVID-19, new traffic counts will not reflect realistic traffic conditions at the study intersections. Therefore, LSA consulted traffic counters to compile a list of counts available for the study intersections. Detailed count sheets are included in Appendix B.

For intersections where historical counts were available, the following methodologies were used for development of existing traffic volumes:

- Intersection 1 – Lasselle Street/Iris Avenue: Historical traffic counts were available for this intersection. An ambient growth rate of 2 percent per annum was applied from 2017 to 2021 to obtain traffic volumes under existing conditions.
- Intersection 2 – Morrison Street/Fir Avenue: Historical traffic counts were available for this intersection. An ambient growth rate of 2 percent per annum was applied from 2018 to 2021 to obtain traffic volumes under existing conditions.

- Intersection 4 – Nason Street/Elder Avenue –SR-60 Westbound Ramps: Historical traffic counts were available for this intersection. An ambient growth rate of 2 percent per annum was applied from 2018 to 2021 to obtain traffic volumes under existing conditions.
- Intersection 5 – Nason Street/SR-60 Eastbound Ramps: Historical traffic counts were available for this intersection. An ambient growth rate of 2 percent per annum was applied from 2018 to 2021 to obtain traffic volumes under existing conditions.
- Intersection 6 – Nason Street/Fir Avenue: Historical traffic counts were available for this intersection. An ambient growth rate of 2 percent per annum was applied from 2018 to 2021 to obtain traffic volumes under existing conditions.
- Intersection 7 – Nason Street/Eucalyptus Avenue: Historical traffic counts were available for this intersection. An ambient growth rate of 2 percent per annum was applied from 2018 to 2021 to obtain traffic volumes under existing conditions.
- Intersection 8 – Nason Street/Dracaea Avenue: Historical traffic counts were available for this intersection. An ambient growth rate of 2 percent per annum was applied from 2018 to 2021 to obtain traffic volumes under existing conditions.
- Intersection 9 – Nason Street/Cottonwood Avenue: Historical traffic counts were available for this intersection. An ambient growth rate of 2 percent per annum was applied from 2017 to 2021 to obtain traffic volumes under existing conditions.
- Intersection 10 – Nason Street/Alessandro Boulevard: Historical traffic counts were available for this intersection. An ambient growth rate of 2 percent per annum was applied from 2017 to 2021 to obtain traffic volumes under existing conditions.
- Intersection 11 – Historical traffic counts were available for this intersection. An ambient growth rate of 2 percent per annum was applied from 2017 to 2021 to obtain traffic volumes under existing conditions.
- Intersection 12 – Nason Street/Iris Avenue: Historical traffic counts were available for this intersection. An ambient growth rate of 2 percent per annum was applied from 2017 to 2021 to obtain traffic volumes under existing conditions.

For the intersection of Morrison Street/Eucalyptus Avenue, historical counts were not available. Therefore, the following methodology was used for development of existing traffic volumes:

- Intersection 3 – Morrison Street/Eucalyptus Avenue: Historical traffic counts were not available for this intersection. Therefore, new traffic counts were collected by Counts Unlimited at this intersection and the nearby intersection of Morrison Street/Fir Avenue. The north-south and east-west growths in traffic volumes at intersection 2 were developed by comparing the collected traffic counts to calculated year 2021 traffic volumes. Further,

these growths were applied to the counts for the north-south and east-west directions at intersection 3 to develop year 2021 traffic volumes.

Existing traffic volumes at the project driveways were obtained using balance of flow of traffic volumes with the adjacent intersections.

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

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

Figure 4-7 illustrates existing peak hour traffic volumes at study intersections.

Detailed volume development worksheets are included in Appendix C.

4.6.2 Freeway Segments and Ramps

Caltrans requires a freeway mainline and ramp merge/diverge analysis for land development projects where the project is anticipated to add more than 100 two-way peak hour trips to the mainline segment and 50 peak hour trips to the ramp merge/diverge areas. Since the project is anticipated to add more than 100 two-way peak hour project trips at the SR-60 freeway mainline segment between the Perris Boulevard and Nason Street interchanges, a freeway segment analysis was performed at these segments. Additionally, a ramp merge/diverge analysis was conducted at the SR-60 and Nason Street interchange, since the project will be adding greater than 50 peak hour trips. The resulting levels of service was calculated using the HCM 6 analysis methodologies. For both freeway mainline and ramp merge/diverge areas, the LOS was calculated using HCS 7.

Typically, freeway traffic volumes are developed using Annual Average Daily Traffic (AADT) volume data published by Caltrans. The most recent Caltrans AADT volume data are from 2019. Similar to intersection traffic counts, the historic freeway segment traffic volumes were adjusted to develop freeway segment volumes under existing conditions. An ambient growth rate of 2 percent per annum was applied from 2019 to 2021 to obtain freeway traffic volumes under existing conditions.

To develop peak hour directional volumes for the freeway mainline, the K and D factors along with the split in traffic volumes between mainline and high occupancy vehicle (HOV) lanes were obtained from the Caltrans Performance Measurement System (PeMS) database. The PeMS database contains historical and current traffic data from detectors provided along the freeway system, updated annually by Caltrans. The freeway mainline and HOV traffic volumes from 2019 in PeMS

was used to develop the volume split between HOV lane and mainline during peak hours. The resulting volume split was applied to the post-processed Average Daily Traffic (ADT) volumes to calculate the HOV traffic volumes and mainline traffic volumes respectively. The 2019 AADT volumes were then multiplied by the appropriate K and D factors derived from PeMS database to obtain the one-way peak hour directional flow rates.

Finally, conservation of flow was applied between freeway mainline segment volumes and ramp volumes (obtained from intersection traffic counts) to develop the traffic volumes throughout the freeway facilities.

The conservation of flow methodology was applied to develop freeway mainline and HOV traffic volumes. Along the eastbound direction, the freeway segment between Perris Boulevard On-Ramp and Nason Street Off-Ramp was used as the starting point. PeMS data from October 2019 was obtained and conservation of flow methodologies was applied in the eastbound and westbound directions to develop traffic volumes along the SR-60 study corridor. Similarly, the freeway segment between Nason Street On-Ramp and Perris Boulevard Off-Ramp was used as the starting point to develop traffic volumes in the westbound direction. PeMS data from October 2019 was obtained for this segment and was utilized to develop traffic volumes along the SR-60 study corridor.

The SR-60 freeway is utilized by a variety of vehicle types such as passenger vehicles, 2-axle trucks (i.e. light trucks), and 3+ axle trucks (i.e. medium/heavy trucks). For purposes of this analysis, trucks were converted to PCEs. A PCE factor of 2.0 was applied to convert the trucks to PCEs. Additionally, medium and heavy-duty trucks do not typically use the HOV lanes. Therefore, all traffic on HOV lanes are considered as passenger vehicles for the purpose of this analysis.

Table 4-A summarizes existing peak hour traffic volumes at ramp merge/diverge study areas and study area freeway segments.

4.7 EXISTING LEVELS OF SERVICE

4.7.1 Study Intersections

Figure 4-1 illustrates existing study intersection geometrics and traffic control. An intersection LOS analysis was conducted for existing conditions using the methodologies previously discussed. For the intersections under the jurisdiction of Caltrans, existing signal timing sheets were obtained and the corresponding signal timings were included in the Synchro files. These timings were used for all the analysis scenarios. The signal timing sheets are included in Appendix B. Table 4-B summarizes the results of this analysis and shows that all intersections currently operate at a satisfactory LOS.

Detailed intersection LOS worksheets are included in Appendix D.

4.7.2 Freeway Segments and Ramps

A freeway segment and ramp LOS analysis was conducted for existing conditions using the methodologies previously discussed. Table 4-C summarizes the results of this analysis and shows that all freeway segments and ramp merge/diverge areas currently operate at a satisfactory LOS.

Detailed freeway LOS worksheets are included in Appendix E.

4.8 LIST OF CHAPTER 4.0 FIGURES AND TABLES

- Figure 4-1: Existing Study Intersection Geometrics and Traffic Control
- Figure 4-2: City of Moreno Valley General Plan Street Classifications
- Figure 4-3: Conceptual Striping Plan for the Proposed Improvements along Fir Avenue
- Figure 4-4: Study Intersection Geometrics and Traffic Control under Plus Project Conditions
- Figure 4-5: City of Moreno Valley Bicycle Network
- Figure 4-6: City of Moreno Valley Master Plan of Trails
- Figure 4-7: Existing Peak Hour Traffic Volumes
- Table 4-A: Existing Freeway Segment and Ramp Merge/Diverge Area Peak Hour Traffic Volumes
- Table 4-B: Existing Intersection Levels of Service
- Table 4-C: Existing Freeway Segment and Ramp Merge/Diverge Area Levels of Service

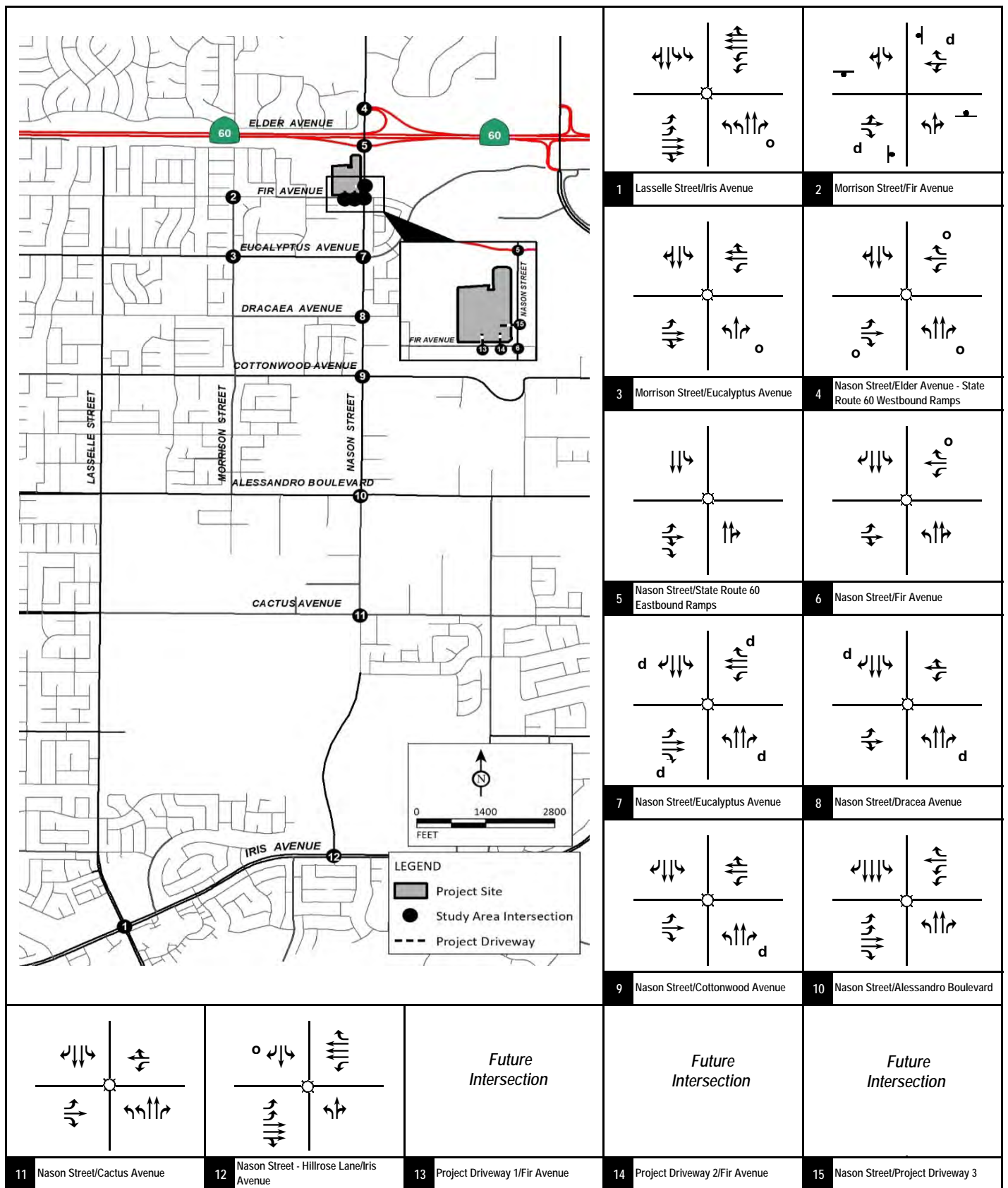


FIGURE 4-1

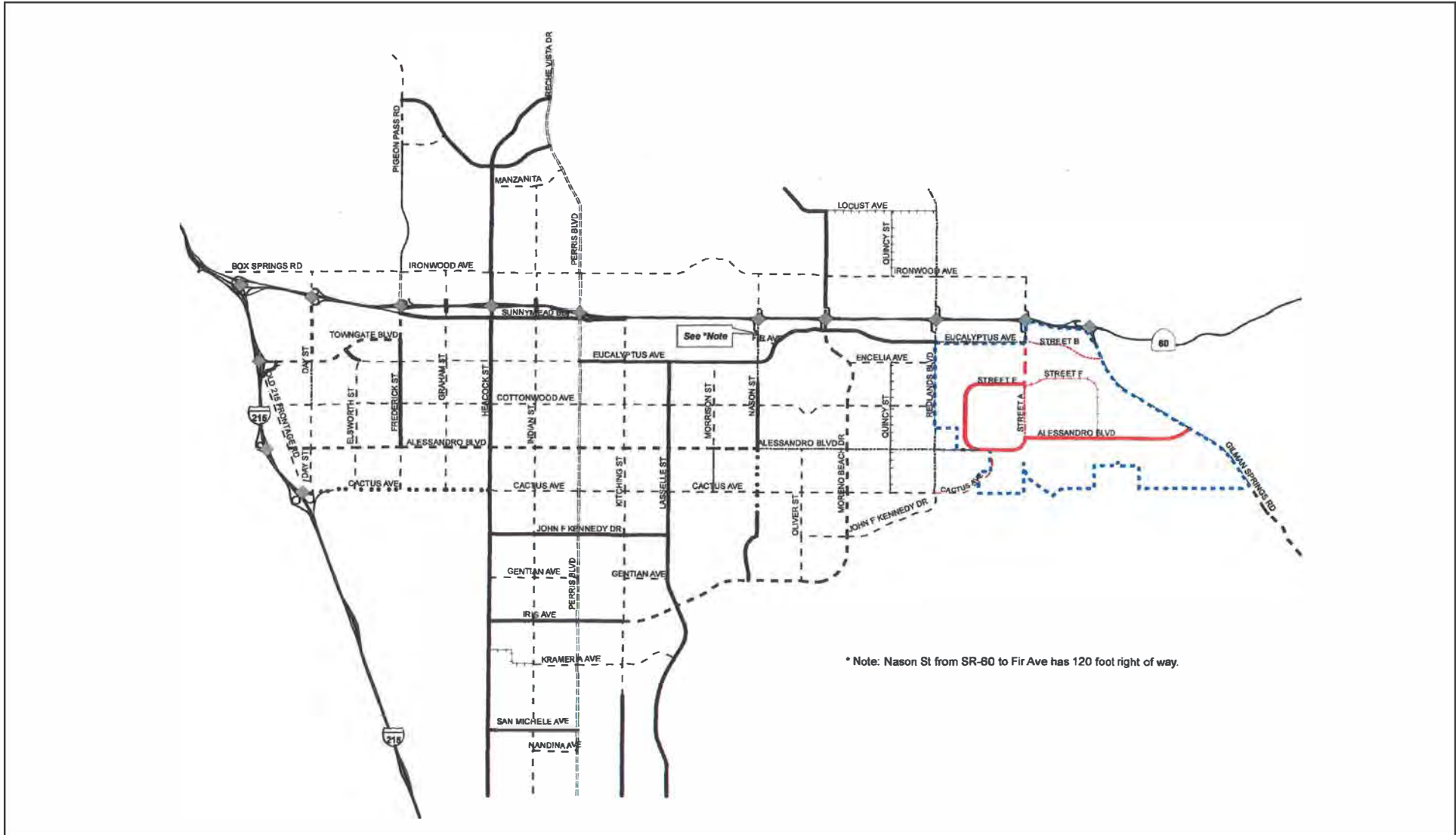
LSA

Legend

- ◻ Signal
- ◐ Right Turn Overlap
- ▬ Stop Sign
- d Defacto Right Turn

Village at Moreno Valley Project
Transportation Impact Analysis

Existing Study Intersection Geometrics and Traffic Control



LSA



Legend

- | | | | |
|--|--|--|--|
| | Freeway | | Minor Arterial |
| | Divided Major Arterial | | Minor Arterial - Pigeon Pass Cross Section |
| | Divided Major Arterial - Reduced Cross Section | | Collector |
| | Divided Arterial - 6 lane | | Freeway Overpass |
| | Divided Arterial - 4 lane | | Freeway Interchange |
| | Arterial | | |

FIGURE 4-2

Village at Moreno Valley Project
Transportation Impact Analysis

City of Moreno Valley General Plan Street Classifications

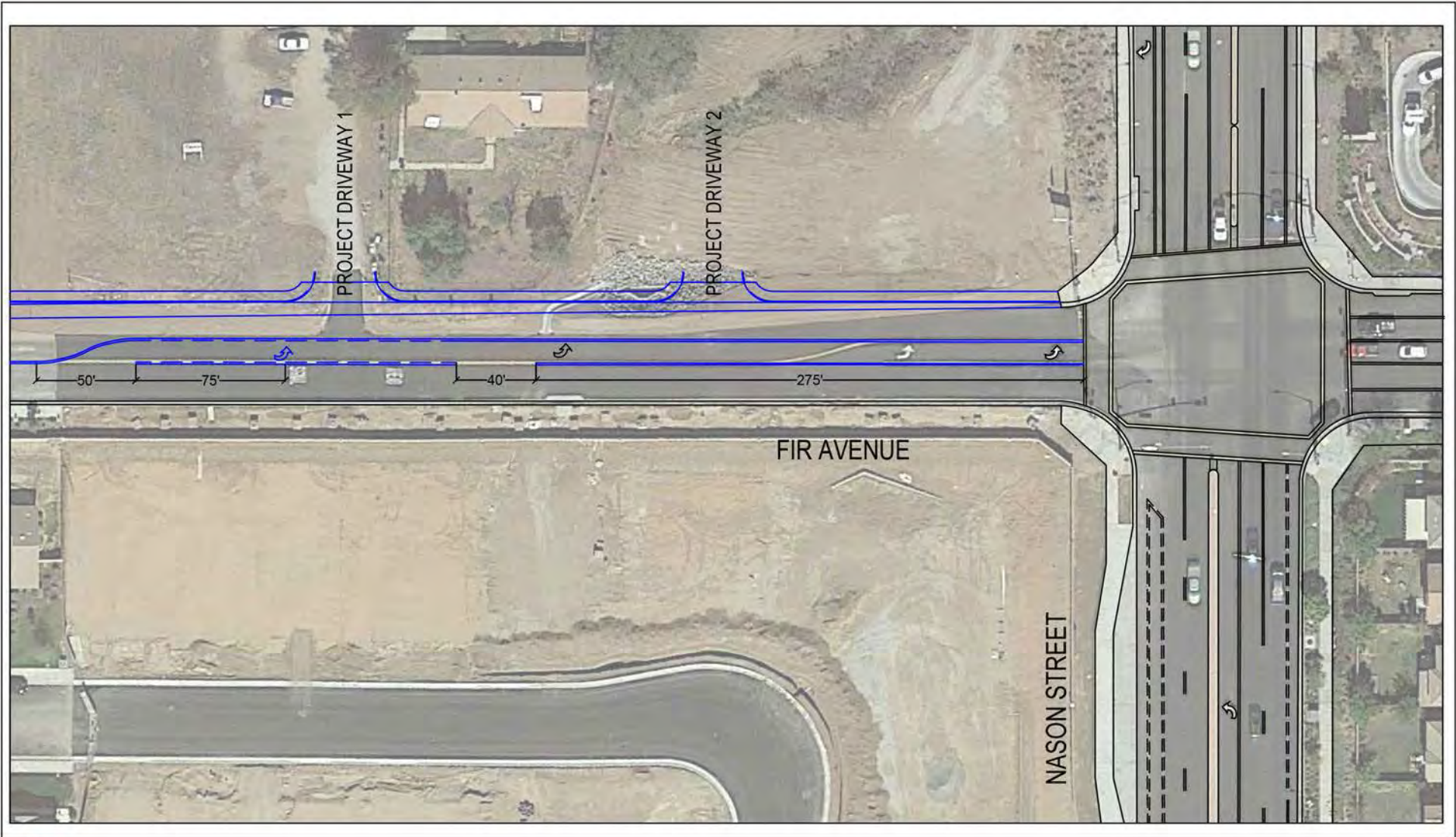
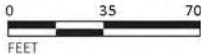


FIGURE 4-3

LSA

LEGEND

- Existing
- Project Design Features



Village at Moreno Valley Project
 Transportation Impact Analysis

Conceptual Striping Plan for the Proposed Improvements along Fir Avenue

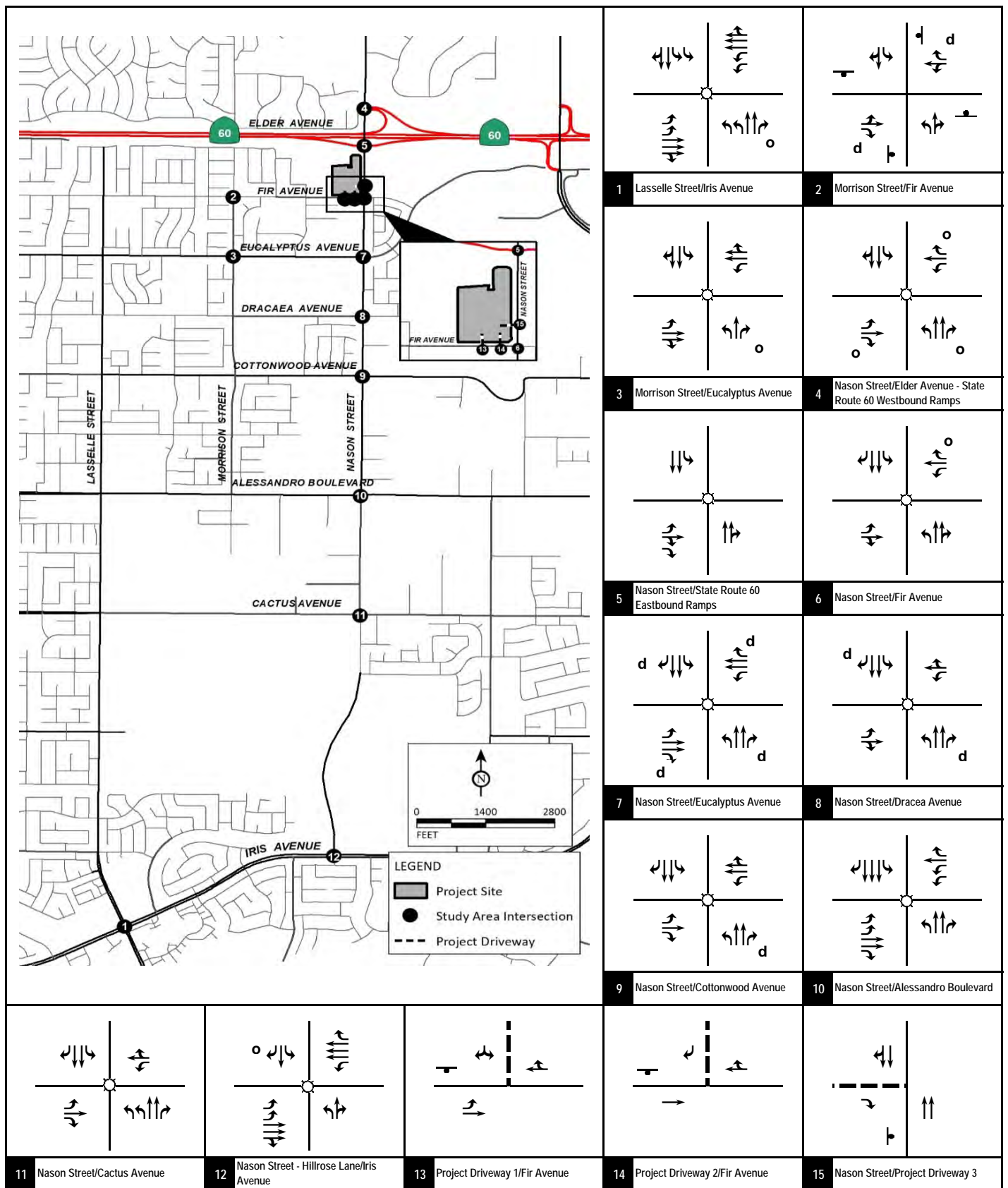


FIGURE 4-4

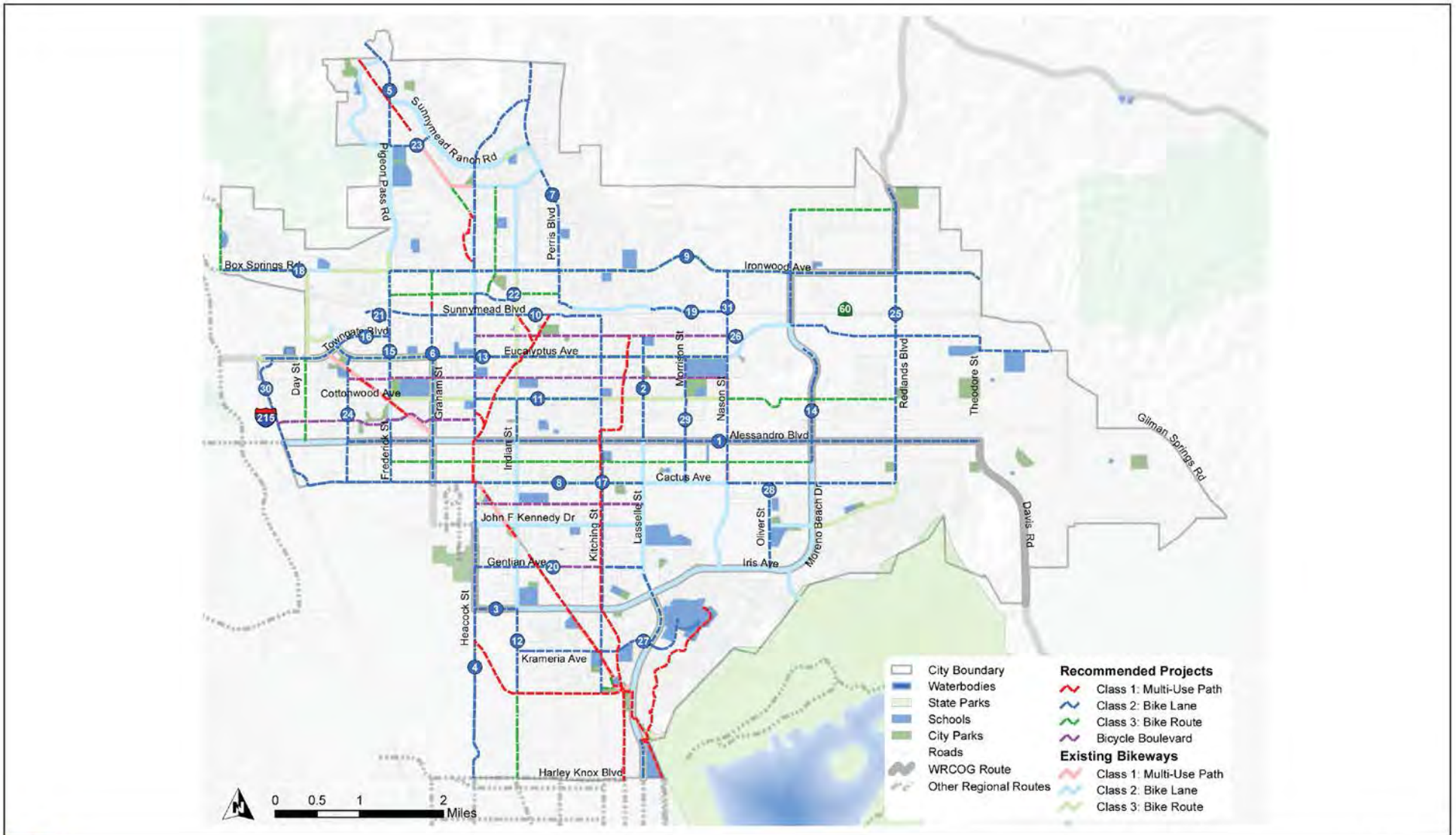
LSA

Legend

- ⊠ Signal
- ⊠ Stop Sign
- d Defacto Right Turn
- Right Turn Overlap
- - - Project Driveway

Study Intersection Geometrics and Traffic Control under Plus Project Conditions

Village at Moreno Valley Project
 Transportation Impact Analysis

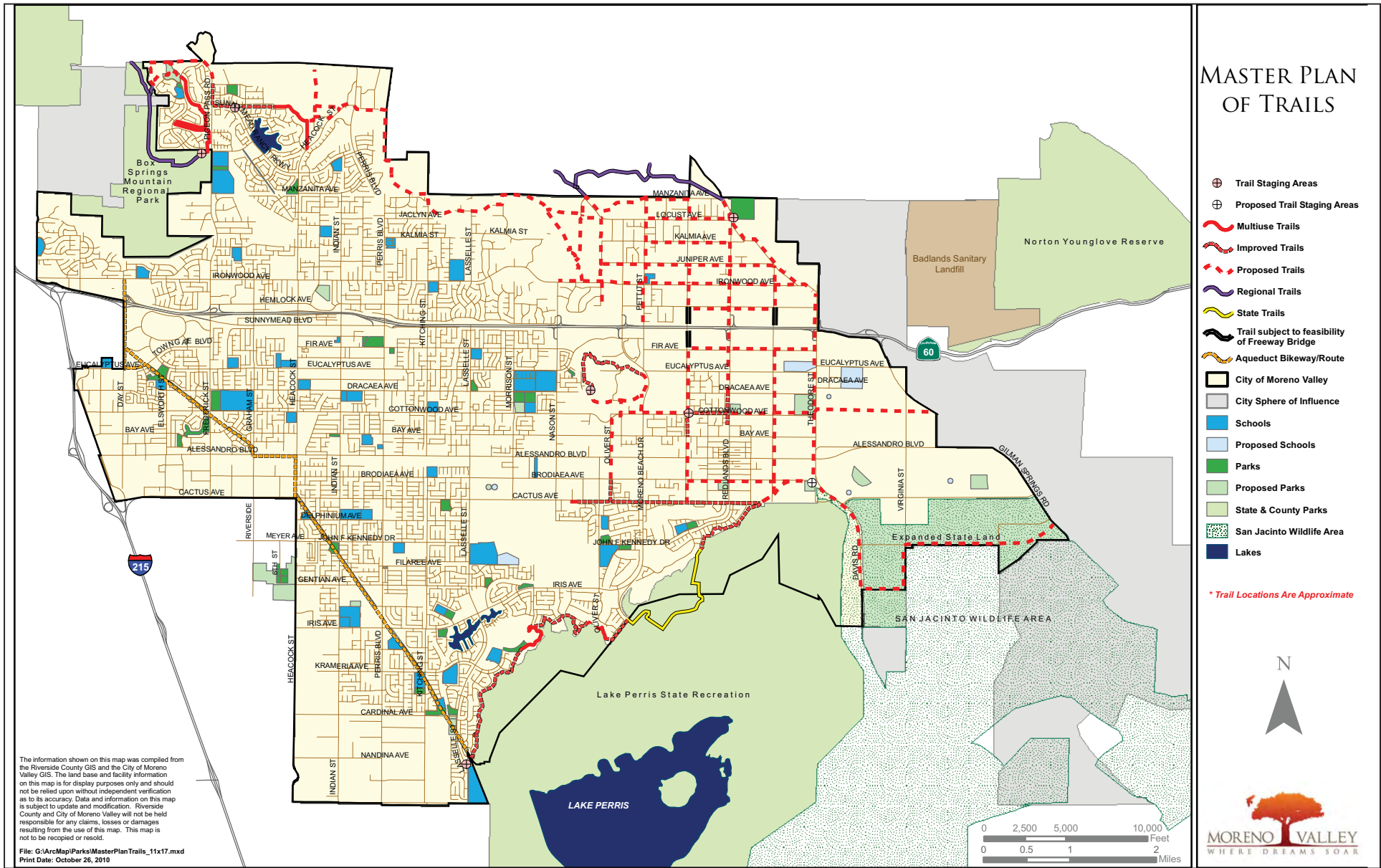


LSA

FIGURE 4-5

Village at Moreno Valley Project
 Transportation Impact Analysis

City of Moreno Valley Bicycle Network



LSA

FIGURE 4-6

Village at Moreno Valley Project
Transportation Impact Analysis

City of Moreno Valley Master Plan of Trails

SOURCE: City of Moreno Valley Multi-Use Trails, 2010

I:\FXP1802\Reports\Traffic\fig4-6_TrailsMasterPlan.cdr (05/16/2018)

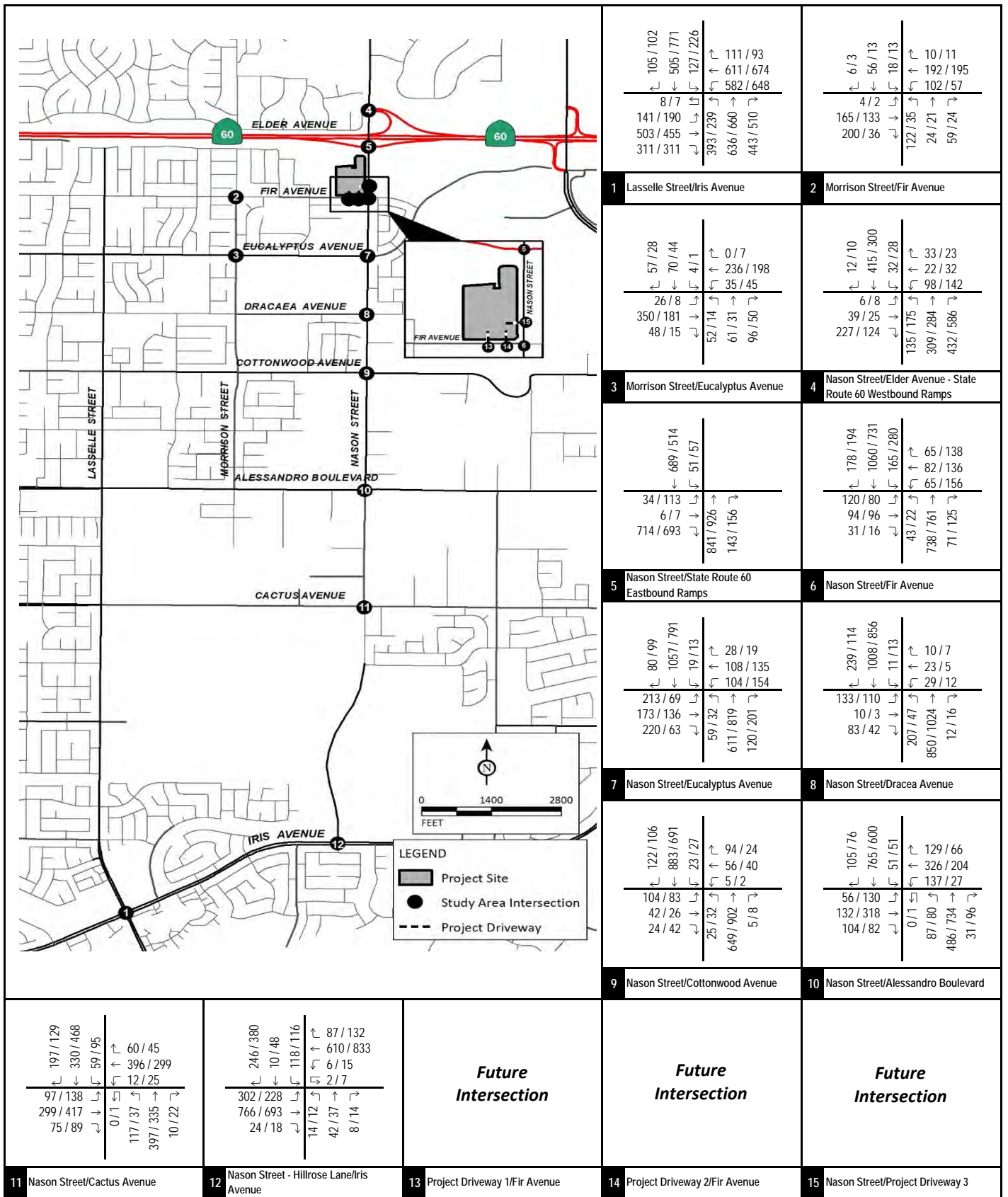


FIGURE 4-7



XXXX / YYYY

AM / PM Peak Hour PCE Traffic Volumes

Village at Moreno Valley Project
Transportation Impact Analysis

Existing Peak Hour Traffic Volumes

Table 4-A - Existing Freeway Segment and Ramp Merge/Diverge Area Peak Hour Traffic Volumes

Eastbound							
SR-60 Eastbound	Type	AM Peak Hour			PM Peak Hour		
		NP HOV PV Volumes	NP Mainline PCE Volumes	NP Ramp PCE Volumes	NP HOV PV Volumes	NP Mainline PCE Volumes	NP Ramp PCE Volumes
1 . West of Nason Street Off-Ramp	Basic	995	2,322		1,269	2,962	
2 . Nason Street Off-Ramp	Ramp (Diverge)			754			813
3 . Between Nason Street Off-Ramp and Nason Street On-Ramp	Basic	995	1,568		1,269	2,149	
4 . Nason Street On-Ramp	Ramp (Merge)			200			220
5 . East of Nason Street On-Ramp	Basic	995	1,768		1,269	2,369	
Westbound							
SR-60 Westbound	Type	AM Peak Hour			PM Peak Hour		
		NP HOV PV Volumes	NP Mainline PCE Volumes	NP Ramp PCE Volumes	NP HOV PV Volumes	NP Mainline PCE Volumes	NP Ramp PCE Volumes
6 . East of Nason Street Off-Ramp	Basic	849	1,631		908	1,676	
7 . Nason Street Off-Ramp	Ramp (Diverge)			153			197
8 . Between Nason Street Off-Ramp and Nason Street on-Ramp	Basic	849	1,478		908	1,479	
9 . Nason Street On-Ramp	Ramp (Merge)			503			639
10 . West of Nason Street On-Ramp	Basic	849	1,981		908	2,118	



Table 4-B - Existing Intersection Levels of Service

Intersection	Control	Jurisdiction	LOS Standard	Without Project			
				A.M. Peak Hour		P.M. Peak Hour	
				Delay (sec.)	LOS	Delay (sec.)	LOS
1 . Lasselle Street/Iris Avenue	Signal	City of Moreno Valley	D	39.7	D	42.6	D
2 . Morrison Street/Fir Avenue	AWSC	City of Moreno Valley	C	19.2	C	9.8	A
3 . Morrison Street/Eucalyptus Avenue	Signal	City of Moreno Valley	C	20.9	C	17.2	B
4 . Nason Street/Elder Avenue - State Route 60 Westbound Ramps	Signal	Caltrans	45 sec	24.4	C	22.5	C
5 . Nason Street/State Route 60 Eastbound Ramps	Signal	Caltrans	45 sec	37.0	D	32.2	C
6 . Nason Street/Fir Avenue	Signal	City of Moreno Valley	D	33.6	C	34.2	C
7 . Nason Street/Eucalyptus Avenue	Signal	City of Moreno Valley	D	28.9	C	26.5	C
8 . Nason Street/Dracea Avenue	Signal	City of Moreno Valley	C	10.1	B	5.5	A
9 . Nason Street/Cottonwood Avenue	Signal	City of Moreno Valley	C	28.2	C	15.8	B
10 . Nason Street/Alessandro Boulevard	Signal	City of Moreno Valley	D	34.3	C	37.3	D
11 . Nason Street/Cactus Avenue	Signal	City of Moreno Valley	D	36.8	D	35.0	C
12 . Nason Street - Hillrose Lane/Iris Avenue	Signal	City of Moreno Valley	C	27.7	C	27.4	C
13 . Project Driveway 1/Fir Avenue	-	City of Moreno Valley	D	<i>Does not Exist</i>		<i>Does not Exist</i>	
14 . Project Driveway 2/Fir Avenue	-	City of Moreno Valley	D	<i>Does not Exist</i>		<i>Does not Exist</i>	
15 . Nason Street/Project Driveway 3	-	City of Moreno Valley	D	<i>Does not Exist</i>		<i>Does not Exist</i>	

Notes:

AWSC = All-Way Stop Control

Delay = Average control delay in seconds

LOS = Level of Service

Table 4-C - Existing Freeway Segment and Ramp Merge/Diverge Area Levels of Service

SR-60 Freeway	Type	Mainline Lanes	Without Project						HOV Lanes	Without Project					
			AM Peak Hour			PM Peak Hour				AM Peak Hour			PM Peak Hour		
			Speed (mi/hr)	Density (pc/mi/ln)	LOS	Speed (mi/hr)	Density (pc/mi/ln)	LOS		Speed (mi/hr)	Density (pc/mi/ln)	LOS	Speed (mi/hr)	Density (pc/mi/ln)	LOS
Eastbound															
1 . West of Nason Street Off-Ramp	Basic	2	65.0	19.0	C	64.6	24.4	C	1	63.8	16.6	B	61.5	22.0	C
2 . Nason Street Off-Ramp	Ramp (Diverge)	2	53.5	23.1	B	53.4	29.5	C	1	63.8	16.6	B	61.5	22.0	C
3 . Between Nason Street Off-Ramp and Nason Street On-Ramp	Basic	2	64.6	12.8	B	64.6	17.6	B	1	63.8	16.6	B	61.5	22.0	C
4 . Nason Street On-Ramp	Ramp (Merge)	2	60.2	10.4	B	59.0	14.2	B	1	63.8	16.6	B	61.5	22.0	C
5 . East of Nason Street On-Ramp	Basic	3	60.2	10.4	B	59.0	14.2	B	1	63.8	16.6	B	61.5	22.0	C
Westbound															
6 . East of Nason Street Off-Ramp	Basic	3	60.9	9.5	A	60.3	9.9	A	1	64.5	14.0	B	64.2	15.0	B
7 . Nason Street Off-Ramp	Ramp (Diverge)	2	60.9	9.5	A	60.3	9.9	A	1	64.5	14.0	B	64.2	15.0	B
8 . Between Nason Street Off-Ramp and Nason Street on-Ramp	Basic	2	64.8	12.1	B	64.8	12.1	B	1	64.5	14.0	B	64.2	15.0	B
9 . Nason Street On-Ramp	Ramp (Merge)	2	58.2	12.1	B	58.1	19.4	B	1	64.5	14.0	B	64.2	15.0	B
10 . West of Nason Street On-Ramp	Basic	2	65.0	16.2	B	65.0	17.3	B	1	64.5	14.0	B	64.2	15.0	B

Notes:

SR-60 = State Route 60

mi/hr = miles per hour

pc/mi/ln = passanger cars per mile per lane

5.0 PROJECT TRAFFIC

5.1 PROJECT TRIP GENERATION

The project will include a gas station with 18 fueling positions, a 5,427 square foot convenience store with a car wash, 12,200 sf of retail, a total of 9,956 sf of fast food restaurant with a drive through window, a total of 4,500 sf of fast food restaurant without a drive through window, a 4,500 square foot restaurant, two retail anchors with a total of 21,000 sf, and a three story office with a total of 15,000 sf. Total vehicle trip generation for the proposed project was developed as follows:

- The trip generation for the gas station with convenience store and car wash was developed using rates from the ITE *Trip Generation Manual*, 10th Edition, for Land Use 945 – “Gasoline/Service Station with Convenience Market.”
- The trip generation for the retail use was developed using rates from the ITE *Trip Generation Manual*, 10th Edition, for Land Use 820 – “Shopping Center.”
- The trip generation for the fast food restaurant with a drive through window was developed using rates from the ITE *Trip Generation Manual*, 10th Edition, for Land Use 934 – “Fast Food Restaurant with Drive-Through Window.”
- The trip generation for the fast food restaurant without a drive through window was developed using rates from the ITE *Trip Generation Manual*, 10th Edition, for Land Use 933 – “Fast Food Restaurant without Drive-Through Window.”
- The trip generation for the restaurant was developed using rates from the ITE *Trip Generation Manual*, 10th Edition, for Land Use 932 – “High-Turnover (Sit-Down) Restaurant.”
- The trip generation for the retail anchors was developed using rates from the ITE *Trip Generation Manual*, 10th Edition, for Land Use 850 – “Supermarket.”

Since the project is a mixed-use development, it is estimated that a certain percentage of trips between the land uses will occur on-site. These internal trips can occur either by walking or by vehicles using internal roadways without using external streets. The internal capture rates were estimated using the Internal Trip Capture Estimation Tool developed by the National Cooperative Highway Research Program (NCHRP). The internal capture rate estimated for each land use was applied to its respective trip generation to estimate the number of internal trips. These internal trips were subtracted from the trip generation to establish the total number of external trips for each land use.

Gas stations, restaurants, and retail uses typically draw some of their trips from the adjacent street traffic. These trips are not actually “new” trips to the surrounding circulation system. Rather, they are referred to as “pass-by” trips and are made as intermediate stops on the way from the origin to the primary destination of the trip without making a route diversion. For the proposed project, pass-by trips would occur along Fir Avenue and Nason Street.

Pass-by rates were obtained from the ITE *Trip Generation Handbook* (3rd Edition). Figure 5-1 illustrates the pass-by trips at study intersections. After deducting the pass-by trips from the

external trips, the net trips for each individual land use were obtained. These were added to the external trips for the other uses to obtain the net external trips for the project.

As illustrated in Table 5-A, the project is anticipated to generate 574 net trips in the a.m. peak hour, 381 net trips in the p.m. peak hour, and 6,191 net daily trips.

5.2 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The overall project trip distribution was developed using select zone model runs obtained from the Riverside County Traffic Analysis Model (RIVTAM). The select zone model plot for the proposed project has been included as part of the scoping agreement in Appendix A. Figure 5-2 illustrates the project trip distribution. The project net trip assignment is the product of the project net trip generation and trip distribution percentages. Figure 5-3 illustrates the project net trip assignment.

5.3 LIST OF CHAPTER 5.0 FIGURES AND TABLES

- Figure 5-1: Pass-by Trip Assignment
- Figure 5-2: Project Trip Distribution
- Figure 5-3: Project Net Trip Assignment
- Table 5-A: Project Trip Generation

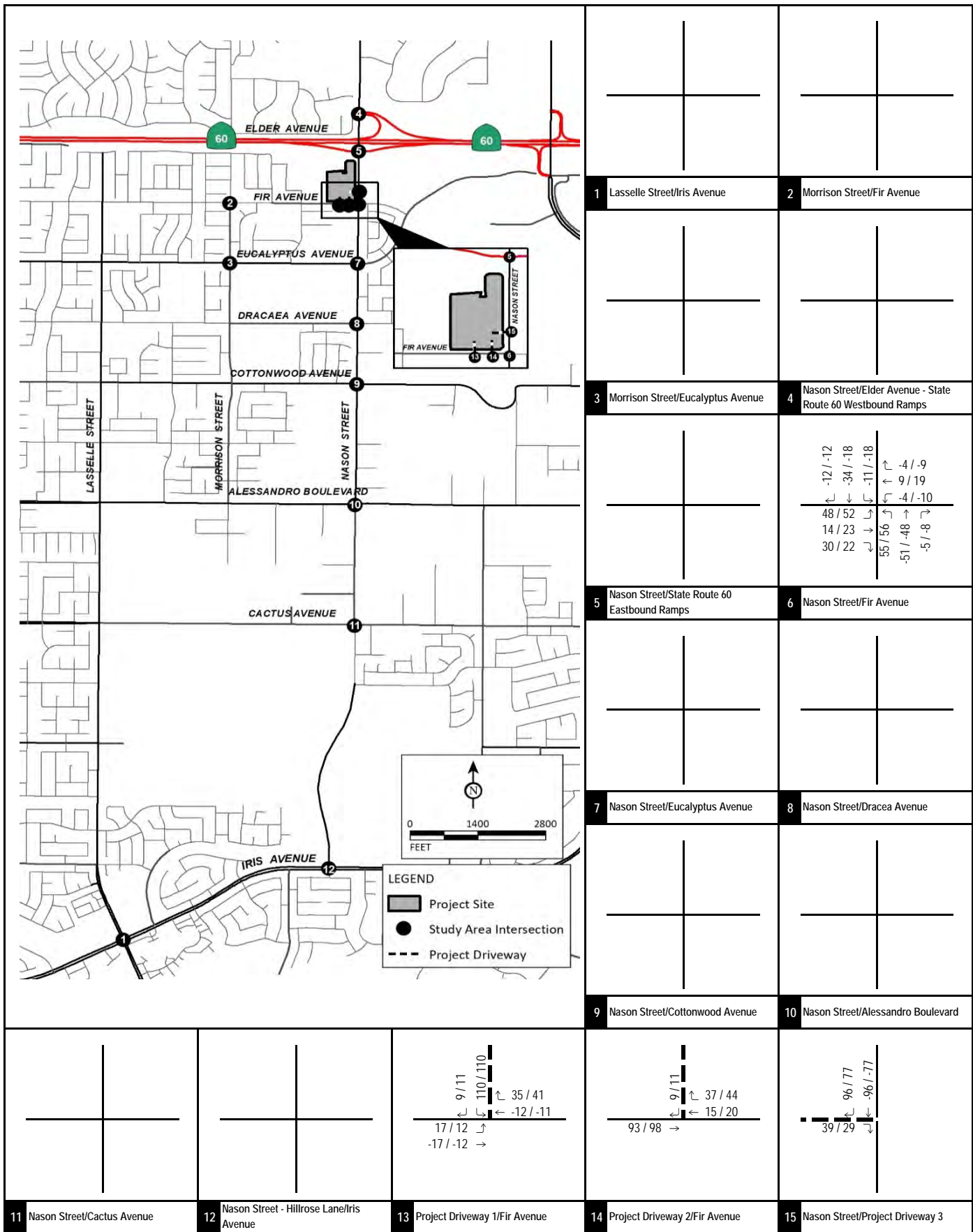


FIGURE 5-1

LSA

XXX / YYY

AM / PM Peak Hour Trips

---- Project Driveway

Village at Moreno Valley Project
Transportation Impact Analysis

Pass-by Trip Assignment

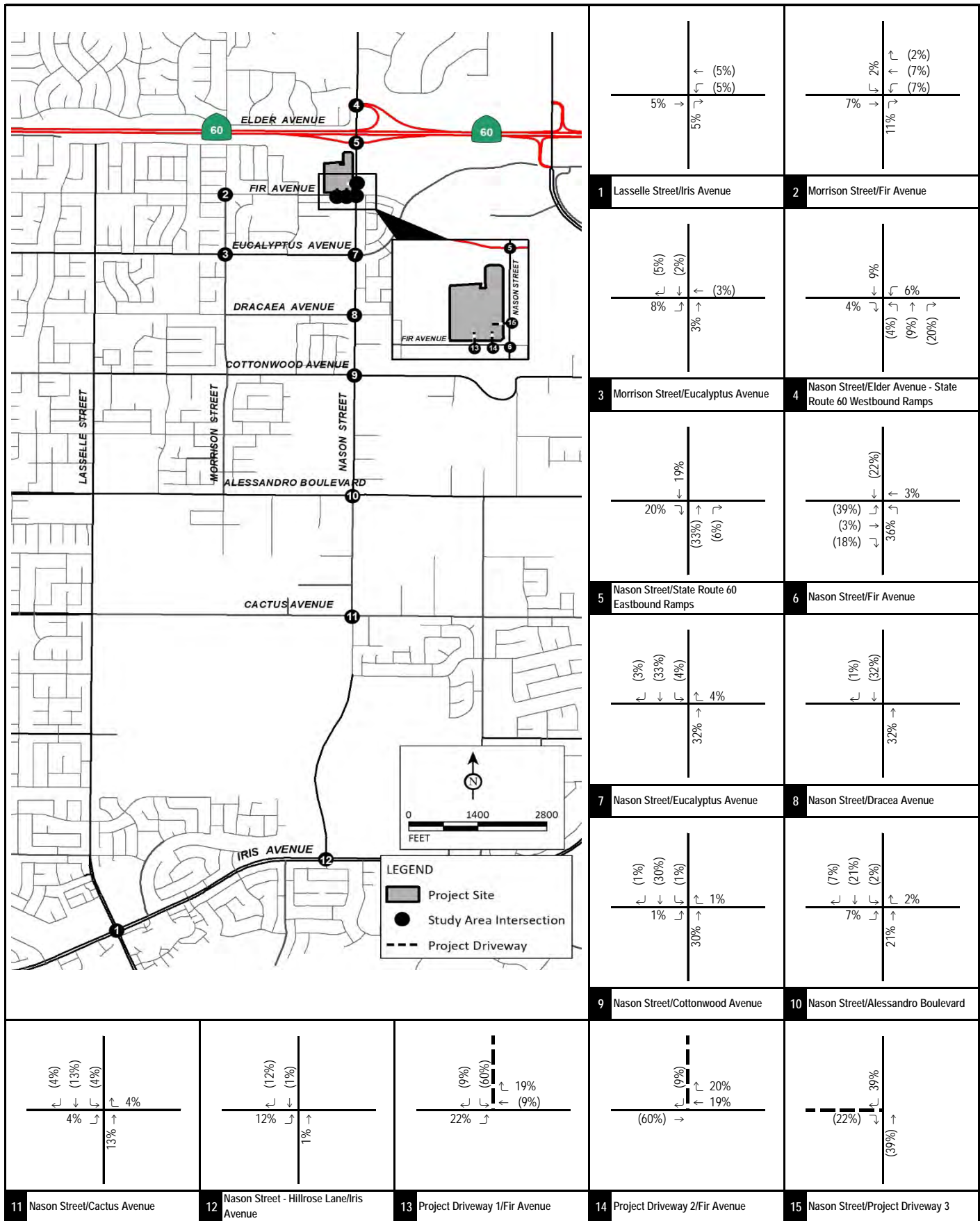


FIGURE 5-2

LSA

XX% (YY%)

Inbound (Outbound) Trip Distribution

---- Project Driveway

Village at Moreno Valley Project
Transportation Impact Analysis

Project Trip Distribution

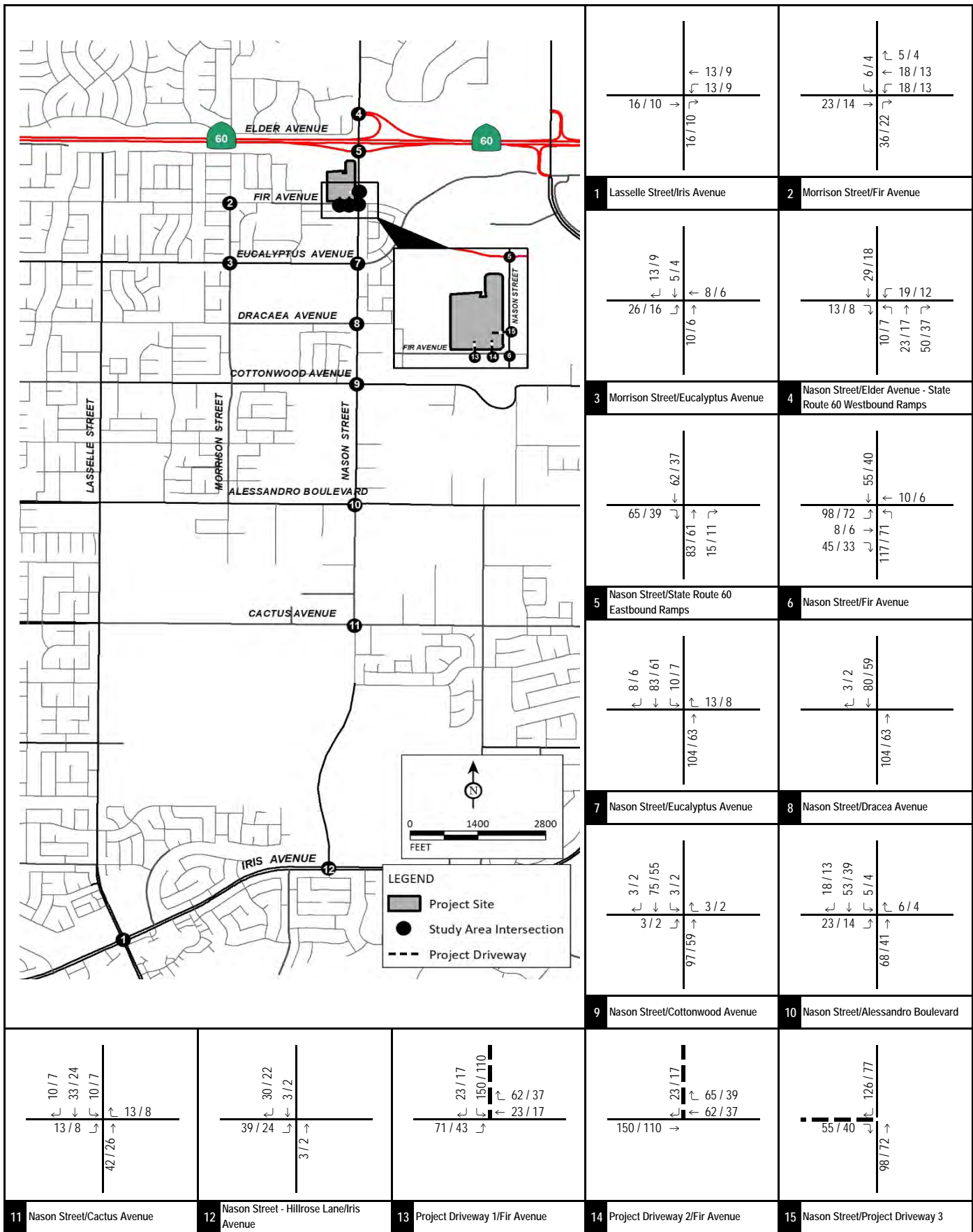


FIGURE 5-3

LSA

XXX / YYY

AM / PM Peak Hour Trips

---- Project Driveway

Village at Moreno Valley Project
 Transportation Impact Analysis
 Project Net Trip Assignment

Table 5-A - Project Trip Generation

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Gas Station with Convenience Store/Car Wash	18 VFP							
Trips/Unit ¹		6.36	6.11	12.47	7.13	6.86	13.99	205.36
Trip Generation		114	110	224	128	123	251	3,696
Internal Capture ²		(9)	(15)	(24)	(44)	(33)	(77)	(505)
Total External Trips		105	95	200	84	90	174	3,191
Pass-by Trips ³		(65)	(59)	(124)	(47)	(50)	(97)	(1,883)
Total Net Trips		40	36	76	37	40	77	1,308
Retail	11.00 TSF							
Trips/Unit		8.82	5.45	14.27	4.64	5.00	9.64	121.82
Trip Generation ⁴		97	60	157	51	55	106	1,340
Internal Capture ²		(8)	(8)	(16)	(17)	(15)	(32)	(240)
Total External Trips		89	52	141	34	40	74	1,100
Pass-by Trips ⁵		0	0	0	(12)	(14)	(26)	(374)
Total Net Trips		89	52	141	22	26	48	726
Fast-Food Restaurant with Drive Through	9.96 TSF							
Trips/Unit ⁶		20.50	19.69	40.19	16.99	15.68	32.67	470.95
Trip Generation		204	196	400	169	156	325	4,689
Internal Capture ²		(19)	(16)	(35)	(49)	(64)	(113)	(740)
Total External Trips		185	180	365	120	92	212	3,949
Pass-by Trips ⁷		(91)	(88)	(179)	(60)	(46)	(106)	(1,955)
Total Net Trips		94	92	186	60	46	106	1,994
Fast-Food Restaurant without Drive Through	4.50 TSF							
Trips/Unit ⁸		15.06	10.04	25.10	14.17	14.17	28.34	346.23
Trip Generation		68	45	113	64	64	128	1,558
Internal Capture ²		(6)	(4)	(10)	(18)	(26)	(44)	(270)
Total External Trips		62	41	103	46	38	84	1,288
Pass-by Trips ⁹		(30)	(20)	(50)	(23)	(19)	(42)	(638)
Total Net Trips		32	21	53	23	19	42	650
Restaurant	4.50 TSF							
Trips/Unit ¹⁰		5.47	4.47	9.94	6.06	3.71	9.77	112.18
Trip Generation		25	20	45	27	17	44	505
Internal Capture ²		(2)	(1)	(3)	(8)	(7)	(15)	(90)
Total External Trips		23	19	42	19	10	29	415
Pass-by Trips ¹¹		0	0	0	(8)	(4)	(12)	(178)
Total Net Trips		23	19	42	11	6	17	237
Retail Anchors	22.00 TSF							
Trips/Unit ¹²		2.29	1.53	3.82	4.71	4.53	9.24	106.78
Trip Generation		50	34	84	104	100	204	2,349
Internal Capture ²		(4)	(4)	(8)	(36)	(27)	(63)	(355)
Total External Trips		46	30	76	68	73	141	1,994
Pass-by Trips ¹³		0	0	0	(24)	(26)	(50)	(718)
Total Net Trips		46	30	76	44	47	91	1,276

Table 5-A - Project Trip Generation

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Total Gross Trip Generation		558	465	1,023	543	515	1,058	14,137
Total Internal Trips		(48)	(48)	(96)	(172)	(172)	(344)	(2,200)
Total Net External Trips		510	417	927	371	343	714	11,937
Total Pass-By Trips		(186)	(167)	(353)	(174)	(159)	(333)	(5,746)
Total Net Trip Generation		324	250	574	197	184	381	6,191

Note:

VFP = Vehicle Fueling Positions; TSF = Thousand Square Feet

- ¹ Rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition), Land Use 945 - "Gasoline/Service Station with Convenience Market", Setting/Location - "General Urban/Suburban."
- ² Internal capture rates obtained using the National Cooperative Highway Research Program (NCHRP 8-51) Internal Trip Capture Estimation Tool.
- ³ Pass-by rates from the ITE *Trip Generation Handbook* (3rd Edition) for Land Use 945 - "Gasoline/Service Station with Convenience Market." A pass-by rate of 62% was used for the a.m. peak hour and a pass-by rate of 56% was used for the p.m. peak hour. Since there is no data available for daily pass-by trips, the average of a.m. and p.m. pass-by rates was used as the daily pass-by rate.
- ⁴ Fitted curve rates used from the ITE *Trip Generation Manual* (10th Edition), Land Use 820 - "Shopping Center", Setting/Location - "General Urban/Suburban."
- ⁵ Pass-by rates from the ITE *Trip Generation Handbook*, 3rd Edition for Land Use 820 - "Shopping Center." A pass-by rate of 34% was used for the p.m. peak hour. No a.m. peak and daily pass-by rates are provided; therefore, the p.m. pass-by rate was used as the daily pass-by rate.
- ⁶ Rates from the ITE *Trip Generation Manual* (10th Edition), Land Use 934 - "Fast-Food Restaurant with Drive-Through Window", Setting/Location - "General Urban/Suburban."
- ⁷ Pass-by rates from the ITE *Trip Generation Handbook*, 3rd Edition for Land Use 934 - "Fast-Food Restaurant with Drive-Through Window." A pass-by rate of 49% was used for the a.m. peak hour and a pass-by rate of 50% was used for the p.m. peak hour. Since there is no data available for daily pass-by trips, the average of a.m. and p.m. pass-by rates was used as the daily pass-by rate.
- ⁸ Rates from the ITE *Trip Generation Manual* (10th Edition), Land Use 933 - "Fast-Food Restaurant without Drive-Through Window", Setting/Location - "General Urban/Suburban."
- ⁹ Pass-by rates are not available for Land Use 933 in the ITE *Trip Generation Handbook*, 3rd Edition. Therefore, pass-by rates for Land Use 934 - "Fast-Food Restaurant with Drive-Through Window" were used from the ITE Handbook. A pass-by rate of 49% was used for the a.m. peak hour and a pass-by rate of 50% was used for the p.m. peak hour. Since there is no data available for daily pass-by trips, the average of a.m. and p.m. pass-by rates was used as the daily pass-by rate.
- ¹⁰ Rates from the ITE *Trip Generation Manual* (10th Edition), Land Use 932 - "High-Turnover (Sit-Down) Restaurant", Setting/Location - "General Urban/Suburban."
- ¹¹ Pass-by rates from the ITE *Trip Generation Handbook*, 3rd Edition for Land Use 932 - "High-Turnover (Sit-Down) Restaurant." A pass-by rate of 43% was used for the p.m. peak hour. No a.m. peak and daily pass-by rates are provided; therefore, the p.m. pass-by rate was used as the daily pass-by rate.
- ¹² Rates from the ITE *Trip Generation Manual* (10th Edition), Land Use 850 - "Supermarket", Setting/Location - "General Urban/Suburban."
- ¹³ Pass-by rates from the ITE *Trip Generation Handbook*, 3rd Edition for Land Use 850 - "Supermarket." A pass-by rate of 36% was used for the p.m. peak hour. No a.m. peak and daily pass-by rates are provided; therefore, the p.m. pass-by rate was used as the daily pass-by rate.

6.0 PROJECT COMPLETION ANALYSIS

6.1 PROJECT COMPLETION (2023) TRAFFIC VOLUMES

As approved during the City's scoping agreement process (Appendix A), traffic volumes for project completion conditions were developed by applying a 2.0 percent annual growth rate to the existing traffic volumes. Figure 6-1 illustrates the peak hour traffic volumes at study intersections under project completion conditions. Table 6-A summarizes project completion peak hour traffic volumes at ramp merge/diverge study areas and study area freeway segments.

6.2 PROJECT COMPLETION (2023) PLUS PROJECT TRAFFIC VOLUMES

Project completion plus project traffic volumes were developed by adding project traffic to the traffic volumes under the project completion scenario. Figure 6-2 illustrates "plus project" peak hour traffic volumes at study intersections under project completion conditions. Table 6-A summarizes project completion plus project peak hour traffic volumes at ramp merge/diverge study areas and study area freeway segments.

Detailed volume development worksheets are included in Appendix C.

6.3 PROJECT COMPLETION (2023) LEVELS OF SERVICE

6.3.1 Study Intersections

An intersection LOS analysis was conducted for project completion conditions using the methodologies previously discussed. Table 6-B summarizes the results of this analysis and shows that all intersections are forecast to operate at a satisfactory LOS under project completion conditions.

Detailed intersection LOS worksheets are included in Appendix D.

6.3.2 Freeway Segments and Ramps

A freeway segment and ramp LOS analysis was conducted for project completion conditions using the methodologies previously discussed. Table 6-C summarizes the results of this analysis and shows that all freeway segments and ramp merge/diverge areas are forecast to operate at a satisfactory LOS under project completion conditions.

Detailed freeway LOS worksheets are included in Appendix E.

6.4 PROJECT COMPLETION (2023) PLUS PROJECT LEVELS OF SERVICE

6.4.1 Study Intersections

An intersection LOS analysis was conducted for project completion plus project conditions using the methodologies previously discussed. Table 6-B summarizes the results of this analysis and shows that the following intersection is forecast to operate at an unsatisfactory LOS:

- Morrison Street/Fir Avenue (a.m. peak hour only).

This intersection is not forecast to operate at an unsatisfactory LOS under project completion conditions. As such, based on the criteria stated in the City's TIA guidelines, the project is forecast to create an operational deficiency at this intersection.

All other intersections are forecast to operate at a satisfactory LOS under project completion plus project conditions.

Detailed intersection LOS worksheets are included in Appendix D.

6.4.2 Freeway Segments and Ramps

A freeway segment and ramp LOS analysis was conducted for project completion plus project conditions using the methodologies previously discussed. Table 6-C summarizes the results of this analysis and shows that all freeway segments and ramp merge/diverge areas are forecast to operate at a satisfactory LOS under project completion plus project conditions.

Detailed freeway LOS worksheets are included in Appendix E.

6.5 LIST OF CHAPTER 6.0 FIGURES AND TABLES

- Figure 6-1: Project Completion (2023) Peak Hour Traffic Volumes
- Figure 6-2: Project Completion (2023) Plus Project Peak Hour Traffic Volumes
- Table 6-A: Project Completion (2023) Freeway Segment and Ramp Merge/Diverge Area Peak Hour Traffic Volumes
- Table 6-B: Project Completion (2023) Intersection Levels of Service
- Table 6-C: Project Completion (2023) Freeway Segment and Ramp Merge/Diverge Area Levels of Service

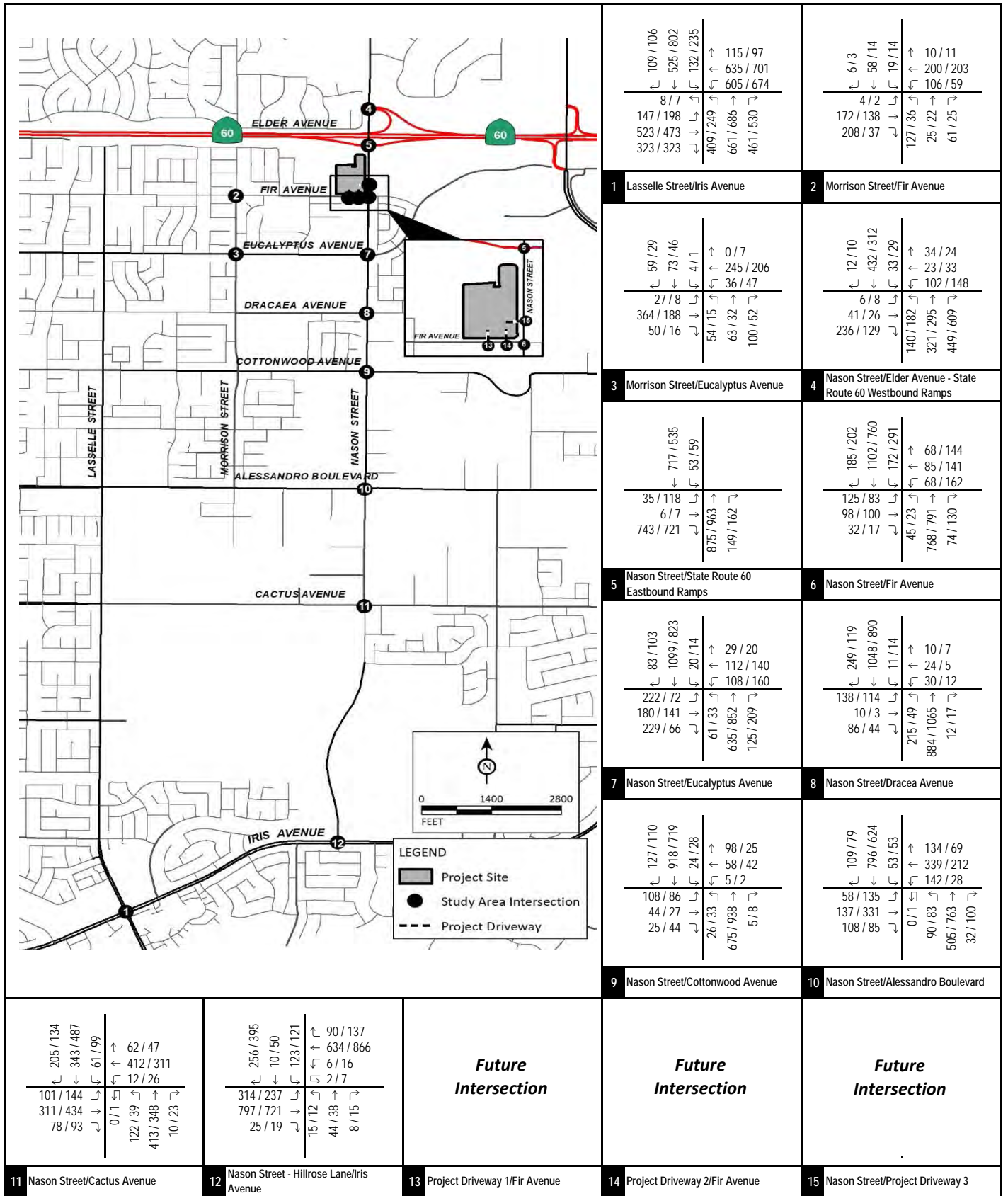


FIGURE 6-1



XXXX / YYYY
AM / PM Peak Hour PCE Volumes

Village at Moreno Valley Project
Transportation Impact Analysis

Project Completion (2023) Peak Hour Traffic Volumes

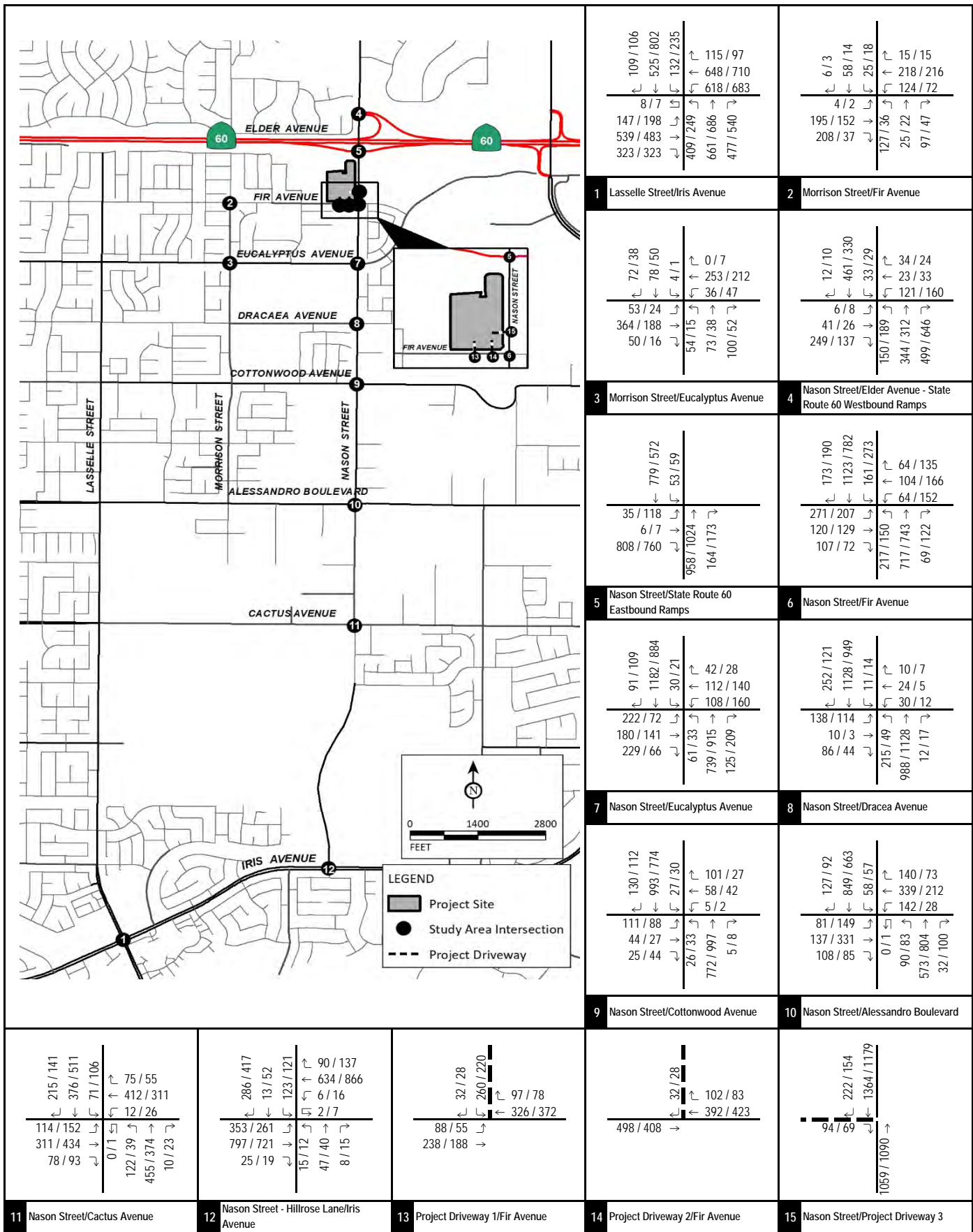


FIGURE 6-2

LSA

XXXX / YYYY

AM / PM Peak Hour PCE Traffic Volumes

---- Project Driveway

Village at Moreno Valley Project
Transportation Impact Analysis

Project Completion (2023) Plus Project Peak Hour Traffic Volumes

Table 6-A - Project Completion (2023) Freeway Segment and Ramp Merge/Diverge Area Peak Hour Traffic Volumes

Eastbound															
SR-60 Eastbound	Type	AM Peak Hour							PM Peak Hour						
		NP HOV PV Volumes	NP Mainline PCE Volumes	NP Ramp PCE Volumes	Project Trips	WP HOV PV Volumes	WP Mainline PCE Volumes	WP Ramp PCE Volumes	NP HOV PV Volumes	NP Mainline PCE Volumes	NP Ramp PCE Volumes	Project Trips	WP HOV PV Volumes	WP Mainline PCE Volumes	WP Ramp PCE Volumes
1 . West of Nason Street Off-Ramp	Basic	1,035	2,415			1,035	2,480		1,320	3,080			1,320	3,119	
2 . Nason Street Off-Ramp	Ramp (Diverge)			784	65			849			846	39			885
3 . Between Nason Street Off-Ramp and Nason Street On-Ramp	Basic	1,035	1,631			1,035	1,631		1,320	2,234			1,320	2,234	
4 . Nason Street On-Ramp	Ramp (Merge)			208	15			223			228	11			239
5 . East of Nason Street On-Ramp	Basic	1,035	1,839			1,035	1,854		1,320	2,462			1,320	2,473	
Westbound															
SR-60 Westbound	Type	AM Peak Hour							PM Peak Hour						
		NP HOV PV Volumes	NP Mainline PCE Volumes	NP Ramp PCE Volumes	Project Trips	WP HOV PV Volumes	WP Mainline PCE Volumes	WP Ramp PCE Volumes	NP HOV PV Volumes	NP Mainline PCE Volumes	NP Ramp PCE Volumes	Project Trips	WP HOV PV Volumes	WP Mainline PCE Volumes	WP Ramp PCE Volumes
6 . East of Nason Street Off-Ramp	Basic	883	1,696			883	1,715		944	1,744			944	1,756	
7 . Nason Street Off-Ramp	Ramp (Diverge)			159	19			178			205	12			217
8 . Between Nason Street Off-Ramp and Nason Street on-Ramp	Basic	883	1,537			883	1,537		944	1,539			944	1,539	
9 . Nason Street On-Ramp	Ramp (Merge)			523	50			573			664	37			701
10 . West of Nason Street On-Ramp	Basic	883	2,060			883	2,110		944	2,203			944	2,240	

Table 6-B - Project Completion (2023) Intersection Levels of Service

Intersection	Control	Jurisdiction	LOS Standard	Without Project				With Project				Increase in Delay (sec.)		Improvements Required?
				A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour	P.M. Peak Hour	
				Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS			
1 . Lasselle Street/Iris Avenue	Signal	City of Moreno Valley	D	43.8	D	45.4	D	44.8	D	45.5	D	1.0	0.1	No
2 . Morrison Street/Fir Avenue	AWSC	City of Moreno Valley	C	21.3	C	10.0	A	31.4	D *	10.6	B	10.1	0.6	Yes
3 . Morrison Street/Eucalyptus Avenue	Signal	City of Moreno Valley	C	21.2	C	17.3	B	21.7	C	18.0	B	0.5	0.7	No
4 . Nason Street/Elder Avenue - State Route 60 Westbound Ramps	Signal	Caltrans	45 sec	24.8	C	22.8	C	25.6	C	23.1	C	0.8	0.3	No
5 . Nason Street/State Route 60 Eastbound Ramps	Signal	Caltrans	45 sec	38.6	D	33.1	C	44.8	D	34.6	C	6.2	1.5	No
6 . Nason Street/Fir Avenue	Signal	City of Moreno Valley	D	34.7	C	35.0	D	52.7	D	40.0	D	18.0	5.0	No
7 . Nason Street/Eucalyptus Avenue	Signal	City of Moreno Valley	D	33.1	C	28.9	C	33.5	C	29.1	C	0.4	0.2	No
8 . Nason Street/Dracea Avenue	Signal	City of Moreno Valley	C	10.2	B	5.6	A	10.3	B	5.7	A	0.1	0.1	No
9 . Nason Street/Cottonwood Avenue	Signal	City of Moreno Valley	C	28.7	C	15.9	B	33.4	C	18.6	B	4.7	2.7	No
10 . Nason Street/Alessandro Boulevard	Signal	City of Moreno Valley	D	34.8	C	38.5	D	35.6	D	40.6	D	0.8	2.1	No
11 . Nason Street/Cactus Avenue	Signal	City of Moreno Valley	D	37.3	D	35.2	D	38.3	D	35.4	D	1.0	0.2	No
12 . Nason Street - Hillrose Lane/Iris Avenue	Signal	City of Moreno Valley	C	28.1	C	27.7	C	28.5	C	28.0	C	0.4	0.3	No
13 . Project Driveway 1/Fir Avenue	OWSC	City of Moreno Valley	D	<i>Does not Exist</i>		<i>Does not Exist</i>		25.8	D	18.7	C	-	-	No
14 . Project Driveway 2/Fir Avenue	OWSC	City of Moreno Valley	D	<i>Does not Exist</i>		<i>Does not Exist</i>		9.9	A	10.0	B	-	-	No
15 . Nason Street/Project Driveway 3	OWSC	City of Moreno Valley	D	<i>Does not Exist</i>		<i>Does not Exist</i>		13.6	B	11.6	B	-	-	No

Notes:

AWSC = All-Way Stop Control; OWSC = One-Way Stop Control

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

LOS = Level of Service

- * Exceeds LOS Standard

Table 6-C - Project Completion (2023) Freeway Segment and Ramp Merge/Diverge Area Levels of Service

SR-60 Freeway	Type	Mainline Lanes	Without Project						With Project						HOV Lanes	Without Project						With Project											
			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour				AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour								
			Speed (mi/hr)	Density (pc/mi/ln)	LOS	Speed (mi/hr)	Density (pc/mi/ln)	LOS	Speed (mi/hr)	Density (pc/mi/ln)	LOS	Speed (mi/hr)	Density (pc/mi/ln)	LOS		Speed (mi/hr)	Density (pc/mi/ln)	LOS	Speed (mi/hr)	Density (pc/mi/ln)	LOS	Speed (mi/hr)	Density (pc/mi/ln)	LOS	Speed (mi/hr)	Density (pc/mi/ln)	LOS	Speed (mi/hr)	Density (pc/mi/ln)	LOS			
Eastbound																																	
1 . West of Nason Street Off-Ramp	Basic	2	65.0	19.8	C	64.2	25.5	C	65.0	20.3	C	64.1	25.9	C	1	63.5	17.3	B	60.9	23.1	C	63.5	17.3	B	60.9	23.1	C	63.5	17.3	B	60.9	23.1	C
2 . Nason Street Off-Ramp	Ramp (Diverge)	2	53.4	24.1	B	53.3	30.7	C	53.3	24.7	B	53.2	31.2	C	1	63.5	17.3	B	60.9	23.1	C	63.5	17.3	B	60.9	23.1	C	63.5	17.3	B	60.9	23.1	C
3 . Between Nason Street Off-Ramp and Nason Street On-Ramp	Basic	2	64.6	13.4	B	64.6	18.3	C	64.6	13.4	B	64.6	18.3	C	1	63.5	17.3	B	60.9	23.1	C	63.5	17.3	B	60.9	23.1	C	63.5	17.3	B	60.9	23.1	C
4 . Nason Street On-Ramp	Ramp (Merge)	2	60.0	10.9	B	58.8	14.9	B	59.8	11.0	B	58.7	14.9	B	1	63.5	17.3	B	60.9	23.1	C	63.5	17.3	B	60.9	23.1	C	63.5	17.3	B	60.9	23.1	C
5 . East of Nason Street On-Ramp	Basic	3	60.0	10.9	B	58.8	14.9	B	59.8	11.0	B	58.7	14.9	B	1	63.5	17.3	B	60.9	23.1	C	63.5	17.3	B	60.9	23.1	C	63.5	17.3	B	60.9	23.1	C
Westbound																																	
6 . East of Nason Street Off-Ramp	Basic	3	60.7	9.9	A	60.2	10.3	B	60.5	10.0	A	60.0	10.4	B	1	64.3	14.6	B	64.0	15.7	B	64.3	14.6	B	64.0	15.7	B	64.3	14.6	B	64.0	15.7	B
7 . Nason Street Off-Ramp	Ramp (Diverge)	2	60.7	9.9	A	60.2	10.3	B	60.5	10.0	A	60.0	10.4	B	1	64.3	14.6	B	64.0	15.7	B	64.3	14.6	B	64.0	15.7	B	64.3	14.6	B	64.0	15.7	B
8 . Between Nason Street Off-Ramp and Nason Street on-Ramp	Basic	2	64.8	12.6	B	64.8	12.6	B	64.8	12.6	B	64.8	12.6	B	1	64.3	14.6	B	64.0	15.7	B	64.3	14.6	B	64.0	15.7	B	64.3	14.6	B	64.0	15.7	B
9 . Nason Street On-Ramp	Ramp (Merge)	2	58.1	18.9	B	58.0	20.2	B	58.1	19.3	B	57.9	20.6	B	1	64.3	14.6	B	64.0	15.7	B	64.3	14.6	B	64.0	15.7	B	64.3	14.6	B	64.0	15.7	B
10 . West of Nason Street On-Ramp	Basic	2	65.0	16.9	B	65.0	18.0	B	65.0	17.3	B	65.0	18.3	C	1	64.3	14.6	B	64.0	15.7	B	64.3	14.6	B	64.0	15.7	B	64.3	14.6	B	64.0	15.7	B

Notes:

SR-60 = State Route 60

mi/hr = miles per hour

pc/mi/ln = passenger cars per mile per lane

7.0 SITE ACCESS ANALYSIS

Fuel tanker trucks will not interfere with the drive-through operations for any of the facilities or the overall site circulation. Truck turning templates for fuel tanker trucks were prepared using the AutoTURN software.

Since discharging fuel for the gasoline station will occur during the off-peak hours, there will be no circulation issues for fuel tanker trucks. Ingress and egress movements as well as internal circulation for fuel tanker trucks are illustrated in Figure 7-1. As illustrated in the Figure 7-1, the trucks will have adequate turning radii to ingress using Project Driveway 2 on Fir Avenue and egress using Project Driveway 3 on Nason Street. Additionally, adequate space is available on site for fuel tanker-trucks to park during fuel discharge operations.

7.1 LIST OF CHAPTER 7.0 FIGURES

- Figure 7-1: Truck Turning Template

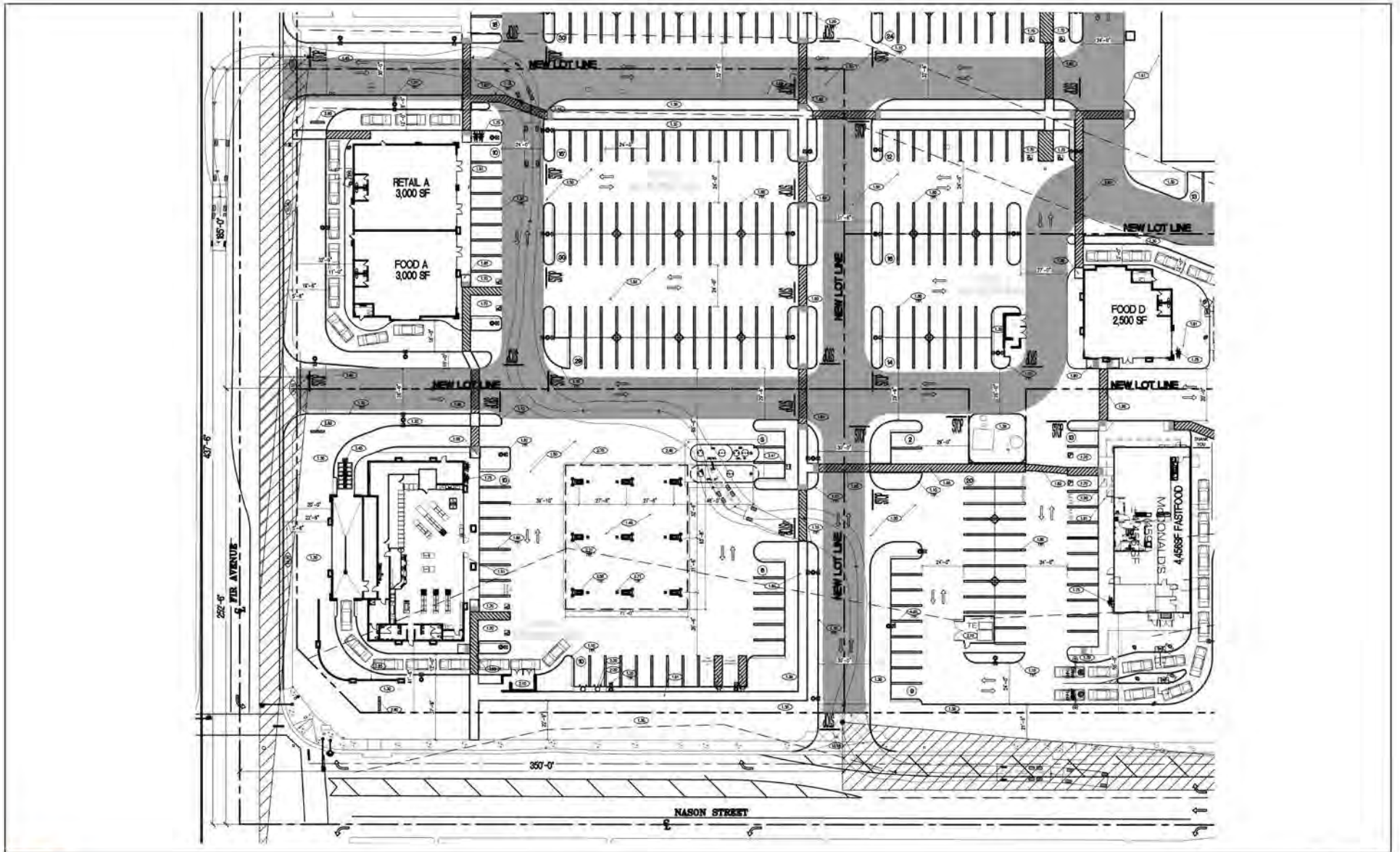


FIGURE 7-1

LSA



SOURCE: CIC Design, Inc.

8.0 QUEUING ANALYSIS

Consistent with the City's guidelines and Caltrans requirements, a queuing analysis was performed at all study intersections. Table 8-A lists the available turn-pocket storage lengths and summarize the 95th percentile back-of-queue lengths at the study intersections under existing and project completion conditions. For intersections under the jurisdiction of the City, queues have only been reported for those turn movements where the project adds to the traffic volumes. For intersections under the jurisdiction of Caltrans, queues have been reported for all turn movements for disclosure purposes only. The queues for signalized intersections have been reported from Synchro, while for unsignalized intersections, SimTraffic queues have been reported since Synchro does not appropriately report queues at unsignalized intersections. As shown in Table 8-A, queues for some of the movements are projected to exceed the existing available turn-pocket storage lengths under existing and project completion conditions, respectively. Recommended improvements based on queuing analysis results have been included in Section 10.1.

Detailed queuing analysis worksheets are included in Appendix F.

8.1 LIST OF CHAPTER 8.0 TABLES

- Table 8-A: Intersection Queuing Analysis

Table 8-A - Intersection Queuing Analysis

Intersection	Intersection Traffic Control	Movement	Existing No. of Lanes	Storage Length ¹ (ft/ln)	Queue Lengths ²					
					Existing		Project Completion (2023)			
					No Project		No Project		With Project	
					AM	PM	AM	PM	AM	PM
1 . Lasselle Street/Iris Avenue	Signal	NBR WBL	1 2	200 220	190	225	205	240	215	250
					155	170	165	180	175	190
2 . Morrison Street/Fir Avenue	AWSC	SBL	1	100	35	25	35	30	30	35
3 . Morrison Street/Eucalyptus Avenue	Signal	EBL	1	150	35	20	35	20	55	35
4 . Nason Street/Elder Avenue-State Route 60 Westbound Ramps	Signal	NBL	1	360	140	185	145	175	150	185
		NBR	1	150	395	405	415	455	465	510
		SBL	1	95	65	55	65	60	65	60
		EBL	1	120	20	25	20	25	20	25
		EBR	1	120	65	45	85	50	125	50
		WBL	1	1345	140	180	145	185	165	200
		WBR	1	165	5	0	10	0	5	0
5 . Nason Street/State Route 60 Eastbound Ramps	Signal	SBL	1	245	90	100	90	100	95	100
		EBL	1	780	50	140	50	140	50	135
		EBR	1	250	295	150	325	175	400	220
6 . Nason Street/Fir Avenue	Signal	NBL	1	230	55	35	55	35	300	155
		EBL	1	100/290 ³	145	105	150	105	275	215
7 . Nason Street/Eucalyptus Avenue	Signal	SBL	1	250	30	25	25	30	25	25
9 . Nason Street/Cottonwood Avenue	Signal	SBL	1	240	30	45	30	50	35	50
		SBR	1	295	5	5	5	5	0	5
		EBL	1	90	130	110	135	115	140	115

Table 8-A - Intersection Queuing Analysis

Intersection	Intersection Traffic Control	Movement	Existing No. of Lanes	Storage Length ¹ (ft/lane)	Queue Lengths ²					
					Existing		Project Completion (2023)			
					No Project		No Project		With Project	
					AM	PM	AM	PM	AM	PM
10 . Nason Street/Alessandro Boulevard	Signal	SBL	1	255	60	60	65	65	70	70
		SBR	1	320	30	5	35	5	50	15
		EBL	2	250	45	80	45	85	55	90
		WBR	1	245	35	0	35	0	35	0
11 . Nason Street/Cactus Avenue	Signal	SBL	1	275	95	145	95	155	110	150
		SBR	1	340	155	105	160	110	175	120
		EBL	1	205	130	155	130	160	145	165
12 . Nason Street - Hillrose Lane/Iris Avenue	Signal	SBR	1	360	50	105	55	115	70	125
		EBL	2	260	140	105	145	110	160	120
13 . Project Driveway 1/Fir Avenue ⁴	OWSC	EBL	1	75	-	-	-	-	45	45
14 . Project Driveway 2/Fir Avenue ⁴	OWSC	SBR	1	110	-	-	-	-	50	55
15 . Nason Street/Project Driveway 3 ⁴	OWSC	EBR	1	110	-	-	-	-	75	55

Notes:

ft/lane = feet per lane

AWSC = All-Way Stop Control, OWSC = One-Way Stop Control

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

L = Left; R = Right

Bold = Queue exceeds available storage.

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

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

³ Under without project conditions, the left turn pocket has a storage length of 100 feet. However, with the implementation of the project, the storage length gets increased to 290 feet.

⁴ This intersection does not exist under without project conditions. It operates as an OWSC intersection under with project conditions.

9.0 ACTIVE TRANSPORTATION AND PUBLIC TRANSIT ANALYSIS

According to the City's TIA guidelines, a significant impact occurs when a project conflicts with adopted plans, policies, or programs regarding bicycle, public transit, or pedestrian facilities, or otherwise decreases the performance or safety of such facilities.

At present, bike lanes exist along the project frontage on Nason Street. Bike facilities currently do not exist along the project frontage on Fir Avenue. However, as per the City's *Bicycle Master Plan*, a bicycle boulevard has been proposed along Fir Avenue between Morrison Street and Nason Street. The project will not decrease the performance or safety of any existing or proposed bicycle facility in its vicinity.

According to the City's Master Plan of Trails, there are no existing or proposed trails within the study area. The project will be widening Fir Avenue to its full cross-section and constructing curb, gutter, and sidewalk along its frontage on Fir Avenue. The project will not decrease the performance or safety of any existing or proposed pedestrian facility.

The RTA bus route 31 operates near the project site, with stops near the intersections of Nason Street/Eucalyptus Avenue and Nason Street/Fir Avenue. There is no other proposed transit route in the vicinity of the project. The project will not decrease the performance or safety of any existing or proposed public transit facility.

The project does not conflict with any existing or proposed bicycle, pedestrian, or public transit facility. Therefore, it can be considered as conforming to all adopted plans, policies, and programs concerning these facilities and will not have a significant impact.

10.0 IMPROVEMENTS AND RECOMMENDATIONS

10.1 RECOMMENDED IMPROVEMENTS

Based on the results of the LOS and queuing analysis, improvements have been recommended at study area intersections. Previously referenced Figure 4-3 illustrates the striping plan for the proposed improvements along the project frontage. Table 10-A summarizes the proposed improvements at different study intersections to offset LOS and queuing deficiencies. Table 10-B illustrates the post-improvement intersection levels of service under project completion conditions. As shown in Table 10-B, with the implementation of the proposed improvements, all study intersections are forecast to operate at a satisfactory LOS under project completion conditions. Additionally, with the implementation of the improvements recommended in Table 10-A, queuing issues can be resolved at all intersections, with the exception of the queuing deficiency for the northbound right turn movement at the intersection of Lasselle Street/Iris Avenue. The northbound right turn pocket at this intersection cannot be extended due to right-of-way constraints. As such, the queuing deficiency for this movement will continue to exist.

As shown in previously referenced Table 6-B, the intersection of Morrison Street/Fir Avenue is forecast to operate at a satisfactory LOS under project completion without project conditions, but is forecast to operate at an unsatisfactory LOS under project completion plus project conditions. Therefore, as per the criteria stated in the City's TIA guidelines, the project is forecast to create an operational deficiency at this intersection. Therefore, the project will be fully responsible for the implementation of the improvements at this intersection. Figure 10-1 illustrates the conceptual striping plan for the improvements at this intersection.

Additionally, the project is forecast to create a queuing deficiency for the northbound left turn movement at the intersection of Nason Street/Fir Avenue. Therefore, the project will also be fully responsible for the implementation of the improvements required to offset this deficiency. For all other queuing deficiencies, the project only contributes to the forecast deficiency. Therefore, as shown in Table 10-B, the project will only be responsible for its fair share payment for the improvements at these locations.

10.2 FUNDING SOURCES AND MECHANISMS

Where there is a funding mechanism (fee program) for the recommended improvements, payment into the fee program would be considered sufficient. At study locations where the addition of project traffic is solely responsible for the operational deficiency and there is no funding mechanism in place, the project will be responsible for the implementation of the improvements. For all other improvements, the project will be responsible for its fair-share payment. Funding mechanisms for the proposed improvements at study intersections have been listed in Table 10-B.

10.2.1 Transportation Uniform Mitigation Fee (TUMF) Program

The underlying purpose of the TUMF program is "the need to establish a comprehensive funding source to mitigate the cumulative regional transportation impacts of new development on regional arterial highways." As new development occurs in western Riverside County, the cumulative

transportation impacts of this new development are reflected in increased demand for transportation infrastructure leading to decreased levels of service, increased delay, and increased congestion on regional transportation facilities, and an overall decline in regional mobility. Therefore, the need to invest in additional transportation infrastructure to meet the increased travel demand and to sustain pre-development traffic conditions to “keep traffic flowing” represents the fundamental premise of the TUMF program.

10.2.2 Project Fair Share

In the absence of a fee program, where an improvement has been recommended on the roadway network, the project shall pay its fair share of the cost required for the implementation of that improvement. As previously stated, the project shall be fully responsible for the implementation of the improvements at the intersections of Morrison Street/Fir Avenue and Nason Street/Fir Avenue. As for the improvement at the intersection of Nason Street/Cottonwood Avenue, the project will be paying a fair share for its implementation. The project’s fair share has been calculated based on project traffic as a percentage of total growth from existing to General Plan build-out conditions.

As previously stated, Table 10-B summarizes the project’s fair share corresponding to the improvements recommended at study intersections.

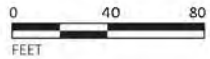
10.3 LIST OF CHAPTER 10.0 TABLES

- Figure 10-1: Conceptual Striping Plan for Proposed Improvements at the Intersection of Morrison Street/Fir Avenue
- Table 10-A: Recommended Improvements for Intersections, Funding Mechanisms, and Fair Share
- Table 10-B: Project Completion (2023) Plus Project with Improvements Intersection Levels of Service



FIGURE 10-1

LSA



LEGEND

- Existing
- Proposed Improvement

Village at Moreno Valley Project
 Transportation Impact Analysis

Conceptual Striping Plan for Proposed Improvements at the Intersection of Morrison Street/Fir Avenue

Table 10-A - Recommended Improvements for Intersections, Funding Mechanisms, and Fair Share

Intersection	Project Completion (2023) Plus Project Improvements	Funding Mechanism	Improvements Covered by TUMF	Improvements Covered by Fair Share	Fair Share Percentage ^{1,2}
2 . Morrison Street/Fir Avenue	Restripe the single 22 feet wide WBLTR lane to a dedicated left-turn lane (with a storage length of 75 feet) and a shared through-right lane, each 11 feet wide; restrict on-street parking along the westbound approach on Fir Avenue for 125 feet east of the intersection.	Fair Share	-	Restripe the single 22 feet wide WBLTR lane to a dedicated left-turn lane (with a storage length of 75 feet) and a shared through-right lane, each 11 feet wide; restrict on-street parking along the westbound approach on Fir Avenue for 125 feet east of the intersection.	100% ³
6 . Nason Street/Fir Avenue	Remove portion of the raised median to extend the storage length for the NBL turn movement from 230 feet to 300 feet.	Fair Share	-	Remove portion of the raised median to extend the storage length for the NBL turn movement from 230 feet to 300 feet.	100% ³
9 . Nason Street/Cottonwood Avenue	Extend storage length for the EBL turn movement from 90 feet to 140 feet.	Fair Share	-	Extend storage length for the EBL turn movement from 90 feet to 140 feet.	12.94%

Notes:

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

L = Left; T = Through; R = Right

TUMF refers to the Transportation Uniform Mitigation Fee program.

¹ Project fair share percentage is the highest fair share value of the AM and PM peak hours when deficiencies occur during both the peak hours. When deficiencies occur during only one peak hour, the fair share percentage corresponds to that peak hour only.

² For the intersection of Nason Street/Cottonwood Avenue, the project fair share was calculated based on projec traffic as a percentage of total growth from existing to General Plan build out conditions. Traffic volumes for General Plan build out conditions were obtained from the Kaiser Permanente Moreno Valley Medical Center Master Plan Project Traffic Impact Analysis prepared by LSA in October 2019.

³ The project is forecast to create the operational deficiency at this intersection. Therefore, it is fully responsible for the implementation of this improvement.



Table 10-B - Project Completion (2023) Plus Project with Improvements Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Control	With Project Without Improvements				With Project With Improvements			
				A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
				Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS	Delay (sec.)	LOS
2 . Morrison Street/Fir Avenue	City of Moreno Valley	C	AWSC	31.4	D *	10.6	B	17.1	C	9.7	A

Notes:

- AWSC = All-Way Stop Control
- Delay = Average control delay in seconds
- LOS = Level of Service
- * Exceeds LOS Standard

11.0 VEHICLE MILES TRAVELED ANALYSIS

On December 28, 2018, the California Office of Administrative Law cleared the revised *CEQA Guidelines* for use. Among the changes to the guidelines was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on VMT. The City recently adopted its VMT analysis guidelines. Therefore, for purposes of this analysis, the City's *Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment* (dated June 2020) has been used.

Pursuant to the City's VMT analysis guidelines, projects located in a low VMT generating zone are exempted from a VMT assessment. The WRCOG screening tool provides information regarding whether a project will fall within a low VMT zone to be eligible to be screened out from a VMT analysis. The tool provides information for VMT per capita that is applicable for residential projects, VMT per employee that is applicable for non-residential projects, and total VMT that is applicable for retail projects. The proposed project includes both retail and office components. As per the WRCOG Screening Tool, the project lies in a low VMT generating TAZ for both VMT per employee and total VMT. The results from the screening tool are included in Appendix G. Additionally, the project is consistent with the City's General Plan. Therefore, the project can be screened from a VMT analysis and will not have a significant VMT impact.

APPENDIX A:

SCOPING AGREEMENT

Wei Sm
9/28/2021

EXHIBIT A

Project Scoping Form

This scoping form shall be submitted to the Lead Agency to assist in identifying infrastructure improvements that may be required to support traffic from the proposed project.

Project Identification:

Case Number:	PEN20-0045, PEN20-0046, PEN20-0047, PEN20-0049, PEN20-0050, PEN20-0051, PEN20-0053
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	Village at Moreno Valley Project
Project Address:	Northwest corner of the intersection of Nason Street and Fir Avenue
Project Opening Year:	2023
Project Description:	The project is a commercial development on an approximately 9.3-acre site. The development would include 1) a gas station with 18 fueling positions, a 5,427 square foot convenience store, and a car wash, 2) 11,000 square feet (sf) of retail, 3) a total of 9,956 sf of fast food restaurant with a drive through window, 4) a total of 4,500 sf of fast food restaurant without a drive through window, 5) a 4,500 square foot restaurant, and 6) two retail anchors with a total of 22,000 sf.

	Consultant:	Developer:
Name:	LSA Associates, Inc.	ADMG Inc
Address:	1500 Iowa Avenue, Suite 200 Riverside, CA 92507	3380 La Sierra Avenue Suite 104-790 Riverside, CA 92503
Telephone:	951-781-9310	949-701-2973
Email:	ambarish.mukherjee@lsa.net	ash@admgteam.com

Trip Generation Information:

Trip Generation Data Source: Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition)

Current General Plan Land Use:

Commercial

Proposed General Plan Land Use:

Commercial

Current Zoning:

Community Commercial

Proposed Zoning:

Community Commercial

	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips				324	250	574
PM Trips				197	184	381

Trip Internalization: Yes No (_____% Trip Discount)

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

**Note: Please refer to attached project trip generation table for internal capture and pass-by rates.

Potential Screening Checks

Is your project screened from specific analyses (see Page 3 of the guidelines related to LOS assessment and Pages 22-23 for VMT screening criteria).

Is the project screened from LOS assessment? Yes No

LOS screening justification (see Page 3 of the guidelines): _____

Is the project screened from VMT assessment? Yes No

VMT screening justification (see Pages 22-23 of the guidelines): _____
As per the Western Riverside Council of Governments' (WRCOG's) Screening Tool,
the project lies in a low VMT generating Traffic Analysis Zone (TAZ). Additionally, the
project is consistent with the City's General Plan. Therefore, the project can be
screened from a VMT analysis.

Level of Service Scoping

- Proposed Trip Distribution (Attach Graphic for Detailed Distribution):

North	South	East	West
39%	36%	3%	22%

Link level of service and data collection:

___ will be required
 ___ will not be required

- Attach list of study intersections (and roadway segments if applicable)
- Attach site plan
- Other specific items to be addressed:
 - Site access
 - On-site circulation
 - Parking
 - Consistency with Plans supporting Bikes/Peds/Transit
 - Other 1) Queuing Analysis 2) Freeway Analysis (Please refer to attachment)
- Date of Traffic Counts Historical Counts obtained from traffic counters (years 2017, 2018, and 2019)
- Attach proposed analysis scenarios (years plus proposed forecasting approach)
- Attach proposed phasing approach (if the project is phased)

VMT Scoping

For projects that are not screened, identify the following:

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



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

Study Intersection Analysis

As per the City of Moreno Valley *Transportation Impact Analysis (TIA) Preparation Guide for Vehicle Miles Traveled and Level of Service (LOS) Assessment* (dated June 2020), the minimum study area for the LOS assessment should include any intersection of “Collector” or higher classification street, with “Collector” or higher classification streets, at which the proposed project will add 50 or more peak hour trips. The study area should not exceed a 5-mile radius from the project site. Therefore, based on this criteria, the following intersections are being proposed for analysis:

1. Lasselle Street/Iris Avenue;
2. Morrison Street/Fir Avenue;
3. Morrison Street/Eucalyptus Avenue;
4. Nason Street/Elder Avenue – State Route 60 (SR-60) Westbound Ramps;
5. Nason Street/SR-60 Eastbound Ramps;
6. Nason Street/Fir Avenue;
7. Nason Street/Eucalyptus Avenue;
8. Nason Street/Dracaea Avenue;
9. Nason Street/Cottonwood Avenue;
10. Nason Street/Alessandro Boulevard;
11. Nason Street/Cactus Avenue;
12. Nason Street – Hillrose Lane/Iris Avenue;
13. Project Driveway 1/Fir Avenue;
14. Project Driveway 2/Fir Avenue; and
15. Nason Street/Project Driveway 3.

Traffic operations at all study intersections will be analyzed during the a.m. and p.m. peak hours. The a.m. peak hour is defined as the one hour period occurring between 7:00 and 9:00 a.m. which experiences the highest traffic volumes, while the p.m. peak hour is defined as the one hour period occurring between 4:00 and 6:00 p.m. which experiences the highest traffic volumes. For all intersections, the *Highway Capacity Manual 6* (HCM 6) analysis methodologies will be used to determine intersection levels of service. Intersection LOS will be calculated using Synchro 10 software, which uses the HCM 6 methodologies.

Analysis Scenarios

The TIA will be prepared to meet the requirements of the City. The completion year for the full build-out of the project is anticipated to be year 2023. Therefore, project completion conditions will be analyzed for that year. LSA proposes to analyze a.m. and p.m. peak hour traffic operations at the study area intersections for the following scenarios in accordance with the City's TIA guidelines:

- Existing Conditions;
- Project Completion Conditions; and
- Project Completion Plus Project Conditions.

Volume Development Methodology

Traffic volumes for existing conditions are typically developed using existing count data collected at study intersections. Due to the current school and office closures statewide because of COVID-19, new traffic counts will not reflect realistic traffic conditions at the study intersections. Therefore, LSA consulted traffic counters to compile a list of counts available for the study intersections. Based on the available count data, LSA proposes the following methodology for development of existing traffic volumes at the study intersections:

- Intersection 1 – Lasselle Street/Iris Avenue: Historical traffic counts available. Apply a growth rate of 2 percent per annum from 2017 to 2021.
- Intersection 2 – Morrison Street/Fir Avenue: Historical traffic counts available. Apply a growth rate of 2 percent per annum from 2018 to 2021.
- Intersection 3 – Morrison Street/Eucalyptus Avenue: Traffic counts are not available for this intersection. LSA recommends collecting new traffic counts at this intersection and the nearby intersection of Morrison Street/Fir Avenue. The north-south and east-west growths in traffic volumes at intersection 2 will be developed by comparing the collected traffic counts to calculated year 2021 traffic volumes. Further, these growths will be applied to the counts for the north-south and east-west directions at intersection 3 to develop year 2021 traffic volumes.
- Intersection 4 – Nason Street/Elder Avenue –SR-60 Westbound Ramps: Historical traffic counts available. Apply a growth rate of 2 percent per annum from 2018 to 2021.
- Intersection 5 – Nason Street/SR-60 Eastbound Ramps: Historical traffic counts available. Apply a growth rate of 2 percent per annum from 2018 to 2021.
- Intersection 6 – Nason Street/Fir Avenue: Historical traffic counts available. Apply a growth rate of 2 percent per annum from 2018 to 2021.

- Intersection 7 – Nason Street/Eucalyptus Avenue: Historical traffic counts available. Apply a growth rate of 2 percent per annum from 2018 to 2021.
- Intersection 8 – Nason Street/Dracaea Avenue: Historical traffic counts available. Apply a growth rate of 2 percent per annum from 2018 to 2021.
- Intersection 9 – Nason Street/Cottonwood Avenue: Historical traffic counts available. Apply a growth rate of 2 percent per annum from 2017 to 2021.
- Intersection 10 – Nason Street/Alessandro Boulevard: Historical traffic counts available. Apply a growth rate of 2 percent per annum from 2017 to 2021.
- Intersection 11 – Nason Street/Cactus Avenue: Historical traffic counts available. Apply a growth rate of 2 percent per annum from 2017 to 2021.
- Intersection 12 – Nason Street/Iris Avenue: Historical traffic counts available. Apply a growth rate of 2 percent per annum from 2017 to 2021.

Existing traffic volumes at the project driveways will be obtained using balance of flow of traffic volumes with the adjacent intersections. Traffic volumes for project completion conditions will be developed by adding an appropriate growth rate to existing traffic volumes. A growth rate of 2 percent per annum will be used, based on discussion with City staff. Traffic volumes for project completion plus project conditions will be developed by adding project traffic to the traffic volumes for the project completion conditions.

Freeway Analysis

Caltrans requires a freeway mainline and ramp merge/diverge analysis for land development projects where the project is anticipated to add more than 100 two-way peak hour trips to the mainline segment and 50 peak hour trips to the ramp merge/diverge areas. Since the project is anticipated to add more than 100 two-way peak hour project trips at the SR-60 freeway mainline segments between the Perris Boulevard and Nason Street interchanges, a freeway segment analysis will be performed for these segments. Additionally, a ramp merge/diverge analysis will be conducted at the SR-60 and Nason Street interchange, since the project will be adding greater than 50 peak hour trips. The resulting levels of service will be calculated using the HCM 6 analysis methodologies. For both freeway mainline and ramp merge/diverge areas, the LOS will be calculated using Highway Capacity Software (HCS).

FIGURES

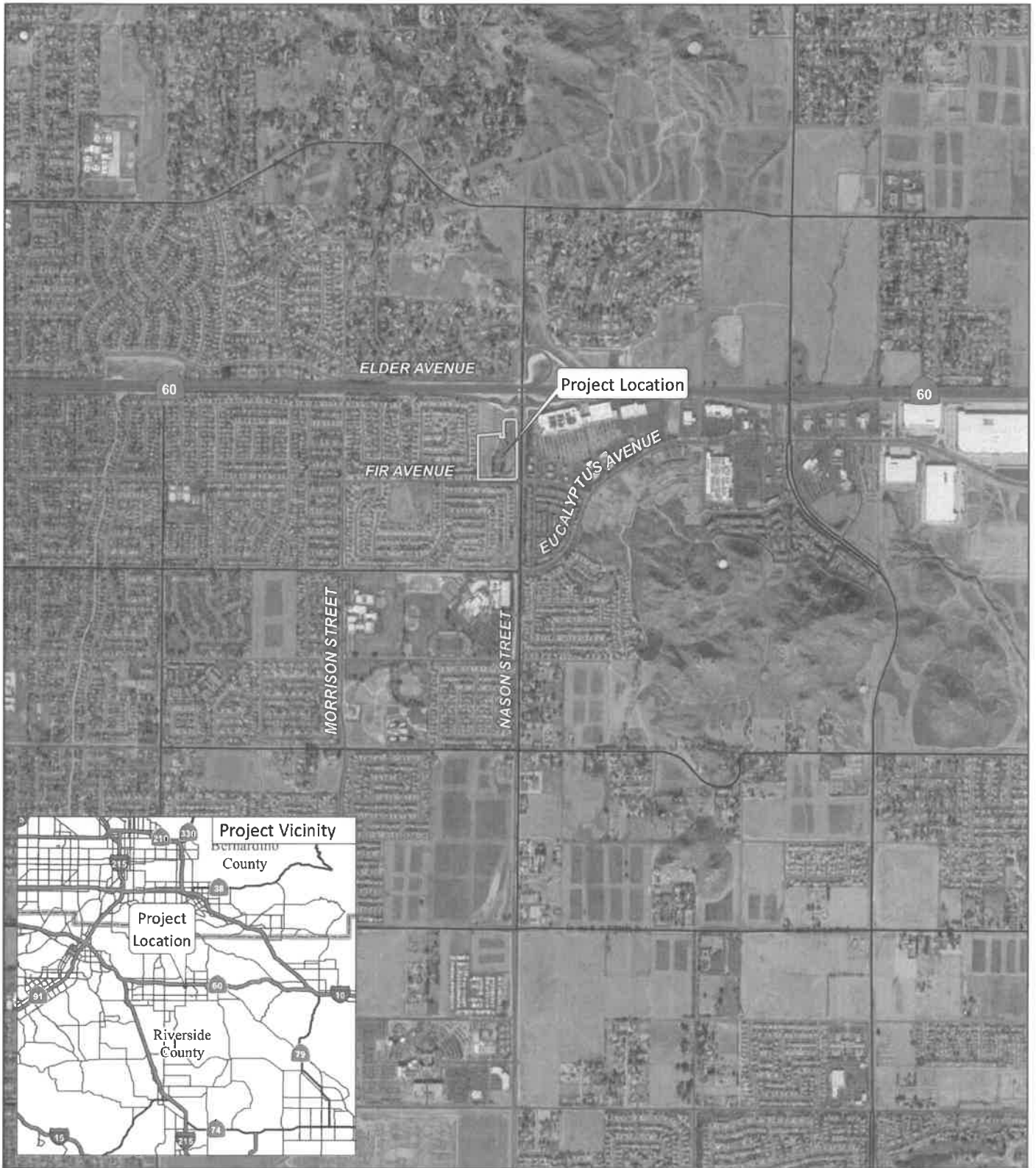
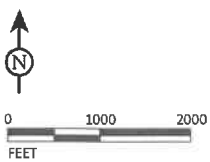


FIGURE 1

LSA



SOURCE: Riverside County, 2016; Google Earth, 2018.

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*Village at Moreno Valley Project
Transportation Impact Analysis
Regional and Project Location*

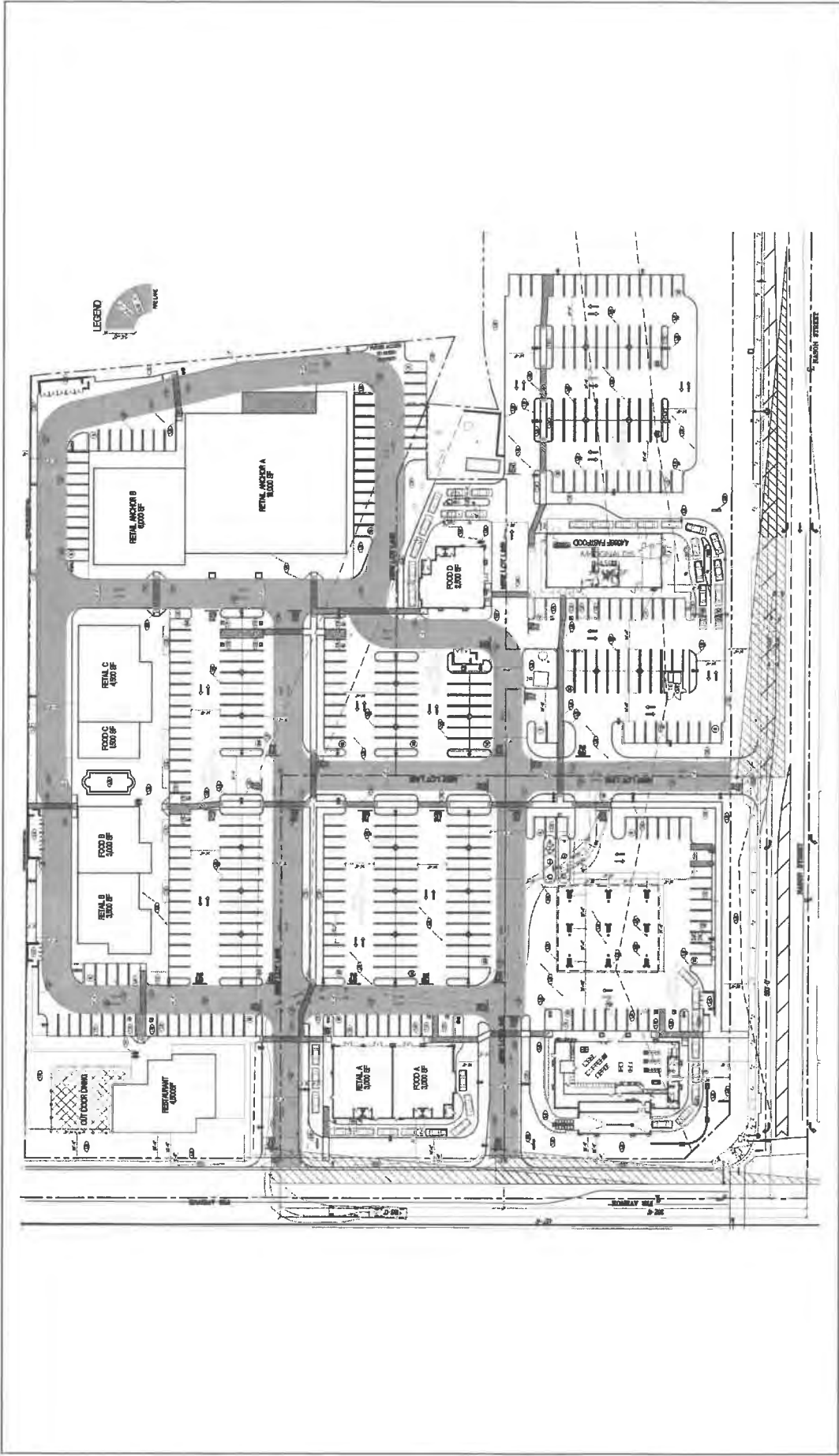


FIGURE 2

LSA



Village at Moreno Valley Project
 Transportation Impact Analysis

Conceptual Site Plan

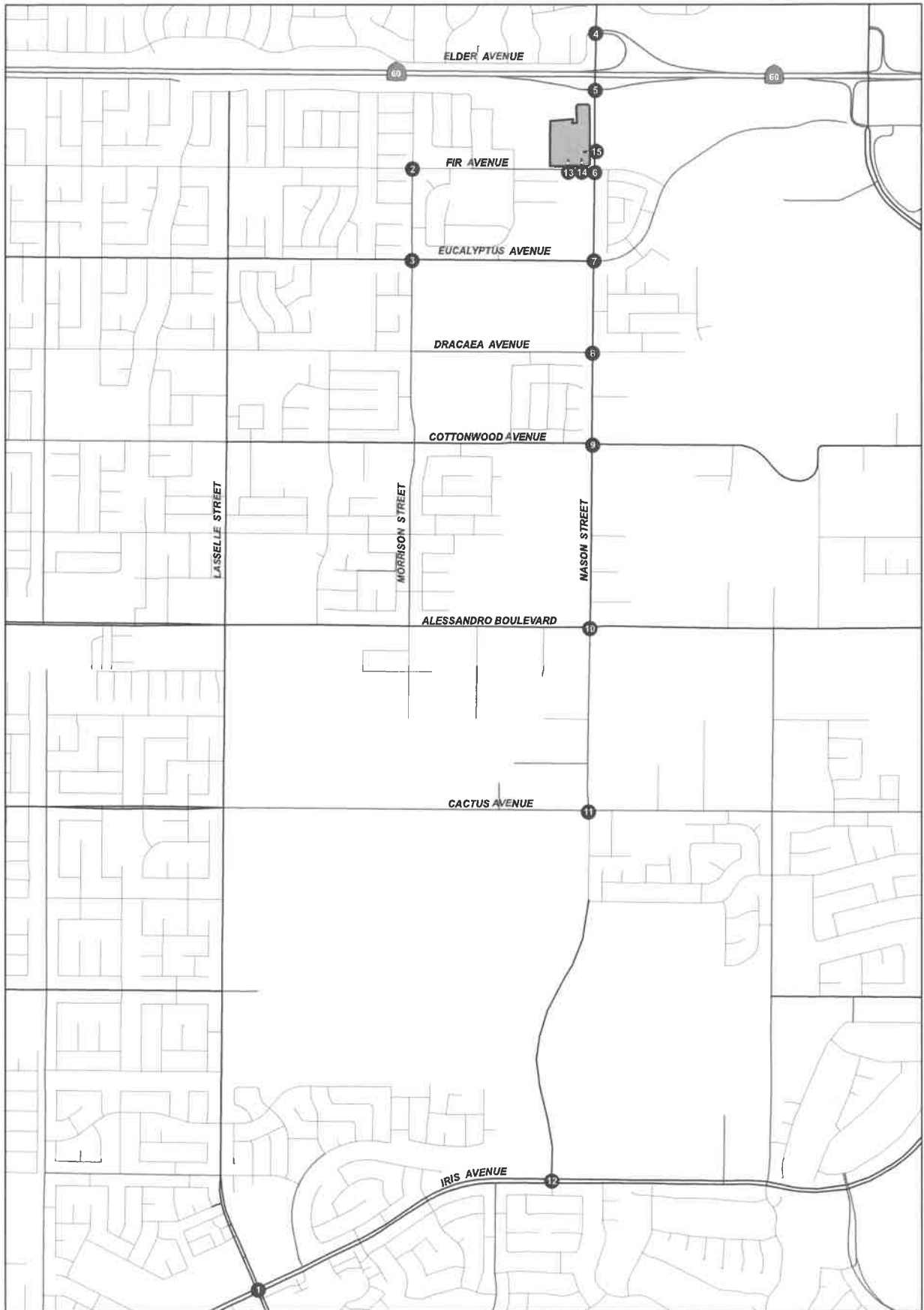
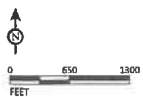


FIGURE 3

LSA

LEGEND

- Project Site
- Study Area Intersection
- Project Driveway



SOURCE: Riverside County, 2016

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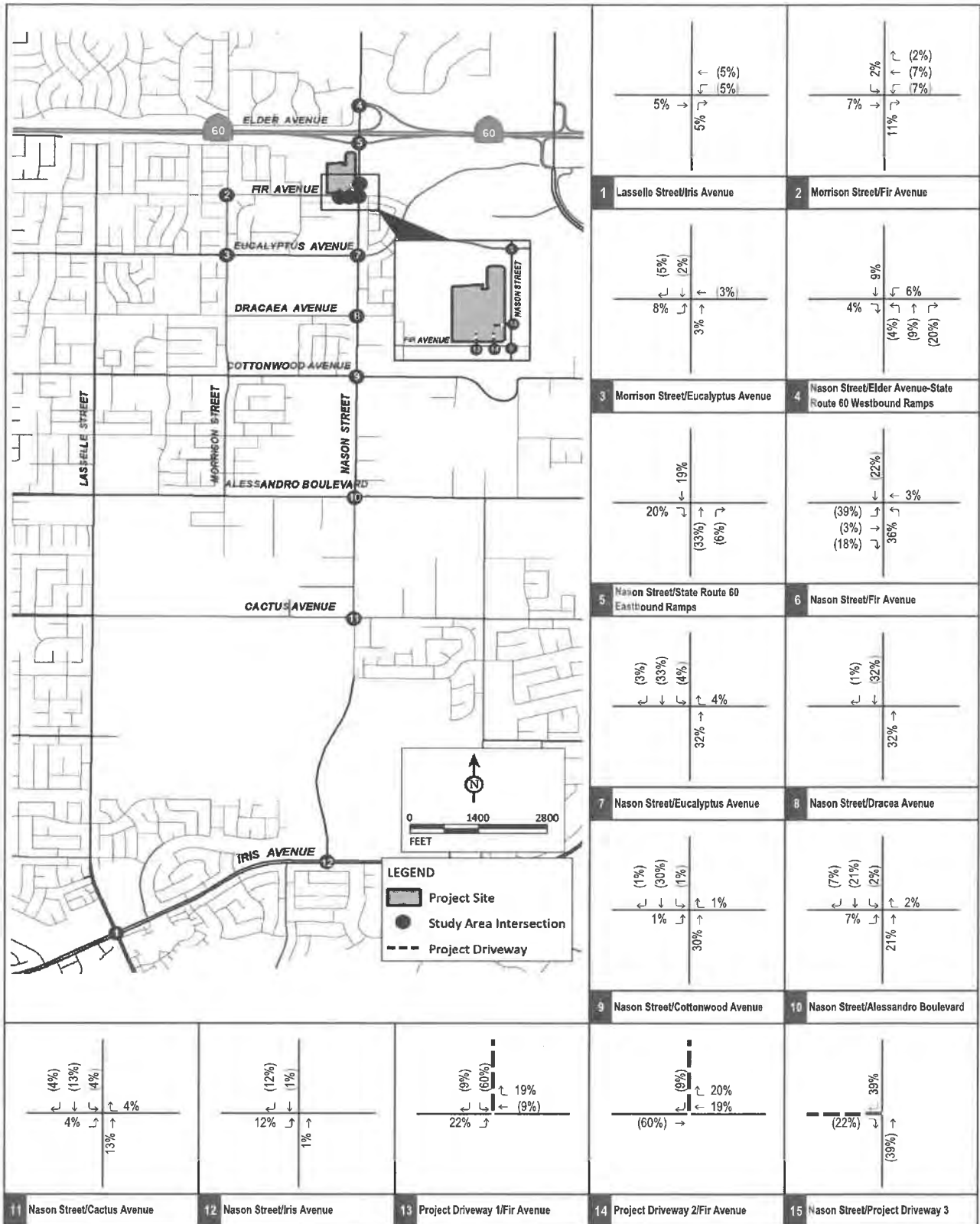


FIGURE 4

LSA

XX% (YY%)

Inbound (Outbound) Trip Distribution

--- Project Driveway

Village at Moreno Valley Project
Transportation Impact Analysis

Project Trip Distribution

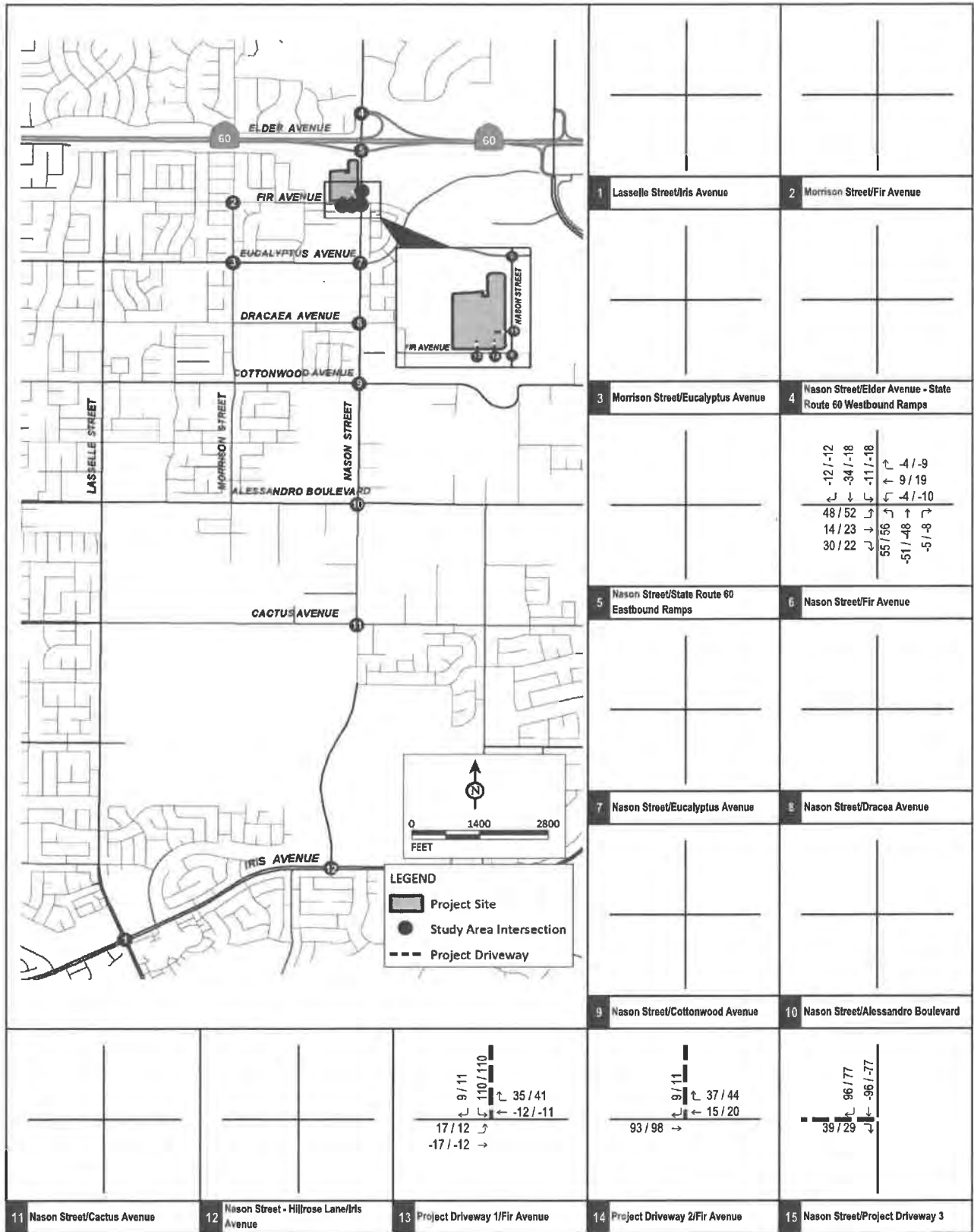


FIGURE 5

LSA

XXX / YYY

AM / PM Peak Hour Trips

--- Project Driveway

Village at Moreno Valley Project
Transportation Impact Analysis

Pass-by Trip Assignment

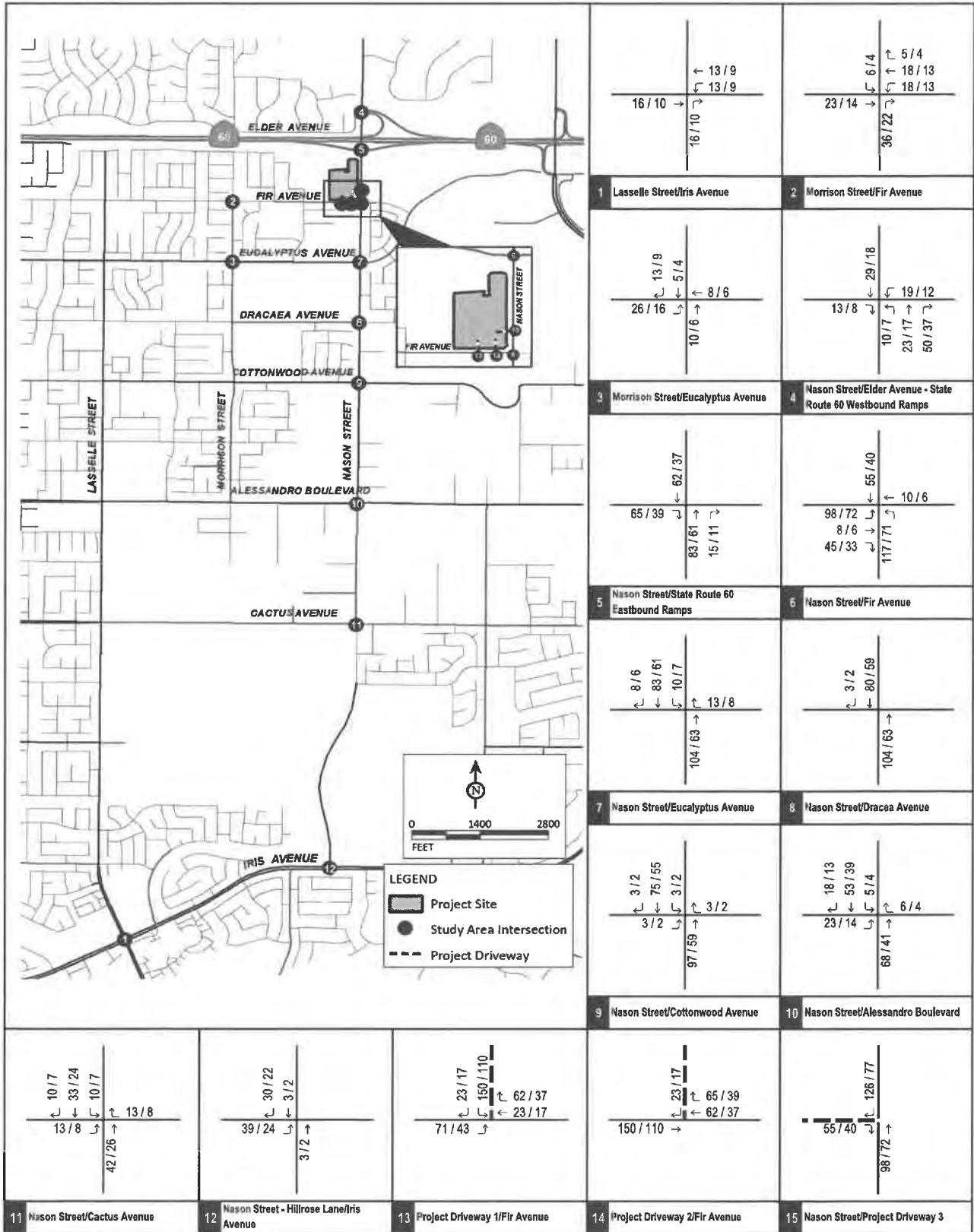


FIGURE 6

LSA

XXX / YYY

AM / PM Peak Hour Trips

---- Project Driveway

Village at Moreno Valley Project
 Transportation Impact Analysis
 Project Net Trip Assignment

TABLES

Table A - Project Trip Generation

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Gas Station with Convenience Store/Car Wash	18 VFP							
Trips/Unit ¹		6.36	6.11	12.47	7.13	6.86	13.99	205.36
Trip Generation		114	110	224	128	123	251	3,696
Internal Capture ²		(9)	(15)	(24)	(44)	(33)	(77)	(505)
Total External Trips		105	95	200	84	90	174	3,191
Pass-by Trips ³		(65)	(59)	(124)	(47)	(50)	(97)	(1,883)
Total Net Trips		40	36	76	37	40	77	1,308
Retail	11.00 TSF							
Trips/Unit		8.82	5.45	14.27	4.64	5.00	9.64	121.82
Trip Generation ⁴		97	60	157	51	55	106	1,340
Internal Capture ²		(8)	(8)	(16)	(17)	(15)	(32)	(240)
Total External Trips		89	52	141	34	40	74	1,100
Pass-by Trips ⁵		0	0	0	(12)	(14)	(26)	(374)
Total Net Trips		89	52	141	22	26	48	726
Fast-Food Restaurant with Drive Through	9.96 TSF							
Trips/Unit ⁶		20.50	19.69	40.19	16.99	15.68	32.67	470.95
Trip Generation		204	196	400	169	156	325	4,689
Internal Capture ²		(19)	(16)	(35)	(49)	(64)	(113)	(740)
Total External Trips		185	180	365	120	92	212	3,949
Pass-by Trips ⁷		(91)	(88)	(179)	(60)	(46)	(106)	(1,955)
Total Net Trips		94	92	186	60	46	106	1,994
Fast-Food Restaurant without Drive Through	4.50 TSF							
Trips/Unit ⁸		15.06	10.04	25.10	14.17	14.17	28.34	346.23
Trip Generation		68	45	113	64	64	128	1,558
Internal Capture ²		(6)	(4)	(10)	(18)	(26)	(44)	(270)
Total External Trips		62	41	103	46	38	84	1,288
Pass-by Trips ⁹		(30)	(20)	(50)	(23)	(19)	(42)	(638)
Total Net Trips		32	21	53	23	19	42	650
Restaurant	4.50 TSF							
Trips/Unit ¹⁰		5.47	4.47	9.94	6.06	3.71	9.77	112.18
Trip Generation		25	20	45	27	17	44	505
Internal Capture ²		(2)	(1)	(3)	(8)	(7)	(15)	(90)
Total External Trips		23	19	42	19	10	29	415
Pass-by Trips ¹¹		0	0	0	(8)	(4)	(12)	(178)
Total Net Trips		23	19	42	11	6	17	237
Retail Anchors	22.00 TSF							
Trips/Unit ¹²		2.29	1.53	3.82	4.71	4.53	9.24	106.78
Trip Generation		50	34	84	104	100	204	2,349
Internal Capture ²		(4)	(4)	(8)	(36)	(27)	(63)	(355)
Total External Trips		46	30	76	68	73	141	1,994
Pass-by Trips ¹³		0	0	0	(24)	(26)	(50)	(718)
Total Net Trips		46	30	76	44	47	91	1,276

Table 5-A - Project Trip Generation

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
		In	Out	Total	In	Out	Total	
	Total Gross Trip Generation	558	465	1,023	543	515	1,058	14,137
	Total Internal Trips	(48)	(48)	(96)	(172)	(172)	(344)	(2,200)
	Total Net External Trips	510	417	927	371	343	714	11,937
	Total Pass-By Trips	(186)	(167)	(353)	(174)	(159)	(333)	(5,746)
	Total Net Trip Generation	324	250	574	197	184	381	6,191

Note:

VFP = Vehicle Fueling Positions; TSF = Thousand Square Feet

- ¹ Rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (10th Edition), Land Use 945 - "Gasoline/Service Station with Convenience Market", Setting/Location - "General Urban/Suburban."
- ² Internal capture rates obtained using the National Cooperative Highway Research Program (NCHRP 8-51) Internal Trip Capture Estimation Tool.
- ³ Pass-by rates from the ITE *Trip Generation Handbook* (3rd Edition) for Land Use 945 - "Gasoline/Service Station with Convenience Market." A pass-by rate of 62% was used for the a.m. peak hour and a pass-by rate of 56% was used for the p.m. peak hour. Since there is no data available for daily pass-by trips, the average of a.m. and p.m. pass-by rates was used as the daily pass-by rate.
- ⁴ Fitted curve rates used from the ITE *Trip Generation Manual* (10th Edition), Land Use 820 - "Shopping Center", Setting/Location - "General Urban/Suburban."
- ⁵ Pass-by rates from the ITE *Trip Generation Handbook*, 3rd Edition for Land Use 820 - "Shopping Center." A pass-by rate of 34% was used for the p.m. peak hour. No a.m. peak and daily pass-by rates are provided; therefore, the p.m. pass-by rate was used as the daily pass-by rate.
- ⁶ Rates from the ITE *Trip Generation Manual* (10th Edition), Land Use 934 - "Fast-Food Restaurant with Drive-Through Window", Setting/Location - "General Urban/Suburban."
- ⁷ Pass-by rates from the ITE *Trip Generation Handbook*, 3rd Edition for Land Use 934 - "Fast-Food Restaurant with Drive-Through Window." A pass-by rate of 49% was used for the a.m. peak hour and a pass-by rate of 50% was used for the p.m. peak hour. Since there is no data available for daily pass-by trips, the average of a.m. and p.m. pass-by rates was used as the daily pass-by rate.
- ⁸ Rates from the ITE *Trip Generation Manual* (10th Edition), Land Use 933 - "Fast-Food Restaurant without Drive-Through Window", Setting/Location - "General Urban/Suburban."
- ⁹ Pass-by rates are not available for Land Use 933 in the ITE *Trip Generation Handbook*, 3rd Edition. Therefore, pass-by rates for Land Use 934 - "Fast-Food Restaurant with Drive-Through Window" were used from the ITE Handbook. A pass-by rate of 49% was used for the a.m. peak hour and a pass-by rate of 50% was used for the p.m. peak hour. Since there is no data available for daily pass-by trips, the average of a.m. and p.m. pass-by rates was used as the daily pass-by rate.
- ¹⁰ Rates from the ITE *Trip Generation Manual* (10th Edition), Land Use 932 - "High-Turnover (Sit-Down) Restaurant", Setting/Location - "General Urban/Suburban."
- ¹¹ Pass-by rates from the ITE *Trip Generation Handbook*, 3rd Edition for Land Use 932 - "High-Turnover (Sit-Down) Restaurant." A pass-by rate of 43% was used for the p.m. peak hour. No a.m. peak and daily pass-by rates are provided; therefore, the p.m. pass-by rate was used as the daily pass-by rate.
- ¹² Rates from the ITE *Trip Generation Manual* (10th Edition), Land Use 850 - "Supermarket", Setting/Location - "General Urban/Suburban."
- ¹³ Pass-by rates from the ITE *Trip Generation Handbook*, 3rd Edition for Land Use 850 - "Supermarket." A pass-by rate of 36% was used for the p.m. peak hour. No a.m. peak and daily pass-by rates are provided; therefore, the p.m. pass-by rate was used as the daily pass-by rate.

APPENDIX A
INTERNAL CAPTURE WORKSHEETS

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Village at Moreno Valley	Organization:	LSA
Project Location:	Moreno Valley, CA	Performed By:	
Scenario Description:		Date:	
Analysis Year:		Checked By:	
Analysis Period:	AM Street Peak Hour	Date:	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	820, 850, 945	33.00, 18	TSF, VFP	465	261	204
Restaurant	932, 933, 934	18.96	TSF	558	297	261
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses ²				0		
Total				1023	558	465

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		27	0	0	0
Restaurant	0	21		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	1,023	558	465
Internal Capture Percentage	9%	9%	10%
External Vehicle-Trips ³	927	510	417
External Transit-Trips ⁴	0	0	0
External Non-Motorized Trips ⁴	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	8%	13%
Restaurant	9%	8%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

¹Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

³Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

⁴Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Village at Moreno Valley
Analysis Period:	AM Street Peak Hour

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	261	261	1.00	204	204
Restaurant	1.00	297	297	1.00	261	261
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	0	0	1.00	0	0
Hotel	1.00	0	0	1.00	0	0

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	59		27	0	29	0
Restaurant	81	37		0	10	8
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		84	68	0	0	0
Retail	0		149	0	0	0
Restaurant	0	21		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	44	59	0		0
Hotel	0	10	18	0	0	

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	21	240	261	240	0	0
Restaurant	27	270	297	270	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	27	177	204	177	0	0
Restaurant	21	240	261	240	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A
²Person-Trips
³Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator
*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Village at Moreno Valley	Organization:	LSA
Project Location:	Moreno Valley, CA	Performed By:	
Scenario Description:		Date:	
Analysis Year:		Checked By:	
Analysis Period:	PM Street Peak Hour	Date:	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	820, 850, 945	33.00, 18	TSF, VFP	561	283	278
Restaurant	932, 933, 934	18.96	TSF	497	260	237
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses ²				0		
Total				1058	543	515

Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant	1.00	0%	0%	1.00	0%	0%
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		75	0	0	0
Restaurant	0	97		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	1,058	543	515
Internal Capture Percentage	33%	32%	33%
External Vehicle-Trips ³	714	371	343
External Transit-Trips ⁴	0	0	0
External Non-Motorized Trips ⁴	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	34%	27%
Restaurant	29%	41%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

¹Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

³Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

⁴Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Project Name:	Village at Moreno Valley
Analysis Period:	PM Street Peak Hour

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	283	283	1.00	278	278
Restaurant	1.00	260	260	1.00	237	237
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	0	0	1.00	0	0
Hotel	1.00	0	0	1.00	0	0

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	6		81	11	72	14
Restaurant	7	97		19	43	17
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		23	5	0	0	0
Retail	0		75	0	0	0
Restaurant	0	142		0	0	0
Cinema/Entertainment	0	11	8		0	0
Residential	0	28	36	0		0
Hotel	0	6	13	0	0	

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	97	186	283	186	0	0
Restaurant	75	185	260	185	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

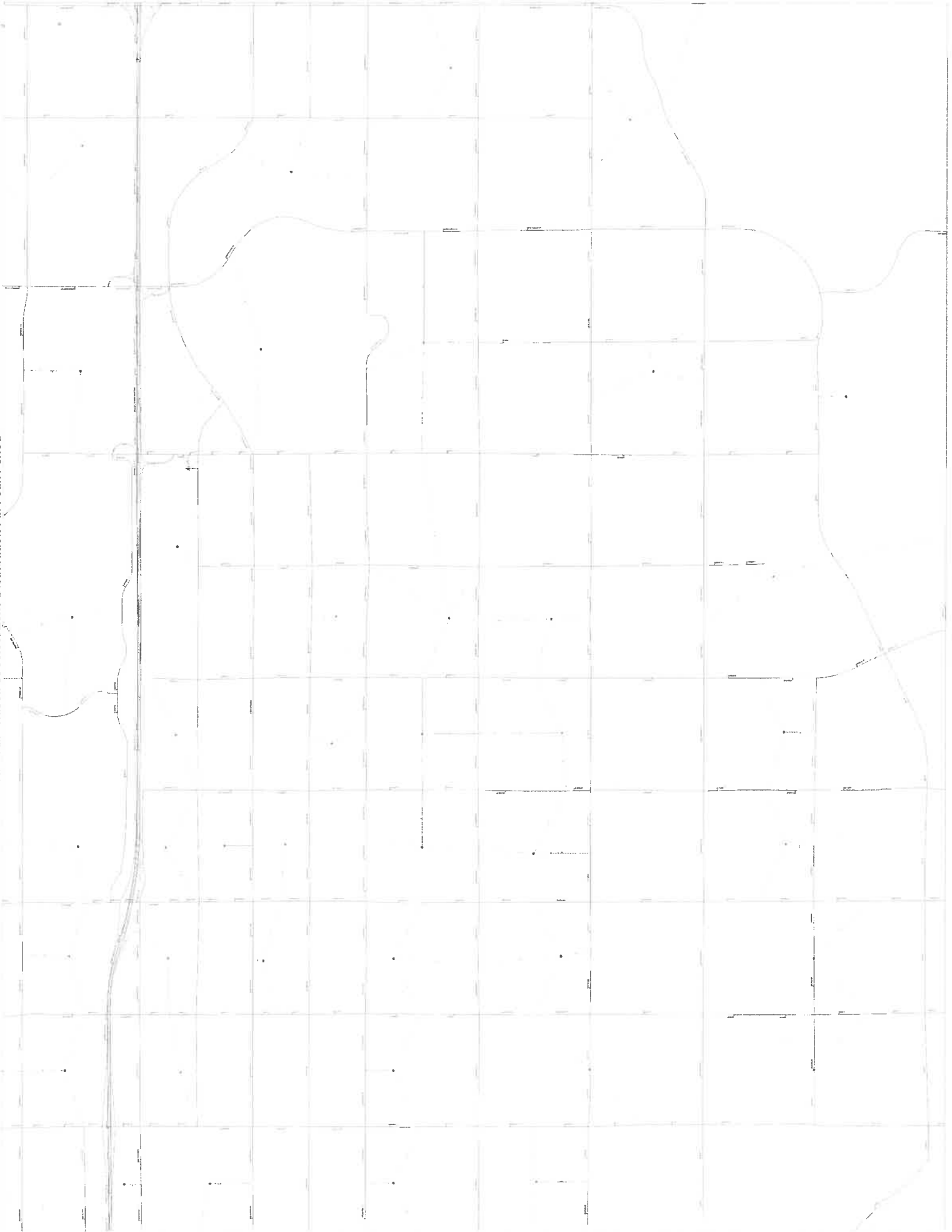
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles ¹	Transit ²	Non-Motorized ²
Office	0	0	0	0	0	0
Retail	75	203	278	203	0	0
Restaurant	97	140	237	140	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	0	0	0	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses ³	0	0	0	0	0	0

¹Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P
²Person-Trips
³Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator
*Indicates computation that has been rounded to the nearest whole number.

APPENDIX B

RIVTAM - PROJECT SELECT ZONE DISTRIBUTION

2040 RIVTAM - Nason St Select Zone Distribution PM Peak Period



APPENDIX B:

TRAFFIC COUNT SHEETS AND SIGNAL TIMING SHEETS

APPENDIX B-1:

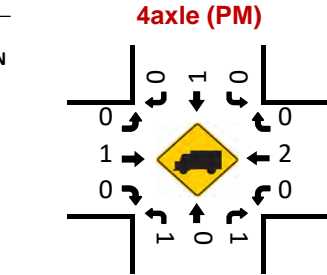
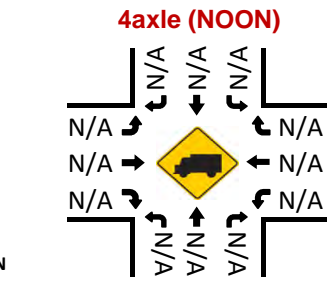
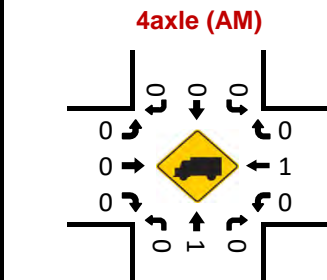
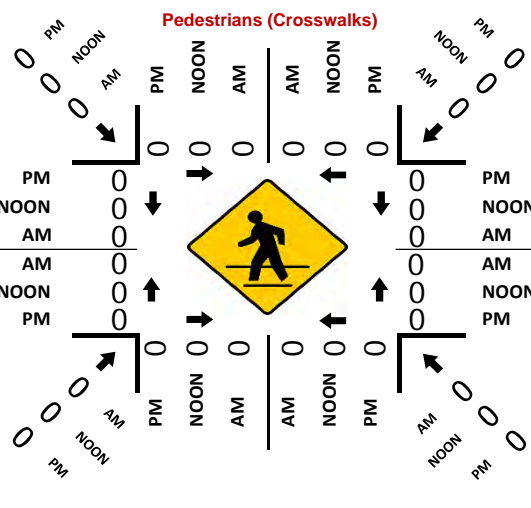
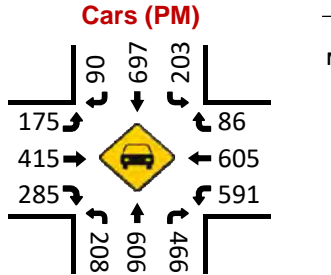
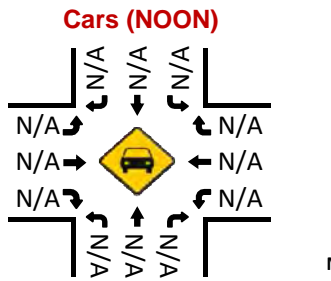
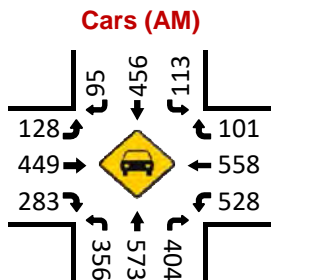
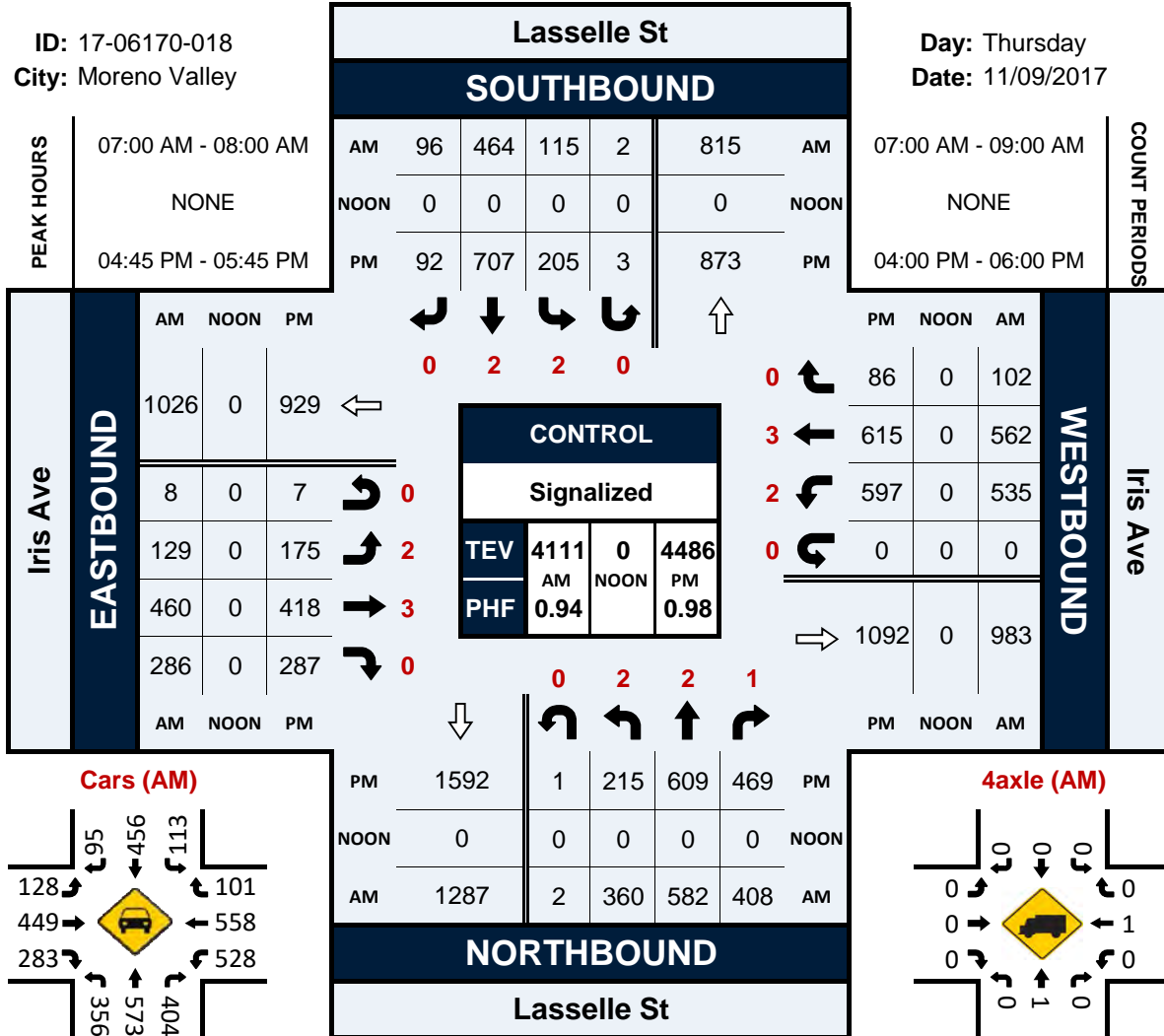
HISTORICAL TRAFFIC COUNT SHEETS

Lasselle St & Iris Ave

Peak Hour Turning Movement Count

ID: 17-06170-018
City: Moreno Valley

Day: Thursday
Date: 11/09/2017



National Data & Surveying Services

Intersection Turning Movement Count

Location: Lasselle St & Iris Ave
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-018
 Date: 11/9/2017

Total

NS/EW Streets:	Lasselle St				Lasselle St				Iris Ave				Iris Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	2	1	0	2	2	0	0	2	3	0	0	2	3	0	0	936
7:15 AM	77	112	84	1	18	117	20	0	14	90	93	3	162	137	8	0	1017
7:30 AM	105	156	110	1	18	114	19	1	27	87	61	4	139	158	17	0	1060
7:45 AM	117	180	94	0	30	129	35	1	41	95	54	1	113	144	26	0	1098
8:00 AM	61	134	120	0	49	104	22	0	47	188	78	0	121	123	51	0	911
8:15 AM	59	151	120	0	50	110	21	0	33	119	57	1	85	85	20	0	686
8:30 AM	44	103	100	1	35	72	9	0	18	83	38	0	78	85	20	0	657
8:45 AM	39	103	76	0	42	60	14	0	21	93	31	0	73	90	15	0	613
	38	100	68	0	27	73	13	0	15	62	23	1	75	94	24	0	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	540	1039	772	3	269	779	153	2	216	817	435	10	846	916	181	0	6978
	22.94%	44.14%	32.80%	0.13%	22.36%	64.75%	12.72%	0.17%	14.61%	55.28%	29.43%	0.68%	43.54%	47.14%	9.32%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	360	582	408	2	115	464	96	2	129	460	286	8	535	562	102	0	4111
PEAK HR FACTOR :	0.769	0.808	0.850	0.500	0.587	0.899	0.686	0.500	0.686	0.612	0.769	0.500	0.826	0.889	0.500	0.000	0.936
	0.864				0.868				0.705				0.955				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	2	1	0	2	2	0	0	2	3	0	0	2	3	0	0	1041
4:15 PM	68	142	121	0	64	130	18	1	29	123	67	0	115	133	30	0	1078
4:30 PM	60	154	106	1	57	130	16	0	35	119	68	0	157	153	22	0	1095
4:45 PM	56	165	126	1	60	171	31	0	40	79	56	2	141	145	22	0	1104
5:00 PM	55	128	115	1	46	163	25	2	43	141	66	0	143	151	25	0	1118
5:15 PM	47	150	116	0	47	165	28	0	35	104	80	1	144	179	22	0	1147
5:30 PM	66	185	136	0	69	177	18	0	49	74	73	4	140	136	20	0	1117
5:45 PM	47	146	102	0	43	202	21	1	48	99	68	2	170	149	19	0	1099
	60	125	91	0	50	187	19	1	30	107	94	1	168	144	22	0	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	459	1195	913	3	436	1325	176	5	309	846	572	10	1178	1190	182	0	8799
	17.86%	46.50%	35.53%	0.12%	22.45%	68.23%	9.06%	0.26%	17.79%	48.70%	32.93%	0.58%	46.20%	46.67%	7.14%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	215	609	469	1	205	707	92	3	175	418	287	7	597	615	86	0	4486
PEAK HR FACTOR :	0.814	0.823	0.862	0.250	0.743	0.875	0.821	0.375	0.893	0.741	0.897	0.438	0.878	0.859	0.860	0.000	0.978
	0.836				0.943				0.887				0.941				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lasselle St & Iris Ave
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-018
 Date: 11/9/2017

Cars

NS/EW Streets:	Lasselle St				Lasselle St				Iris Ave				Iris Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	2	2	1	0	2	2	0	0	2	3	0	0	2	3	0	0	923
7:15 AM	75	111	82	1	18	116	20	0	14	85	92	3	161	137	8	0	997
7:30 AM	105	150	110	1	17	110	19	1	27	84	60	4	137	155	17	0	1050
7:45 AM	116	179	93	0	30	129	35	1	40	94	53	1	109	144	26	0	1086
8:00 AM	60	133	119	0	48	101	21	0	47	186	78	0	121	122	50	0	903
8:15 AM	57	150	119	0	50	110	21	0	33	117	56	1	84	85	20	0	673
8:30 AM	42	101	97	1	35	71	9	0	18	81	37	0	77	84	20	0	643
8:45 AM	38	101	75	0	39	60	14	0	20	89	31	0	73	88	15	0	603
	38	98	67	0	25	72	13	0	15	62	22	1	75	91	24	0	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	531	1023	762	3	262	769	152	2	214	798	429	10	837	906	180	0	6878
	22.90%	44.11%	32.86%	0.13%	22.11%	64.89%	12.83%	0.17%	14.75%	55.00%	29.57%	0.69%	43.53%	47.11%	9.36%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	356	573	404	2	113	456	95	2	128	449	283	8	528	558	101	0	4056
PEAK HR FACTOR :	0.77	0.800	0.849	0.500	0.589	0.884	0.679	0.500	0.681	0.603	0.769	0.500	0.820	0.900	0.505	0.000	0.934
	0.860				0.854				0.698				0.960				

NS/EW Streets:	Lasselle St				Lasselle St				Iris Ave				Iris Ave				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	2	2	1	0	2	2	0	0	2	3	0	0	2	3	0	0	1024
4:15 PM	67	139	119	0	64	129	18	1	29	120	66	0	115	130	27	0	1065
4:30 PM	59	153	106	1	57	127	16	0	34	116	67	0	155	152	22	0	1082
4:45 PM	56	161	126	1	60	170	30	0	39	77	56	2	139	143	22	0	1088
5:00 PM	53	127	114	1	46	160	24	2	43	141	65	0	139	148	25	0	1105
5:15 PM	46	149	115	0	47	161	27	0	35	103	80	1	144	175	22	0	1132
5:30 PM	63	184	135	0	67	174	18	0	49	73	72	4	140	133	20	0	1113
5:45 PM	46	146	102	0	43	202	21	1	48	98	68	2	168	149	19	0	1089
	59	123	90	0	50	186	19	1	30	107	93	1	168	140	22	0	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	449	1182	907	3	434	1309	173	5	307	835	567	10	1168	1170	179	0	8698
	17.67%	46.52%	35.69%	0.12%	22.59%	68.14%	9.01%	0.26%	17.86%	48.57%	32.98%	0.58%	46.40%	46.48%	7.11%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	208	606	466	1	203	697	90	3	175	415	285	7	591	605	86	0	4438
PEAK HR FACTOR :	0.83	0.823	0.863	0.250	0.757	0.863	0.833	0.375	0.893	0.736	0.891	0.438	0.879	0.864	0.860	0.000	0.980
	0.838				0.930				0.886				0.940				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lasselle St & Iris Ave
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-018
 Date: 11/9/2017

2axle

NS/EW Streets:	Lasselle St				Lasselle St				Iris Ave				Iris Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	1	2	0	2	1	0	0	2	3	1	0	2	3	0	0	13
7:15 AM	0	4	0	0	1	4	0	0	0	2	1	0	2	2	0	0	16
7:30 AM	1	1	1	0	0	0	0	0	1	1	1	0	4	0	0	0	10
7:45 AM	1	1	1	0	1	3	1	0	0	2	0	0	0	1	1	0	12
8:00 AM	1	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0	5
8:15 AM	1	2	2	0	0	1	0	0	0	2	1	0	1	1	0	0	11
8:30 AM	1	2	0	0	3	0	0	0	1	4	0	0	0	2	0	0	13
8:45 AM	0	2	1	0	2	1	0	0	0	0	1	0	0	2	0	0	9
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	24.14%	48.28%	27.59%	0.00%	38.89%	55.56%	5.56%	0.00%	8.33%	66.67%	25.00%	0.00%	50.00%	44.44%	5.56%	0.00%	89
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	4	7	4	0	2	8	1	0	1	10	3	0	7	3	1	0	51
PEAK HR FACTOR :	0.500	0.438	0.500	0.000	0.500	0.500	0.250	0.000	0.250	0.500	0.750	0.000	0.438	0.375	0.250	0.000	0.797
	0.750				0.550				0.583				0.688				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	3	1	0	0	1	0	0	0	2	1	0	0	1	3	0	13
4:15 PM	1	1	0	0	0	3	0	0	1	3	1	0	2	0	0	0	12
4:30 PM	0	4	0	0	0	1	0	0	0	1	0	0	2	0	0	0	8
4:45 PM	1	1	1	0	0	2	1	0	0	0	1	0	4	1	0	0	12
5:00 PM	1	1	1	0	0	4	0	0	0	1	0	0	0	4	0	0	12
5:15 PM	3	1	0	0	2	3	0	0	0	1	1	0	0	2	0	0	13
5:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3
5:45 PM	1	2	1	0	0	1	0	0	0	0	1	0	0	1	0	0	7
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	34.62%	50.00%	15.38%	0.00%	11.11%	83.33%	5.56%	0.00%	7.14%	57.14%	35.71%	0.00%	45.45%	40.91%	13.64%	0.00%	80
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	6	3	2	0	2	9	1	0	0	2	2	0	6	7	0	0	40
PEAK HR FACTOR :	0.50	0.750	0.500	0.000	0.250	0.563	0.250	0.000	0.000	0.500	0.500	0.000	0.375	0.438	0.000	0.000	0.769
	0.688				0.600				0.500				0.650				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lasselle St & Iris Ave
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-018
 Date: 11/9/2017

3axle

NS/EW Streets:	Lasselle St				Lasselle St				Iris Ave				Iris Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	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	0	0	0	0
8:00 AM	0	0	0	0	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	0	0	0	0
8:30 AM	0	0	0	0	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	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
	0.00%	100.00%	0.00%	0.00%					0.00%	100.00%	0.00%	0.00%					
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
	0.250								0.250								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
4:15 PM	0	0	0	0	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	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	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	1	0	0	1
5:30 PM	0	0	0	0	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	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	0	4
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.500
	0.000				0.250				0.000				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lasselle St & Iris Ave
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-018
 Date: 11/9/2017

4axle

NS/EW Streets:	Lasselle St				Lasselle St				Iris Ave				Iris Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
7:30 AM	0	0	0	0	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	0	0	0	0
8:00 AM	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3
8:15 AM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	1	0	0	0	0	0	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	1	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	40.00%	20.00%	40.00%	0.00%	0.00%	0	0	0	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	9
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250
	0.250												0.250				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	1	0	1	1	0	0	0	2	0	0	5
4:45 PM	1	0	0	0	0	1	0	0	0	1	0	0	0	2	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	33.33%	0.00%	66.67%	0.00%	0.00%	50.00%	50.00%	0.00%	33.33%	66.67%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	17
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	1	0	1	0	0	1	0	0	0	1	0	0	0	2	0	0	6
PEAK HR FACTOR :	0.25	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.375
	0.500				0.250				0.250				0.250				

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : MRVMOFIAM
 Site Code : 00318643
 Start Date : 9/11/2018
 Page No : 1

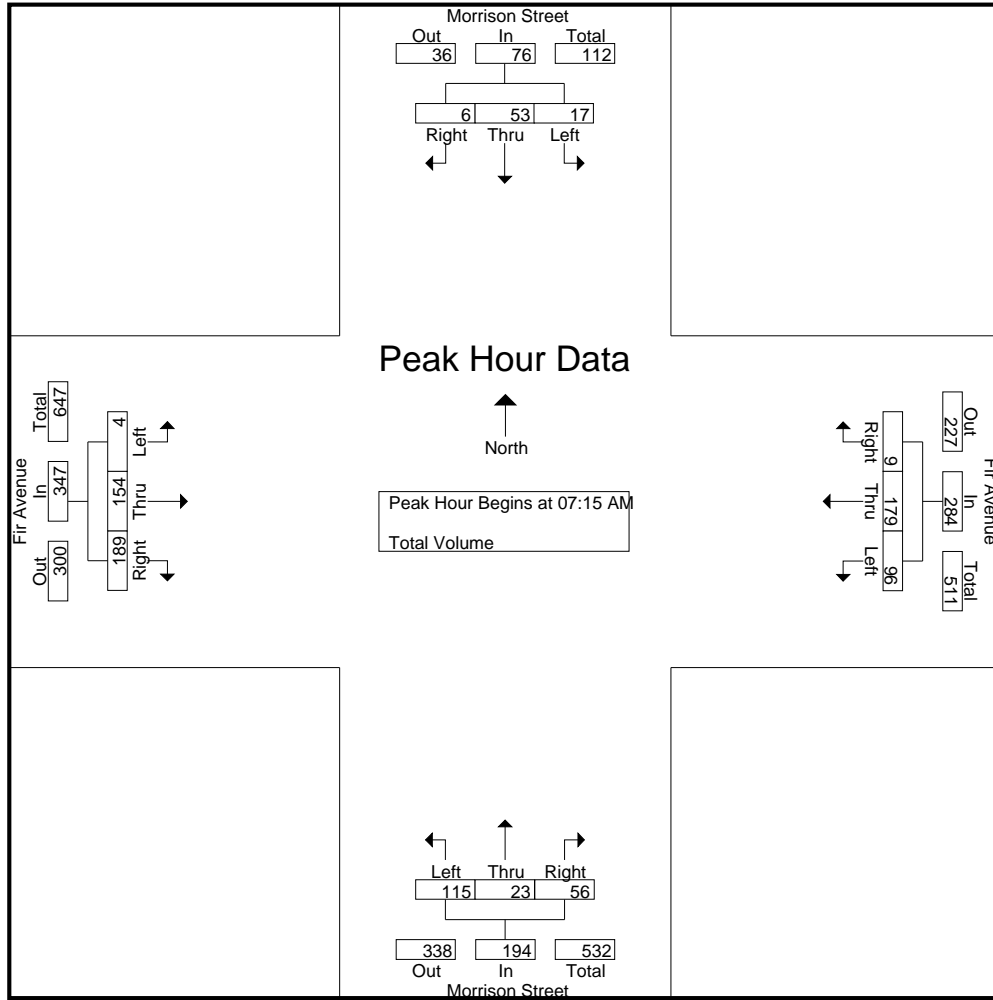
Groups Printed- Total Volume

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	6	3	0	9	6	17	1	24	11	1	5	17	0	26	12	38	88
07:15 AM	5	9	1	15	18	30	2	50	17	1	7	25	1	13	26	40	130
07:30 AM	3	9	1	13	22	46	1	69	24	4	12	40	0	48	47	95	217
07:45 AM	5	24	3	32	38	56	3	97	35	7	15	57	3	48	76	127	313
Total	19	45	5	69	84	149	7	240	87	13	39	139	4	135	161	300	748
08:00 AM	4	11	1	16	18	47	3	68	39	11	22	72	0	45	40	85	241
08:15 AM	1	2	1	4	3	21	1	25	5	0	7	12	1	25	3	29	70
08:30 AM	2	1	0	3	6	19	0	25	2	0	3	5	0	13	0	13	46
08:45 AM	2	4	0	6	3	25	0	28	5	0	5	10	0	16	3	19	63
Total	9	18	2	29	30	112	4	146	51	11	37	99	1	99	46	146	420
Grand Total	28	63	7	98	114	261	11	386	138	24	76	238	5	234	207	446	1168
Apprch %	28.6	64.3	7.1		29.5	67.6	2.8		58	10.1	31.9		1.1	52.5	46.4		
Total %	2.4	5.4	0.6	8.4	9.8	22.3	0.9	33	11.8	2.1	6.5	20.4	0.4	20	17.7	38.2	

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	5	9	1	15	18	30	2	50	17	1	7	25	1	13	26	40	130
07:30 AM	3	9	1	13	22	46	1	69	24	4	12	40	0	48	47	95	217
07:45 AM	5	24	3	32	38	56	3	97	35	7	15	57	3	48	76	127	313
08:00 AM	4	11	1	16	18	47	3	68	39	11	22	72	0	45	40	85	241
Total Volume	17	53	6	76	96	179	9	284	115	23	56	194	4	154	189	347	901
% App. Total	22.4	69.7	7.9		33.8	63	3.2		59.3	11.9	28.9		1.2	44.4	54.5		
PHF	.850	.552	.500	.594	.632	.799	.750	.732	.737	.523	.636	.674	.333	.802	.622	.683	.720

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : MRVMOFIAM
 Site Code : 00318643
 Start Date : 9/11/2018
 Page No : 2



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	5	9	1	15	18	30	2	50	17	1	7	25	1	13	26	40
+15 mins.	3	9	1	13	22	46	1	69	24	4	12	40	0	48	47	95
+30 mins.	5	24	3	32	38	56	3	97	35	7	15	57	3	48	76	127
+45 mins.	4	11	1	16	18	47	3	68	39	11	22	72	0	45	40	85
Total Volume	17	53	6	76	96	179	9	284	115	23	56	194	4	154	189	347
% App. Total	22.4	69.7	7.9		33.8	63	3.2		59.3	11.9	28.9		1.2	44.4	54.5	
PHF	.850	.552	.500	.594	.632	.799	.750	.732	.737	.523	.636	.674	.333	.802	.622	.683

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : MRVMOFIPM
 Site Code : 00318643
 Start Date : 9/11/2018
 Page No : 1

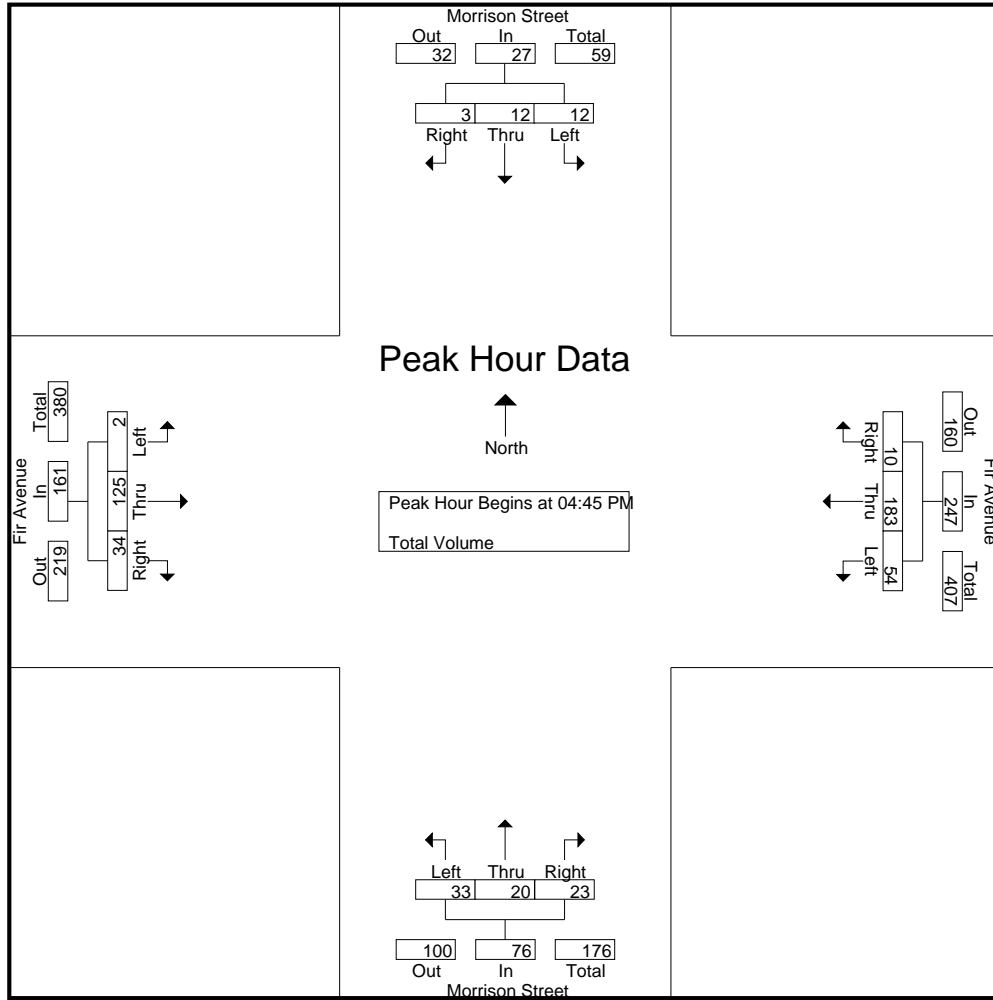
Groups Printed- Total Volume

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	4	3	4	11	5	42	4	51	3	2	7	12	2	27	5	34	108
04:15 PM	3	1	0	4	13	42	2	57	13	1	3	17	1	30	1	32	110
04:30 PM	1	1	0	2	13	42	3	58	6	4	3	13	1	21	6	28	101
04:45 PM	1	0	1	2	22	48	1	71	7	6	8	21	1	34	9	44	138
Total	9	5	5	19	53	174	10	237	29	13	21	63	5	112	21	138	457
05:00 PM	2	1	2	5	11	52	1	64	9	3	3	15	0	37	6	43	127
05:15 PM	4	9	0	13	10	41	6	57	9	6	6	21	0	24	8	32	123
05:30 PM	5	2	0	7	11	42	2	55	8	5	6	19	1	30	11	42	123
05:45 PM	4	3	1	8	10	50	5	65	4	3	11	18	2	26	10	38	129
Total	15	15	3	33	42	185	14	241	30	17	26	73	3	117	35	155	502
Grand Total	24	20	8	52	95	359	24	478	59	30	47	136	8	229	56	293	959
Apprch %	46.2	38.5	15.4		19.9	75.1	5		43.4	22.1	34.6		2.7	78.2	19.1		
Total %	2.5	2.1	0.8	5.4	9.9	37.4	2.5	49.8	6.2	3.1	4.9	14.2	0.8	23.9	5.8	30.6	

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	1	0	1	2	22	48	1	71	7	6	8	21	1	34	9	44	138
05:00 PM	2	1	2	5	11	52	1	64	9	3	3	15	0	37	6	43	127
05:15 PM	4	9	0	13	10	41	6	57	9	6	6	21	0	24	8	32	123
05:30 PM	5	2	0	7	11	42	2	55	8	5	6	19	1	30	11	42	123
Total Volume	12	12	3	27	54	183	10	247	33	20	23	76	2	125	34	161	511
% App. Total	44.4	44.4	11.1		21.9	74.1	4		43.4	26.3	30.3		1.2	77.6	21.1		
PHF	.600	.333	.375	.519	.614	.880	.417	.870	.917	.833	.719	.905	.500	.845	.773	.915	.926

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : MRVMOFIPM
 Site Code : 00318643
 Start Date : 9/11/2018
 Page No : 2



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

	05:00 PM				04:15 PM				04:45 PM				04:45 PM			
+0 mins.	2	1	2	5	13	42	2	57	7	6	8	21	1	34	9	44
+15 mins.	4	9	0	13	13	42	3	58	9	3	3	15	0	37	6	43
+30 mins.	5	2	0	7	22	48	1	71	9	6	6	21	0	24	8	32
+45 mins.	4	3	1	8	11	52	1	64	8	5	6	19	1	30	11	42
Total Volume	15	15	3	33	59	184	7	250	33	20	23	76	2	125	34	161
% App. Total	45.5	45.5	9.1		23.6	73.6	2.8		43.4	26.3	30.3		1.2	77.6	21.1	
PHF	.750	.417	.375	.635	.670	.885	.583	.880	.917	.833	.719	.905	.500	.845	.773	.915

Location: Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue



Date: 9/11/2018
 Day: Tuesday

PEDESTRIANS

	North Leg Morrison Street	East Leg Fir Avenue	South Leg Morrison Street	West Leg Fir Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	2	1	1	4
7:15 AM	1	1	0	0	2
7:30 AM	2	1	3	1	7
7:45 AM	1	1	0	1	3
8:00 AM	0	0	2	0	2
8:15 AM	0	0	0	1	1
8:30 AM	0	0	0	1	1
8:45 AM	3	0	6	0	9
TOTAL VOLUMES:	7	5	12	5	29

	North Leg Morrison Street	East Leg Fir Avenue	South Leg Morrison Street	West Leg Fir Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	1	1	0	2
4:45 PM	0	0	2	0	2
5:00 PM	0	1	0	0	1
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	3	0	5

Location: Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue



Date: 9/11/2018
 Day: Tuesday

BICYCLES

	Southbound Morrison Street			Westbound Fir Avenue			Northbound Morrison Street			Eastbound Fir Avenue			
	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	1	0	0	0	0	0	0	0	0	0	0	1
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	4	4
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	1	0	0	0	0	0	0	0	0	1	4	6

	Southbound Morrison Street			Westbound Fir Avenue			Northbound Morrison Street			Eastbound Fir Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

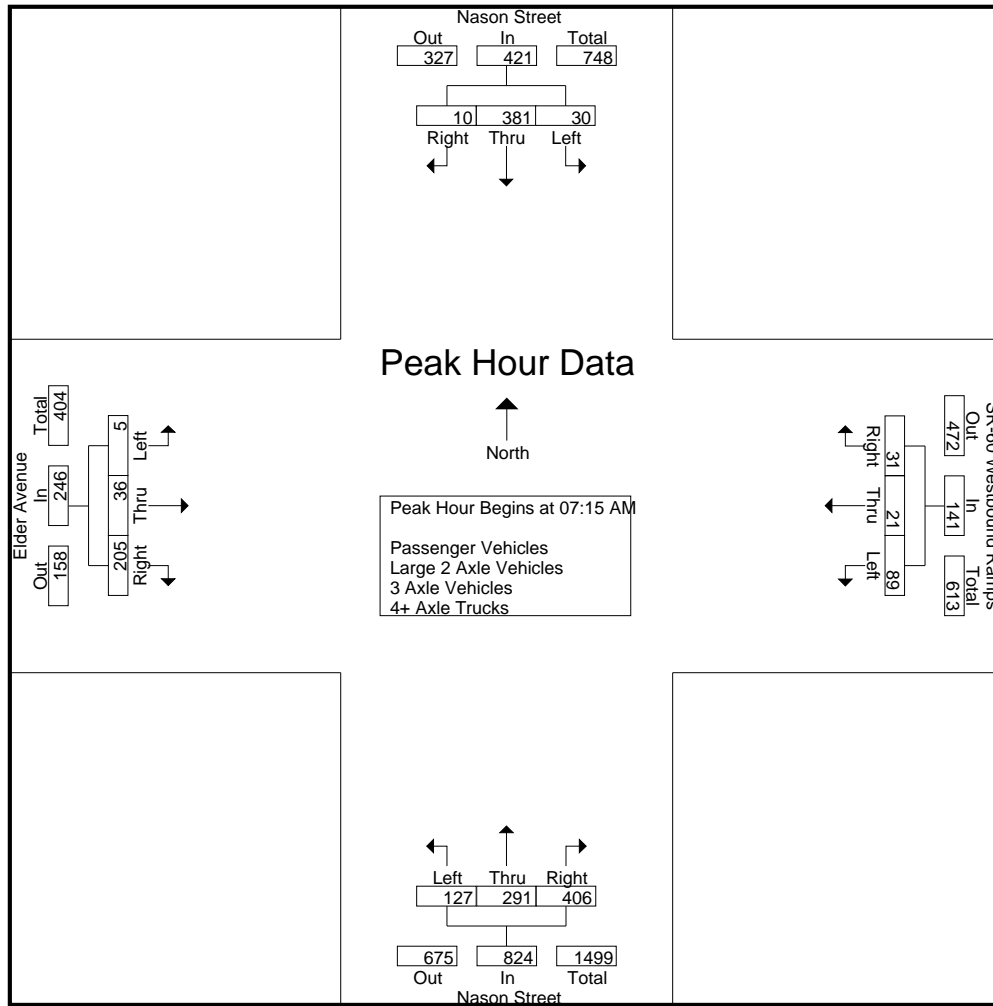
City of Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps
 Weather: Clear

File Name : 01_MR_V_Nason_Elder_60W AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

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

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	5	50	1	56	22	2	3	27	14	60	102	176	0	18	29	47	306
07:15 AM	10	65	1	76	26	8	10	44	12	58	105	175	2	14	33	49	344
07:30 AM	7	131	4	142	24	6	10	40	28	75	92	195	1	16	73	90	467
07:45 AM	9	136	4	149	23	5	6	34	49	90	102	241	2	3	73	78	502
Total	31	382	10	423	95	21	29	145	103	283	401	787	5	51	208	264	1619
08:00 AM	4	49	1	54	16	2	5	23	38	68	107	213	0	3	26	29	319
08:15 AM	4	43	0	47	18	0	3	21	21	34	95	150	1	7	21	29	247
08:30 AM	7	32	0	39	25	1	0	26	4	21	99	124	1	10	14	25	214
08:45 AM	6	22	0	28	16	1	2	19	15	25	99	139	2	9	13	24	210
Total	21	146	1	168	75	4	10	89	78	148	400	626	4	29	74	107	990
Grand Total	52	528	11	591	170	25	39	234	181	431	801	1413	9	80	282	371	2609
Apprch %	8.8	89.3	1.9		72.6	10.7	16.7		12.8	30.5	56.7		2.4	21.6	76		
Total %	2	20.2	0.4	22.7	6.5	1	1.5	9	6.9	16.5	30.7	54.2	0.3	3.1	10.8	14.2	
Passenger Vehicles	51	524	9	584	168	25	39	232	179	424	785	1388	8	76	277	361	2565
% Passenger Vehicles	98.1	99.2	81.8	98.8	98.8	100	100	99.1	98.9	98.4	98	98.2	88.9	95	98.2	97.3	98.3
Large 2 Axle Vehicles	1	3	2	6	1	0	0	1	2	5	14	21	1	4	4	9	37
% Large 2 Axle Vehicles	1.9	0.6	18.2	1	0.6	0	0	0.4	1.1	1.2	1.7	1.5	11.1	5	1.4	2.4	1.4
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
% 3 Axle Vehicles	0	0.2	0	0.2	0	0	0	0	0	0	0.1	0.1	0	0	0	0	0.1
4+ Axle Trucks	0	0	0	0	1	0	0	1	0	2	1	3	0	0	1	1	5
% 4+ Axle Trucks	0	0	0	0	0.6	0	0	0.4	0	0.5	0.1	0.2	0	0	0.4	0.3	0.2

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	10	65	1	76	26	8	10	44	12	58	105	175	2	14	33	49	344
07:30 AM	7	131	4	142	24	6	10	40	28	75	92	195	1	16	73	90	467
07:45 AM	9	136	4	149	23	5	6	34	49	90	102	241	2	3	73	78	502
08:00 AM	4	49	1	54	16	2	5	23	38	68	107	213	0	3	26	29	319
Total Volume	30	381	10	421	89	21	31	141	127	291	406	824	5	36	205	246	1632
% App. Total	7.1	90.5	2.4		63.1	14.9	22		15.4	35.3	49.3		2	14.6	83.3		
PHF	.750	.700	.625	.706	.856	.656	.775	.801	.648	.808	.949	.855	.625	.563	.702	.683	.813



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

	07:00 AM				07:00 AM				07:15 AM				07:00 AM			
+0 mins.	5	50	1	56	22	2	3	27	12	58	105	175	0	18	29	47
+15 mins.	10	65	1	76	26	8	10	44	28	75	92	195	2	14	33	49
+30 mins.	7	131	4	142	24	6	10	40	49	90	102	241	1	16	73	90
+45 mins.	9	136	4	149	23	5	6	34	38	68	107	213	2	3	73	78
Total Volume	31	382	10	423	95	21	29	145	127	291	406	824	5	51	208	264
% App. Total	7.3	90.3	2.4		65.5	14.5	20		15.4	35.3	49.3		1.9	19.3	78.8	
PHF	.775	.702	.625	.710	.913	.656	.725	.824	.648	.808	.949	.855	.625	.708	.712	.733

City of Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps
 Weather: Clear

File Name : 01_MR_V_Nason_Elder_60W AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

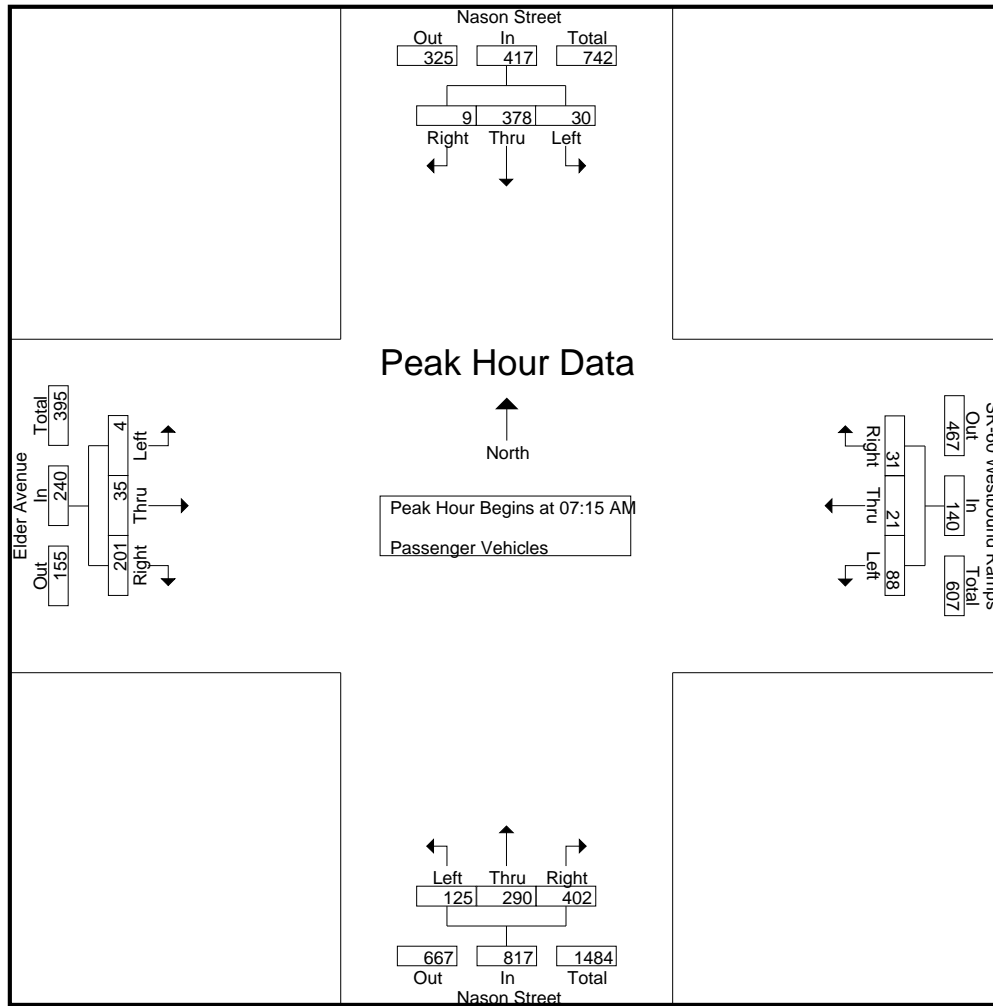
Groups Printed- Passenger Vehicles

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	5	49	0	54	22	2	3	27	14	56	99	169	0	17	29	46	296
07:15 AM	10	65	0	75	25	8	10	43	11	57	103	171	1	14	31	46	335
07:30 AM	7	128	4	139	24	6	10	40	28	75	92	195	1	15	71	87	461
07:45 AM	9	136	4	149	23	5	6	34	49	90	102	241	2	3	73	78	502
Total	31	378	8	417	94	21	29	144	102	278	396	776	4	49	204	257	1594
08:00 AM	4	49	1	54	16	2	5	23	37	68	105	210	0	3	26	29	316
08:15 AM	4	43	0	47	18	0	3	21	21	32	94	147	1	7	20	28	243
08:30 AM	7	32	0	39	25	1	0	26	4	21	94	119	1	8	14	23	207
08:45 AM	5	22	0	27	15	1	2	18	15	25	96	136	2	9	13	24	205
Total	20	146	1	167	74	4	10	88	77	146	389	612	4	27	73	104	971
Grand Total	51	524	9	584	168	25	39	232	179	424	785	1388	8	76	277	361	2565
Apprch %	8.7	89.7	1.5		72.4	10.8	16.8		12.9	30.5	56.6		2.2	21.1	76.7		
Total %	2	20.4	0.4	22.8	6.5	1	1.5	9	7	16.5	30.6	54.1	0.3	3	10.8	14.1	

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	10	65	0	75	25	8	10	43	11	57	103	171	1	14	31	46	335
07:30 AM	7	128	4	139	24	6	10	40	28	75	92	195	1	15	71	87	461
07:45 AM	9	136	4	149	23	5	6	34	49	90	102	241	2	3	73	78	502
08:00 AM	4	49	1	54	16	2	5	23	37	68	105	210	0	3	26	29	316
Total Volume	30	378	9	417	88	21	31	140	125	290	402	817	4	35	201	240	1614
% App. Total	7.2	90.6	2.2		62.9	15	22.1		15.3	35.5	49.2		1.7	14.6	83.8		
PHF	.750	.695	.563	.700	.880	.656	.775	.814	.638	.806	.957	.848	.500	.583	.688	.690	.804

City of Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps
 Weather: Clear

File Name : 01_MRV_Nason_Elder_60W AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 2



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	10	65	0	75	25	8	10	43	11	57	103	171	1	14	31	46
+15 mins.	7	128	4	139	24	6	10	40	28	75	92	195	1	15	71	87
+30 mins.	9	136	4	149	23	5	6	34	49	90	102	241	2	3	73	78
+45 mins.	4	49	1	54	16	2	5	23	37	68	105	210	0	3	26	29
Total Volume	30	378	9	417	88	21	31	140	125	290	402	817	4	35	201	240
% App. Total	7.2	90.6	2.2		62.9	15	22.1		15.3	35.5	49.2		1.7	14.6	83.8	
PHF	.750	.695	.563	.700	.880	.656	.775	.814	.638	.806	.957	.848	.500	.583	.688	.690

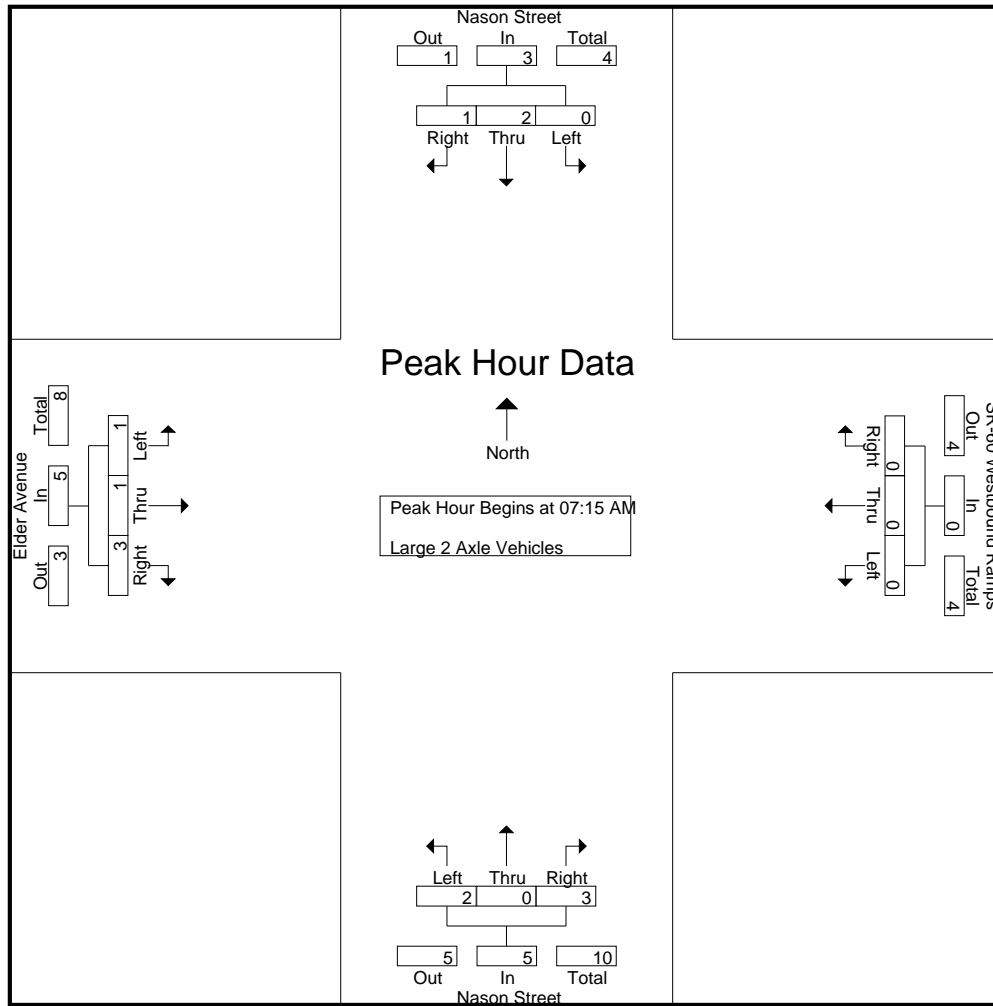
City of Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps
 Weather: Clear

File Name : 01_MRV_Nason_Elder_60W AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	1	1	2	0	0	0	0	0	3	3	6	0	1	0	1	9
07:15 AM	0	0	1	1	0	0	0	0	1	0	1	2	1	0	1	2	5
07:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	1	2	3	5
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	2	5	0	0	0	0	1	3	4	8	1	2	3	6	19
08:00 AM	0	0	0	0	0	0	0	0	1	0	2	3	0	0	0	0	3
08:15 AM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	1	1	4
08:30 AM	0	0	0	0	0	0	0	0	0	0	5	5	0	2	0	2	7
08:45 AM	1	0	0	1	1	0	0	1	0	0	2	2	0	0	0	0	4
Total	1	0	0	1	1	0	0	1	1	2	10	13	0	2	1	3	18
Grand Total	1	3	2	6	1	0	0	1	2	5	14	21	1	4	4	9	37
Apprch %	16.7	50	33.3		100	0	0		9.5	23.8	66.7		11.1	44.4	44.4		
Total %	2.7	8.1	5.4	16.2	2.7	0	0	2.7	5.4	13.5	37.8	56.8	2.7	10.8	10.8	24.3	

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	1	1	0	0	0	0	1	0	1	2	1	0	1	2	5
07:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	1	2	3	5
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	1	0	2	3	0	0	0	0	3
Total Volume	0	2	1	3	0	0	0	0	2	0	3	5	1	1	3	5	13
% App. Total	0	66.7	33.3		0	0	0		40	0	60		20	20	60		
PHF	.000	.250	.250	.375	.000	.000	.000	.000	.500	.000	.375	.417	.250	.250	.375	.417	.650



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	1	1	0	0	0	0	1	0	1	2	1	0	1	2
+15 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	1	2	3
+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	1	0	2	3	0	0	0	0
Total Volume	0	2	1	3	0	0	0	0	2	0	3	5	1	1	3	5
% App. Total	0	66.7	33.3		0	0	0	0	40	0	60		20	20	60	
PHF	.000	.250	.250	.375	.000	.000	.000	.000	.500	.000	.375	.417	.250	.250	.375	.417

City of Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps
 Weather: Clear

File Name : 01_MRV_Nason_Elder_60W AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

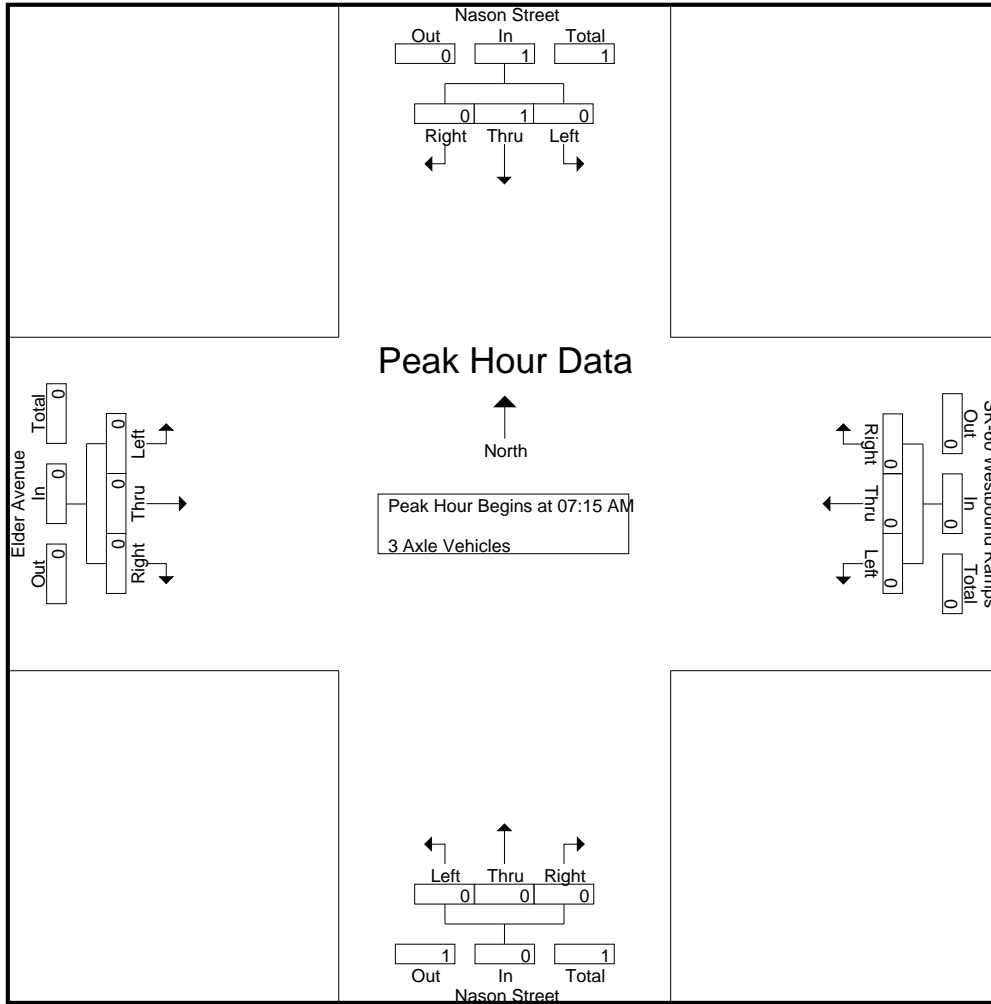
Groups Printed- 3 Axle Vehicles

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Grand Total	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
Apprch %	0	100	0		0	0	0		0	0	100		0	0	0		
Total %	0	50	0	50	0	0	0	0	0	0	50	50	0	0	0	0	

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

City of Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps
 Weather: Clear

File Name : 01_MRV_Nason_Elder_60W AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 2



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

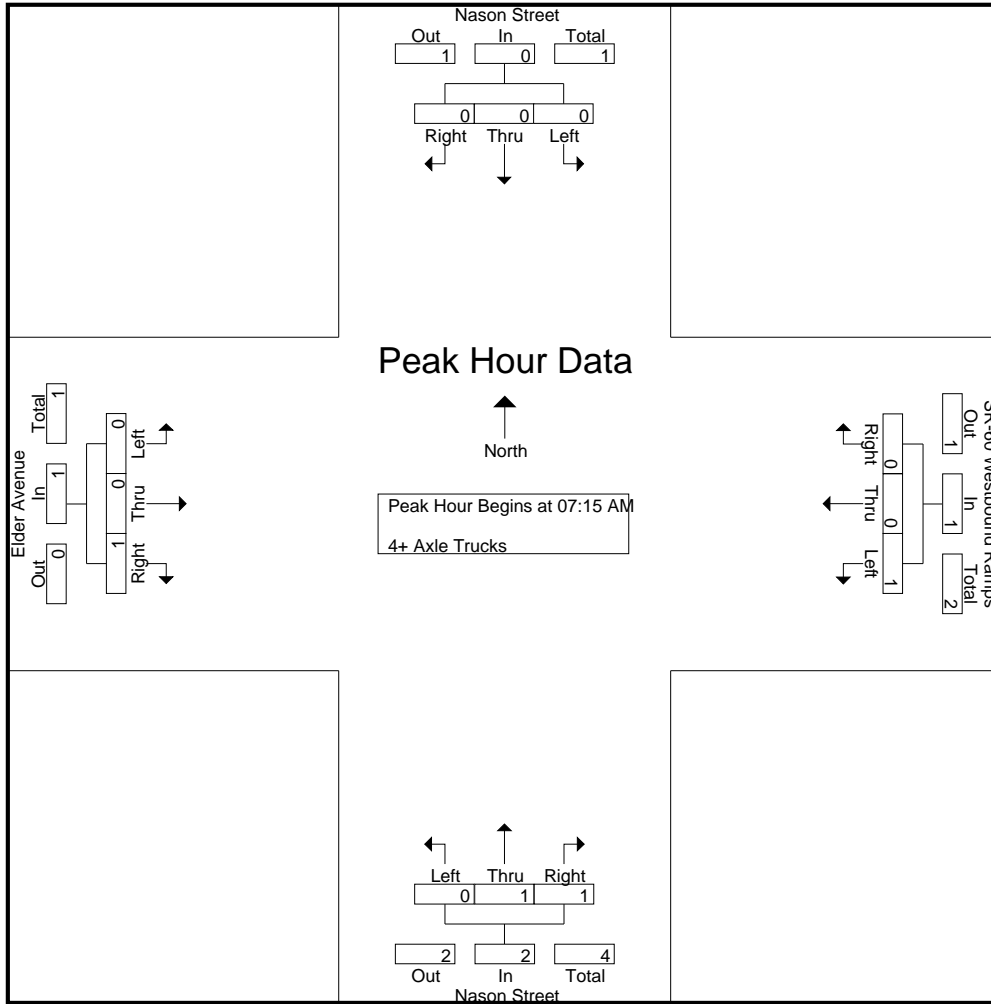
City of Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps
 Weather: Clear

File Name : 01_MRV_Nason_Elder_60W AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	0	0	0	0	1	0	0	1	0	1	1	2	0	0	1	1	4
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	2	1	3	0	0	1	1	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	1	0	0	1	0	2	1	3	0	0	1	1	5
Apprch %	0	0	0		100	0	0		0	66.7	33.3		0	0	100		
Total %	0	0	0	0	20	0	0	20	0	40	20	60	0	0	20	20	

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	1	0	0	1	0	1	1	2	0	0	1	1	4
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	0	0	1	0	1	1	2	0	0	1	1	4
% App. Total	0	0	0		100	0	0		0	50	50		0	0	100		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.250	.250	.250	.000	.000	.250	.250	.250



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	1	0	0	1	0	1	1	2	0	0	1	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	0	0	1	0	1	1	2	0	0	1	1
% App. Total	0	0	0	0	100	0	0	0	0	50	50	0	0	0	100	0
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.250	.250	.250	.000	.000	.250	.250

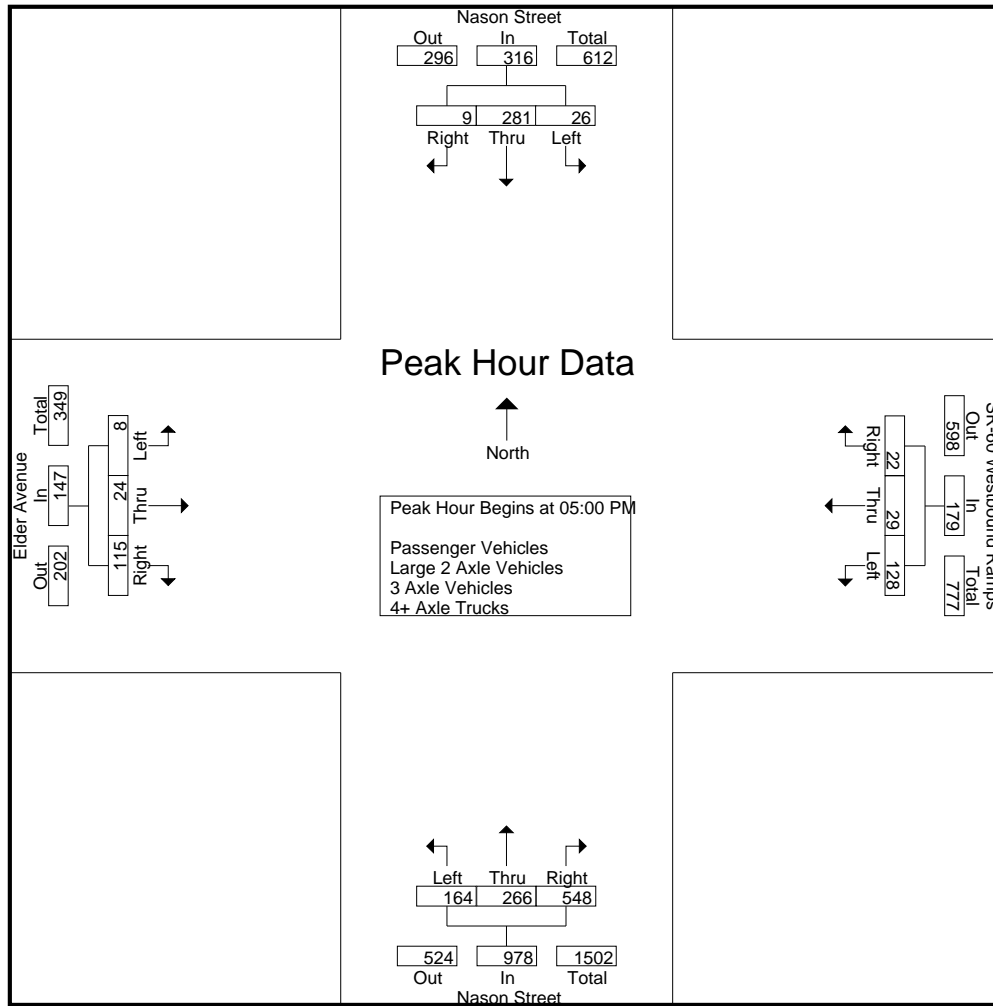
City of Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps
 Weather: Clear

File Name : 01_MR_V_Nason_Elder_60W PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

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

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	3	68	0	71	20	5	5	30	46	66	125	237	0	5	20	25	363
04:15 PM	8	49	0	57	26	3	2	31	36	54	113	203	2	10	25	37	328
04:30 PM	5	50	3	58	30	3	6	39	28	63	142	233	1	7	31	39	369
04:45 PM	4	54	2	60	35	7	8	50	37	67	145	249	1	7	26	34	393
Total	20	221	5	246	111	18	21	150	147	250	525	922	4	29	102	135	1453
05:00 PM	7	60	4	71	29	8	6	43	39	59	129	227	3	7	33	43	384
05:15 PM	3	65	2	70	41	7	4	52	43	68	148	259	3	4	21	28	409
05:30 PM	7	80	2	89	35	7	7	49	38	63	140	241	0	4	29	33	412
05:45 PM	9	76	1	86	23	7	5	35	44	76	131	251	2	9	32	43	415
Total	26	281	9	316	128	29	22	179	164	266	548	978	8	24	115	147	1620
Grand Total	46	502	14	562	239	47	43	329	311	516	1073	1900	12	53	217	282	3073
Apprch %	8.2	89.3	2.5		72.6	14.3	13.1		16.4	27.2	56.5		4.3	18.8	77		
Total %	1.5	16.3	0.5	18.3	7.8	1.5	1.4	10.7	10.1	16.8	34.9	61.8	0.4	1.7	7.1	9.2	
Passenger Vehicles	46	497	14	557	230	46	43	319	307	510	1061	1878	12	53	212	277	3031
% Passenger Vehicles	100	99	100	99.1	96.2	97.9	100	97	98.7	98.8	98.9	98.8	100	100	97.7	98.2	98.6
Large 2 Axle Vehicles	0	4	0	4	5	1	0	6	4	6	11	21	0	0	5	5	36
% Large 2 Axle Vehicles	0	0.8	0	0.7	2.1	2.1	0	1.8	1.3	1.2	1	1.1	0	0	2.3	1.8	1.2
3 Axle Vehicles	0	1	0	1	2	0	0	2	0	0	0	0	0	0	0	0	3
% 3 Axle Vehicles	0	0.2	0	0.2	0.8	0	0	0.6	0	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	0	0	0	0	2	0	0	2	0	0	1	1	0	0	0	0	3
% 4+ Axle Trucks	0	0	0	0	0.8	0	0	0.6	0	0	0.1	0.1	0	0	0	0	0.1

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	7	60	4	71	29	8	6	43	39	59	129	227	3	7	33	43	384
05:15 PM	3	65	2	70	41	7	4	52	43	68	148	259	3	4	21	28	409
05:30 PM	7	80	2	89	35	7	7	49	38	63	140	241	0	4	29	33	412
05:45 PM	9	76	1	86	23	7	5	35	44	76	131	251	2	9	32	43	415
Total Volume	26	281	9	316	128	29	22	179	164	266	548	978	8	24	115	147	1620
% App. Total	8.2	88.9	2.8		71.5	16.2	12.3		16.8	27.2	56		5.4	16.3	78.2		
PHF	.722	.878	.563	.888	.780	.906	.786	.861	.932	.875	.926	.944	.667	.667	.871	.855	.976



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				04:45 PM				05:00 PM				04:15 PM			
+0 mins.	7	60	4	71	35	7	8	50	39	59	129	227	2	10	25	37
+15 mins.	3	65	2	70	29	8	6	43	43	68	148	259	1	7	31	39
+30 mins.	7	80	2	89	41	7	4	52	38	63	140	241	1	7	26	34
+45 mins.	9	76	1	86	35	7	7	49	44	76	131	251	3	7	33	43
Total Volume	26	281	9	316	140	29	25	194	164	266	548	978	7	31	115	153
% App. Total	8.2	88.9	2.8		72.2	14.9	12.9		16.8	27.2	56		4.6	20.3	75.2	
PHF	.722	.878	.563	.888	.854	.906	.781	.933	.932	.875	.926	.944	.583	.775	.871	.890

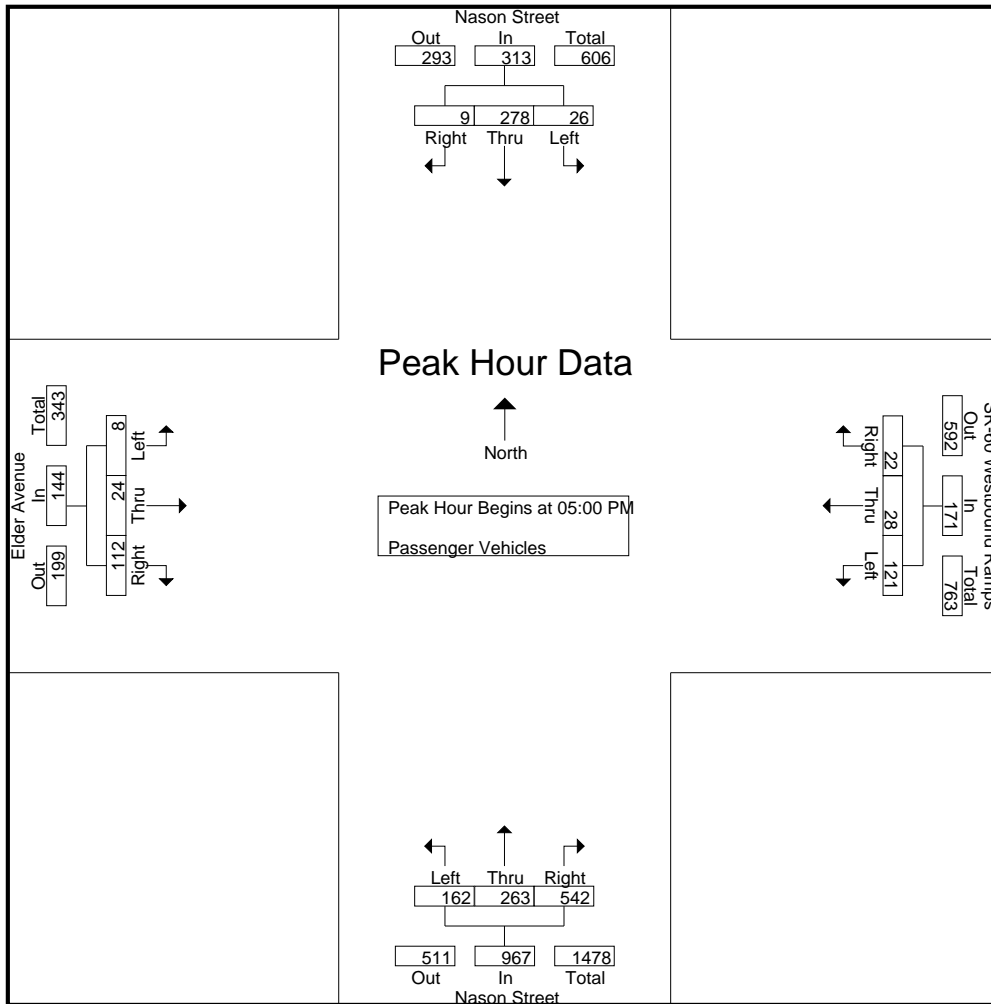
City of Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps
 Weather: Clear

File Name : 01_MRV_Nason_Elder_60W PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	3	67	0	70	18	5	5	28	44	64	124	232	0	5	19	24	354
04:15 PM	8	48	0	56	26	3	2	31	36	54	112	202	2	10	25	37	326
04:30 PM	5	50	3	58	30	3	6	39	28	62	139	229	1	7	31	39	365
04:45 PM	4	54	2	60	35	7	8	50	37	67	144	248	1	7	25	33	391
Total	20	219	5	244	109	18	21	148	145	247	519	911	4	29	100	133	1436
05:00 PM	7	57	4	68	25	8	6	39	38	58	129	225	3	7	33	43	375
05:15 PM	3	65	2	70	40	7	4	51	43	67	146	256	3	4	21	28	405
05:30 PM	7	80	2	89	34	7	7	48	37	63	138	238	0	4	28	32	407
05:45 PM	9	76	1	86	22	6	5	33	44	75	129	248	2	9	30	41	408
Total	26	278	9	313	121	28	22	171	162	263	542	967	8	24	112	144	1595
Grand Total	46	497	14	557	230	46	43	319	307	510	1061	1878	12	53	212	277	3031
Apprch %	8.3	89.2	2.5		72.1	14.4	13.5		16.3	27.2	56.5		4.3	19.1	76.5		
Total %	1.5	16.4	0.5	18.4	7.6	1.5	1.4	10.5	10.1	16.8	35	62	0.4	1.7	7	9.1	

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	7	57	4	68	25	8	6	39	38	58	129	225	3	7	33	43	375
05:15 PM	3	65	2	70	40	7	4	51	43	67	146	256	3	4	21	28	405
05:30 PM	7	80	2	89	34	7	7	48	37	63	138	238	0	4	28	32	407
05:45 PM	9	76	1	86	22	6	5	33	44	75	129	248	2	9	30	41	408
Total Volume	26	278	9	313	121	28	22	171	162	263	542	967	8	24	112	144	1595
% App. Total	8.3	88.8	2.9		70.8	16.4	12.9		16.8	27.2	56		5.6	16.7	77.8		
PHF	.722	.869	.563	.879	.756	.875	.786	.838	.920	.877	.928	.944	.667	.667	.848	.837	.977



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.	7	57	4	68	25	8	6	39	38	58	129	225	3	7	33	43
+15 mins.	3	65	2	70	40	7	4	51	43	67	146	256	3	4	21	28
+30 mins.	7	80	2	89	34	7	7	48	37	63	138	238	0	4	28	32
+45 mins.	9	76	1	86	22	6	5	33	44	75	129	248	2	9	30	41
Total Volume	26	278	9	313	121	28	22	171	162	263	542	967	8	24	112	144
% App. Total	8.3	88.8	2.9		70.8	16.4	12.9		16.8	27.2	56		5.6	16.7	77.8	
PHF	.722	.869	.563	.879	.756	.875	.786	.838	.920	.877	.928	.944	.667	.667	.848	.837

City of Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps
 Weather: Clear

File Name : 01_MRV_Nason_Elder_60W PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

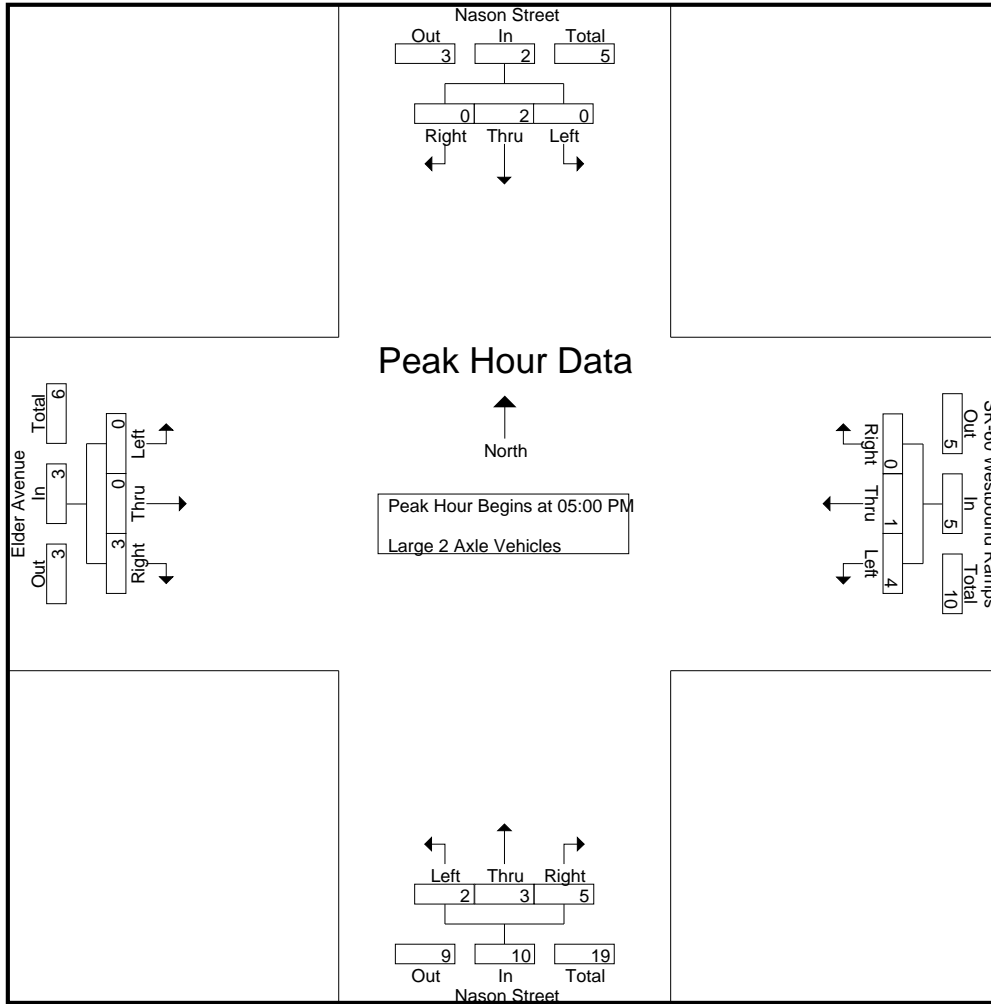
Groups Printed- Large 2 Axle Vehicles

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	1	0	1	1	0	0	1	2	2	1	5	0	0	1	1	8
04:15 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	4
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	2
Total	0	2	0	2	1	0	0	1	2	3	6	11	0	0	2	2	16
05:00 PM	0	2	0	2	2	0	0	2	1	1	0	2	0	0	0	0	6
05:15 PM	0	0	0	0	1	0	0	1	0	1	2	3	0	0	0	0	4
05:30 PM	0	0	0	0	1	0	0	1	1	0	1	2	0	0	1	1	4
05:45 PM	0	0	0	0	0	1	0	1	0	1	2	3	0	0	2	2	6
Total	0	2	0	2	4	1	0	5	2	3	5	10	0	0	3	3	20
Grand Total	0	4	0	4	5	1	0	6	4	6	11	21	0	0	5	5	36
Apprch %	0	100	0		83.3	16.7	0		19	28.6	52.4		0	0	100		
Total %	0	11.1	0	11.1	13.9	2.8	0	16.7	11.1	16.7	30.6	58.3	0	0	13.9	13.9	

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	0	2	0	2	2	0	0	2	1	1	0	2	0	0	0	0	6
05:15 PM	0	0	0	0	1	0	0	1	0	1	2	3	0	0	0	0	4
05:30 PM	0	0	0	0	1	0	0	1	1	0	1	2	0	0	1	1	4
05:45 PM	0	0	0	0	0	1	0	1	0	1	2	3	0	0	2	2	6
Total Volume	0	2	0	2	4	1	0	5	2	3	5	10	0	0	3	3	20
% App. Total	0	100	0		80	20	0		20	30	50		0	0	100		
PHF	.000	.250	.000	.250	.500	.250	.000	.625	.500	.750	.625	.833	.000	.000	.375	.375	.833

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



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

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	2	0	2	2	0	0	2	1	1	0	2	0	0	0	0
+15 mins.	0	0	0	0	1	0	0	1	0	1	2	3	0	0	0	0
+30 mins.	0	0	0	0	1	0	0	1	1	0	1	2	0	0	1	1
+45 mins.	0	0	0	0	0	1	0	1	0	1	2	3	0	0	2	2
Total Volume	0	2	0	2	4	1	0	5	2	3	5	10	0	0	3	3
% App. Total	0	100	0		80	20	0		20	30	50		0	0	100	
PHF	.000	.250	.000	.250	.500	.250	.000	.625	.500	.750	.625	.833	.000	.000	.375	.375

City of Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps
 Weather: Clear

File Name : 01_MR_V_Nason_Elder_60W PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

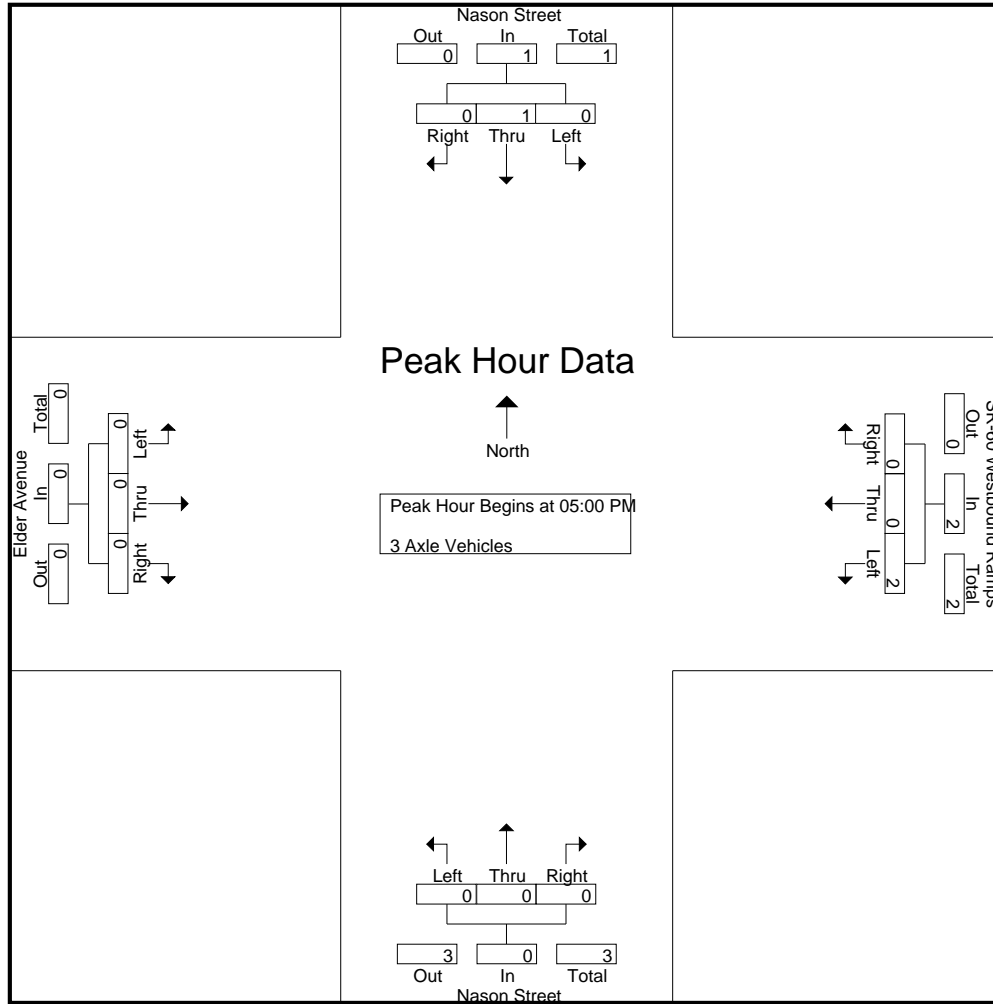
Groups Printed- 3 Axle Vehicles

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	2	0	0	2	0	0	0	0	0	0	0	0	3
Grand Total	0	1	0	1	2	0	0	2	0	0	0	0	0	0	0	0	3
Apprch %	0	100	0		100	0	0		0	0	0		0	0	0		
Total %	0	33.3	0	33.3	66.7	0	0	66.7	0	0	0	0	0	0	0	0	

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	1	2	0	0	2	0	0	0	0	0	0	0	0	3
% App. Total	0	100	0		100	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.500	.000	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.375

City of Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps
 Weather: Clear

File Name : 01_MRV_Nason_Elder_60W PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 2



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

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	2	0	0	2	0	0	0	0	0	0	0	0
% App. Total	0	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.250	.000	.250	.500	.000	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps
 Weather: Clear

File Name : 01_MRV_Nason_Elder_60W PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

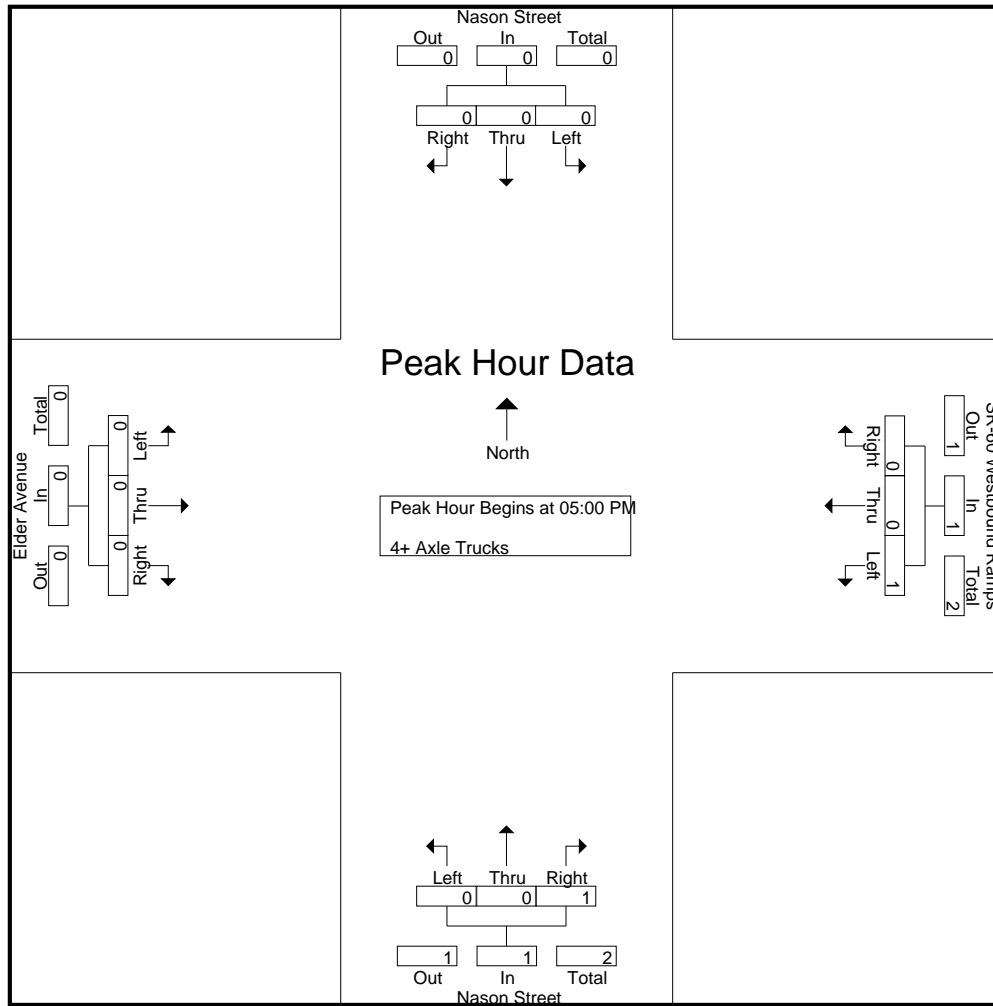
Groups Printed- 4+ Axle Trucks

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
Grand Total	0	0	0	0	2	0	0	2	0	0	1	1	0	0	0	0	3
Apprch %	0	0	0		100	0	0		0	0	100		0	0	0		
Total %	0	0	0	0	66.7	0	0	66.7	0	0	33.3	33.3	0	0	0	0	

Start Time	Nason Street Southbound				SR-60 Westbound Ramps Westbound				Nason Street Northbound				Elder Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
% App. Total	0	0	0		100	0	0		0	0	100		0	0	0		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.250	.250	.000	.000	.000	.000	.500

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



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	1	0	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0
% App. Total	0	0	0	0	100	0	0	100	0	0	100		0	0	0	0
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.250	.250	.000	.000	.000	.000

Location: Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps



Date: 4/26/2018
 Day: Thursday

PEDESTRIANS

	North Leg Nason Street	East Leg SR-60 Westbound Ramps	South Leg Nason Street	West Leg Elder Avenue	
	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	1	1	0	0	2
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	1	0	0	2

	North Leg Nason Street	East Leg SR-60 Westbound Ramps	South Leg Nason Street	West Leg Elder Avenue	
	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	1	1
TOTAL VOLUMES:	0	0	0	1	1

Location: Moreno Valley
 N/S: Nason Street
 E/W: Elder Avenue/SR-60 Westbound Ramps



Date: 4/26/2018
 Day: Thursday

BICYCLES

	Southbound Nason Street			Westbound SR-60 Westbound Ramps			Northbound Nason Street			Eastbound Elder Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
8:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	2
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:	1	2	0	1	0	0	0	0	0	0	0	2	6

	Southbound Nason Street			Westbound SR-60 Westbound Ramps			Northbound Nason Street			Eastbound Elder Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
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:	1	1	2	0	1	0	0	0	0	0	0	0	5

City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

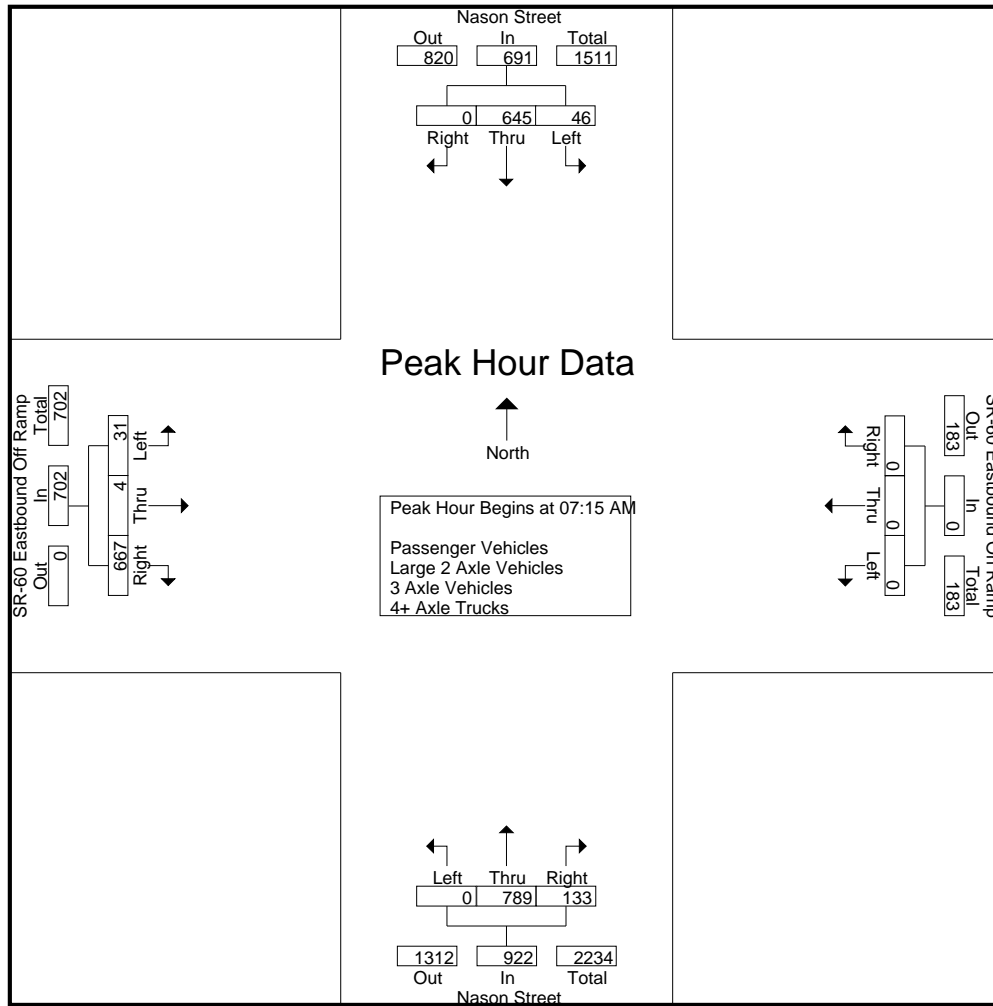
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	14	81	0	95	0	0	0	0	0	165	31	196	10	1	116	127	418
07:15 AM	14	121	0	135	0	0	0	0	0	158	36	194	8	1	154	163	492
07:30 AM	15	209	0	224	0	0	0	0	0	193	27	220	3	0	178	181	625
07:45 AM	9	227	0	236	0	0	0	0	0	233	42	275	13	3	200	216	727
Total	52	638	0	690	0	0	0	0	0	749	136	885	34	5	648	687	2262
08:00 AM	8	88	0	96	0	0	0	0	0	205	28	233	7	0	135	142	471
08:15 AM	5	71	0	76	0	0	0	0	0	134	28	162	7	1	128	136	374
08:30 AM	8	64	0	72	0	0	0	0	0	119	30	149	5	2	125	132	353
08:45 AM	2	48	0	50	0	0	0	0	0	135	20	155	13	0	129	142	347
Total	23	271	0	294	0	0	0	0	0	593	106	699	32	3	517	552	1545
Grand Total	75	909	0	984	0	0	0	0	0	1342	242	1584	66	8	1165	1239	3807
Apprch %	7.6	92.4	0		0	0	0		0	84.7	15.3		5.3	0.6	94		
Total %	2	23.9	0	25.8	0	0	0	0	0	35.3	6.4	41.6	1.7	0.2	30.6	32.5	
Passenger Vehicles	74	901	0	975	0	0	0	0	0	1329	240	1569	59	7	1143	1209	3753
% Passenger Vehicles	98.7	99.1	0	99.1	0	0	0	0	0	99	99.2	99.1	89.4	87.5	98.1	97.6	98.6
Large 2 Axle Vehicles	0	6	0	6	0	0	0	0	0	10	1	11	7	0	17	24	41
% Large 2 Axle Vehicles	0	0.7	0	0.6	0	0	0	0	0	0.7	0.4	0.7	10.6	0	1.5	1.9	1.1
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	2	0	2	0	0	3	3	6
% 3 Axle Vehicles	0	0.1	0	0.1	0	0	0	0	0	0.1	0	0.1	0	0	0.3	0.2	0.2
4+ Axle Trucks	1	1	0	2	0	0	0	0	0	1	1	2	0	1	2	3	7
% 4+ Axle Trucks	1.3	0.1	0	0.2	0	0	0	0	0	0.1	0.4	0.1	0	12.5	0.2	0.2	0.2

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	14	121	0	135	0	0	0	0	0	158	36	194	8	1	154	163	492
07:30 AM	15	209	0	224	0	0	0	0	0	193	27	220	3	0	178	181	625
07:45 AM	9	227	0	236	0	0	0	0	0	233	42	275	13	3	200	216	727
08:00 AM	8	88	0	96	0	0	0	0	0	205	28	233	7	0	135	142	471
Total Volume	46	645	0	691	0	0	0	0	0	789	133	922	31	4	667	702	2315
% App. Total	6.7	93.3	0		0	0	0		0	85.6	14.4		4.4	0.6	95		
PHF	.767	.710	.000	.732	.000	.000	.000	.000	.000	.847	.792	.838	.596	.333	.834	.813	.796

City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 2



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

	07:15 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	14	121	0	135	0	0	0	0	0	158	36	194	8	1	154	163
+15 mins.	15	209	0	224	0	0	0	0	0	193	27	220	3	0	178	181
+30 mins.	9	227	0	236	0	0	0	0	0	233	42	275	13	3	200	216
+45 mins.	8	88	0	96	0	0	0	0	0	205	28	233	7	0	135	142
Total Volume	46	645	0	691	0	0	0	0	0	789	133	922	31	4	667	702
% App. Total	6.7	93.3	0		0	0	0		0	85.6	14.4		4.4	0.6	95	
PHF	.767	.710	.000	.732	.000	.000	.000	.000	.000	.847	.792	.838	.596	.333	.834	.813

City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E AM
 Site Code : 00318351
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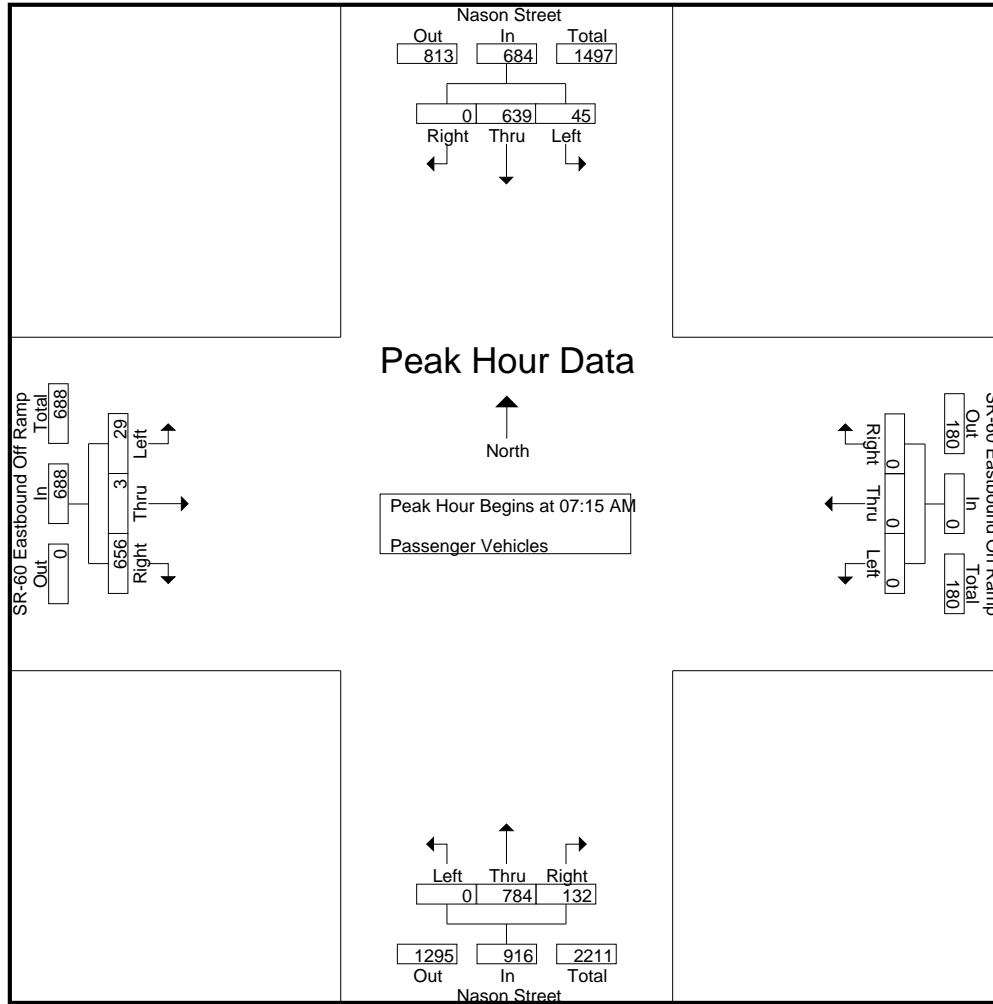
Groups Printed- Passenger Vehicles

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	14	81	0	95	0	0	0	0	0	164	30	194	7	1	115	123	412
07:15 AM	13	119	0	132	0	0	0	0	0	155	35	190	7	1	151	159	481
07:30 AM	15	205	0	220	0	0	0	0	0	193	27	220	3	0	176	179	619
07:45 AM	9	227	0	236	0	0	0	0	0	233	42	275	13	2	196	211	722
Total	51	632	0	683	0	0	0	0	0	745	134	879	30	4	638	672	2234
08:00 AM	8	88	0	96	0	0	0	0	0	203	28	231	6	0	133	139	466
08:15 AM	5	70	0	75	0	0	0	0	0	132	28	160	7	1	125	133	368
08:30 AM	8	64	0	72	0	0	0	0	0	116	30	146	3	2	122	127	345
08:45 AM	2	47	0	49	0	0	0	0	0	133	20	153	13	0	125	138	340
Total	23	269	0	292	0	0	0	0	0	584	106	690	29	3	505	537	1519
Grand Total	74	901	0	975	0	0	0	0	0	1329	240	1569	59	7	1143	1209	3753
Apprch %	7.6	92.4	0		0	0	0		0	84.7	15.3		4.9	0.6	94.5		
Total %	2	24	0	26	0	0	0	0	0	35.4	6.4	41.8	1.6	0.2	30.5	32.2	

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	13	119	0	132	0	0	0	0	0	155	35	190	7	1	151	159	481
07:30 AM	15	205	0	220	0	0	0	0	0	193	27	220	3	0	176	179	619
07:45 AM	9	227	0	236	0	0	0	0	0	233	42	275	13	2	196	211	722
08:00 AM	8	88	0	96	0	0	0	0	0	203	28	231	6	0	133	139	466
Total Volume	45	639	0	684	0	0	0	0	0	784	132	916	29	3	656	688	2288
% App. Total	6.6	93.4	0		0	0	0		0	85.6	14.4		4.2	0.4	95.3		
PHF	.750	.704	.000	.725	.000	.000	.000	.000	.000	.841	.786	.833	.558	.375	.837	.815	.792

City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 2



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	13	119	0	132	0	0	0	0	0	155	35	190	7	1	151	159
+15 mins.	15	205	0	220	0	0	0	0	0	193	27	220	3	0	176	179
+30 mins.	9	227	0	236	0	0	0	0	0	233	42	275	13	2	196	211
+45 mins.	8	88	0	96	0	0	0	0	0	203	28	231	6	0	133	139
Total Volume	45	639	0	684	0	0	0	0	0	784	132	916	29	3	656	688
% App. Total	6.6	93.4	0		0	0	0		0	85.6	14.4		4.2	0.4	95.3	
PHF	.750	.704	.000	.725	.000	.000	.000	.000	.000	.841	.786	.833	.558	.375	.837	.815

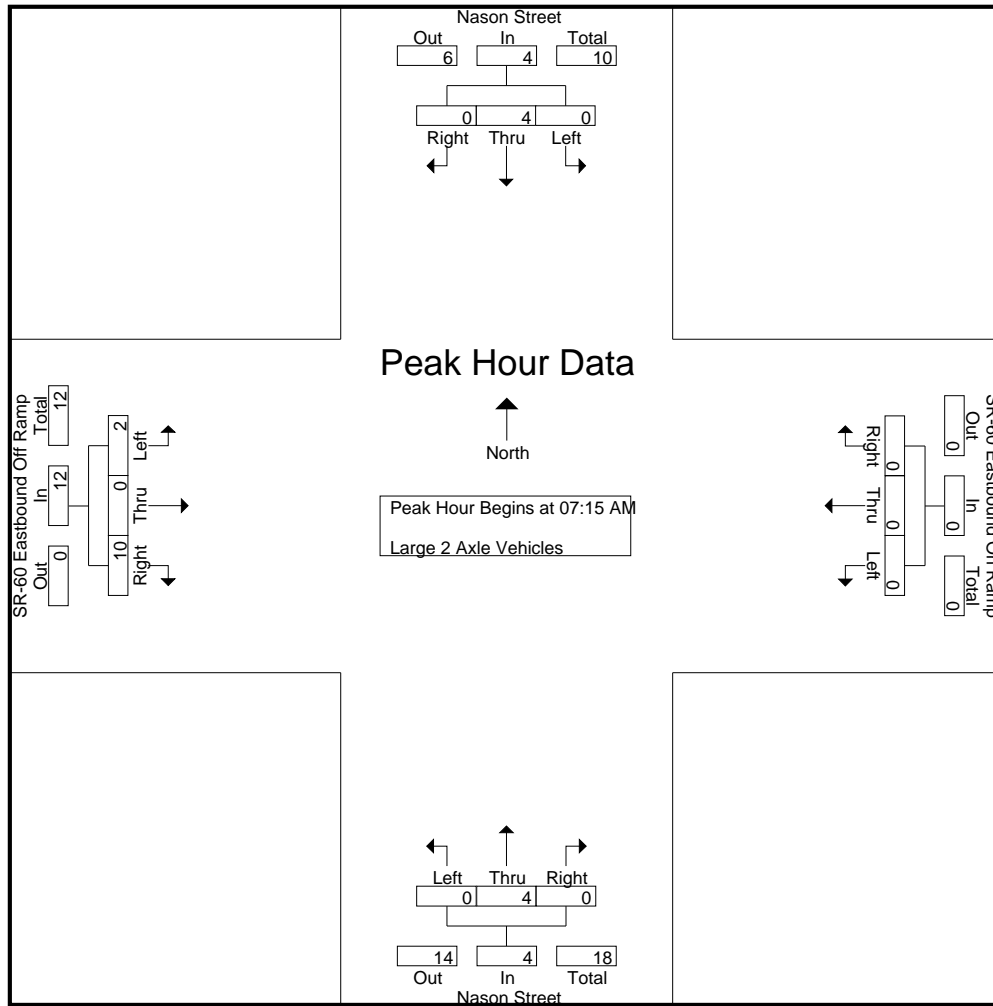
City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	1	1	2	3	0	0	3	5
07:15 AM	0	1	0	1	0	0	0	0	0	2	0	2	1	0	3	4	7
07:30 AM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	2	2	5
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
Total	0	4	0	4	0	0	0	0	0	3	1	4	4	0	8	12	20
08:00 AM	0	0	0	0	0	0	0	0	0	2	0	2	1	0	2	3	5
08:15 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
08:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	2	0	3	5	7
08:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	4	4	6
Total	0	2	0	2	0	0	0	0	0	7	0	7	3	0	9	12	21
Grand Total	0	6	0	6	0	0	0	0	0	10	1	11	7	0	17	24	41
Apprch %	0	100	0		0	0	0		0	90.9	9.1		29.2	0	70.8		
Total %	0	14.6	0	14.6	0	0	0	0	0	24.4	2.4	26.8	17.1	0	41.5	58.5	

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	0	1	0	0	0	0	0	2	0	2	1	0	3	4	7
07:30 AM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	2	2	5
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
08:00 AM	0	0	0	0	0	0	0	0	0	2	0	2	1	0	2	3	5
Total Volume	0	4	0	4	0	0	0	0	0	4	0	4	2	0	10	12	20
% App. Total	0	100	0		0	0	0		0	100	0		16.7	0	83.3		
PHF	.000	.333	.000	.333	.000	.000	.000	.000	.000	.500	.000	.500	.500	.000	.833	.750	.714



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	1	0	1	0	0	0	0	0	2	0	2	1	0	3	4
+15 mins.	0	3	0	3	0	0	0	0	0	0	0	0	0	0	2	2
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
+45 mins.	0	0	0	0	0	0	0	0	0	2	0	2	1	0	2	3
Total Volume	0	4	0	4	0	0	0	0	0	4	0	4	2	0	10	12
% App. Total	0	100	0	0	0	0	0	0	0	100	0	0	16.7	0	83.3	0
PHF	.000	.333	.000	.333	.000	.000	.000	.000	.000	.500	.000	.500	.500	.000	.833	.750

City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E AM
 Site Code : 00318351
 Start Date : 4/26/2018
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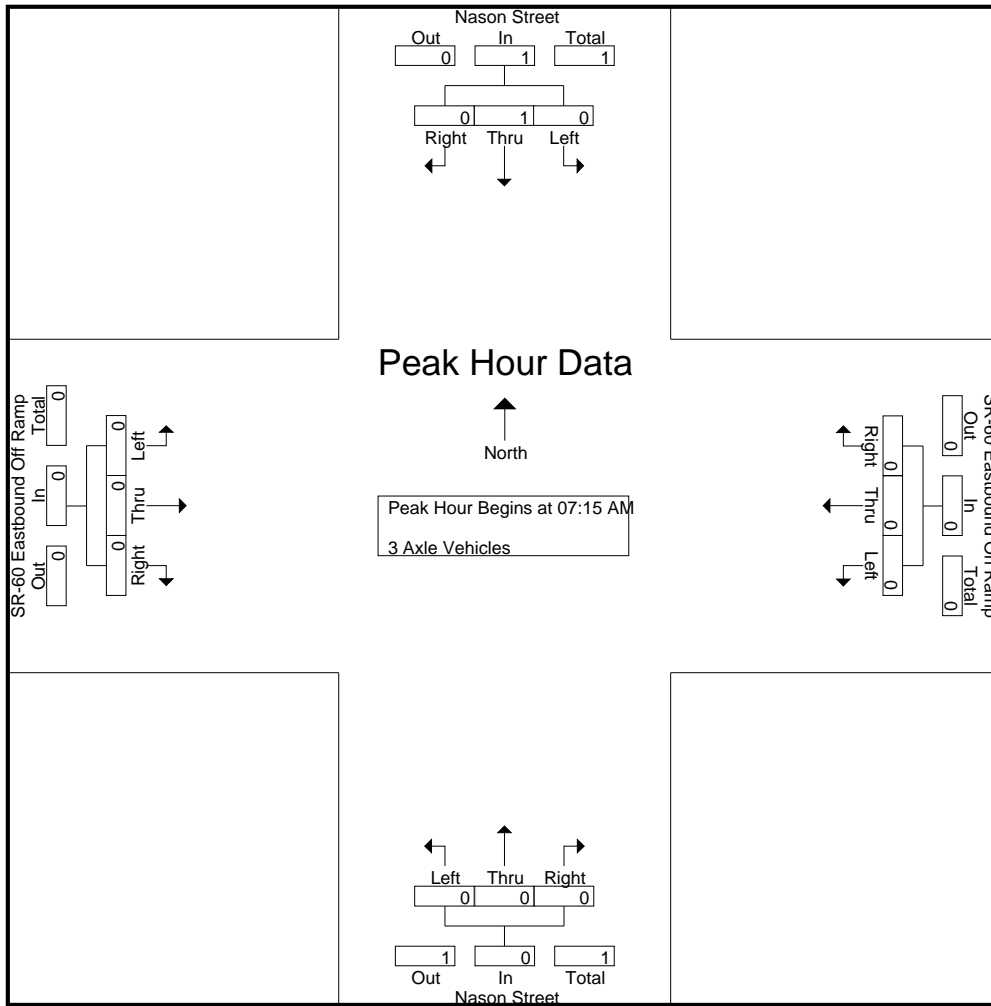
Groups Printed- 3 Axle Vehicles

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2	4
Grand Total	0	1	0	1	0	0	0	0	0	2	0	2	0	0	3	3	6
Apprch %	0	100	0		0	0	0		0	100	0		0	0	100		
Total %	0	16.7	0	16.7	0	0	0	0	0	33.3	0	33.3	0	0	50	50	

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E AM
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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	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E AM
 Site Code : 00318351
 Start Date : 4/26/2018
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Groups Printed- 4+ Axle Trucks

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	1	1	0	2	0	0	0	0	0	1	1	2	0	0	0	0	4
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
Total	1	1	0	2	0	0	0	0	0	1	1	2	0	1	1	2	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	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	1	1	1
Grand Total	1	1	0	2	0	0	0	0	0	1	1	2	0	1	2	3	7
Apprch %	50	50	0		0	0	0		0	50	50		0	33.3	66.7		
Total %	14.3	14.3	0	28.6	0	0	0	0	0	14.3	14.3	28.6	0	14.3	28.6	42.9	

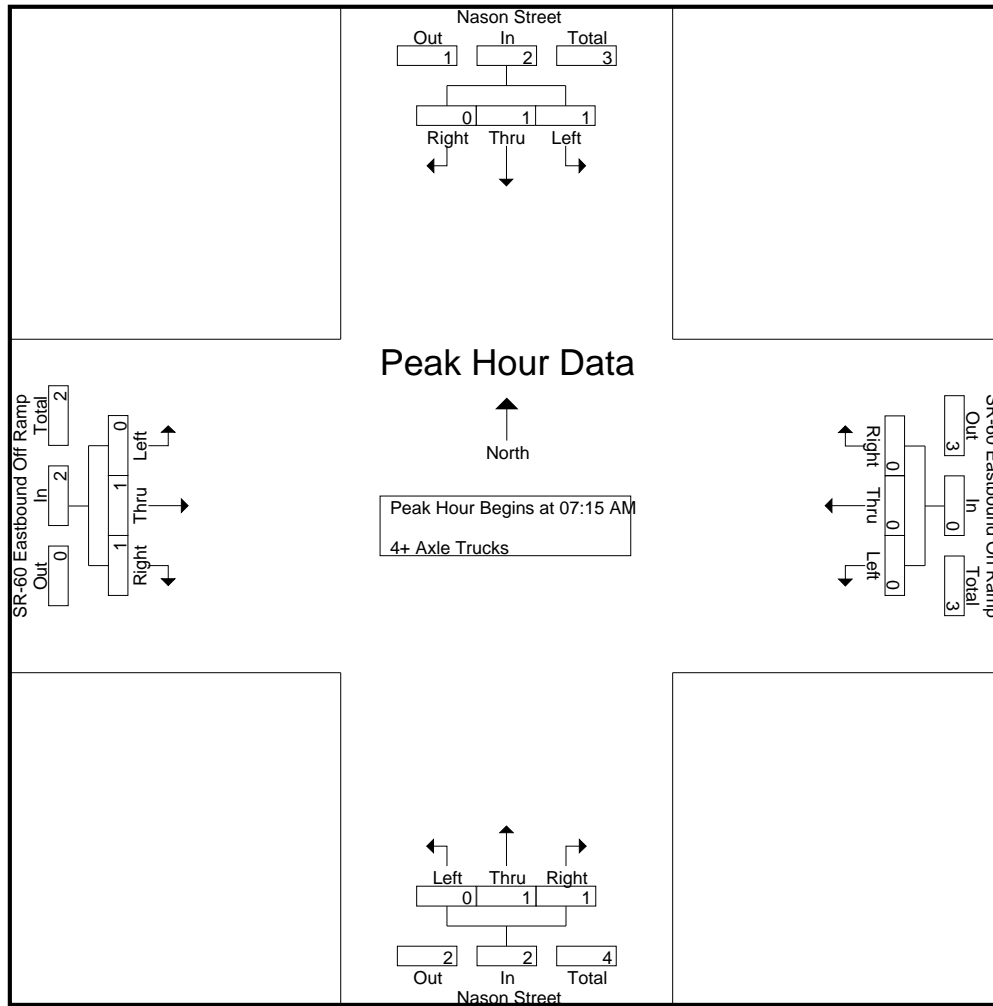
Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	1	1	0	2	0	0	0	0	0	1	1	2	0	0	0	0	4
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	1	0	2	0	0	0	0	0	1	1	2	0	1	1	2	6
% App. Total	50	50	0		0	0	0		0	50	50		0	50	50		
PHF	.250	.250	.000	.250	.000	.000	.000	.000	.000	.250	.250	.250	.000	.250	.250	.250	.375

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

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E AM
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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	1	0	2	0	0	0	0	0	1	1	2	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	1	0	2	0	0	0	0	0	1	1	2	0	1	1	2
% App. Total	50	50	0		0	0	0		0	50	50		0	50	50	
PHF	.250	.250	.000	.250	.000	.000	.000	.000	.000	.250	.250	.250	.000	.250	.250	.250

City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

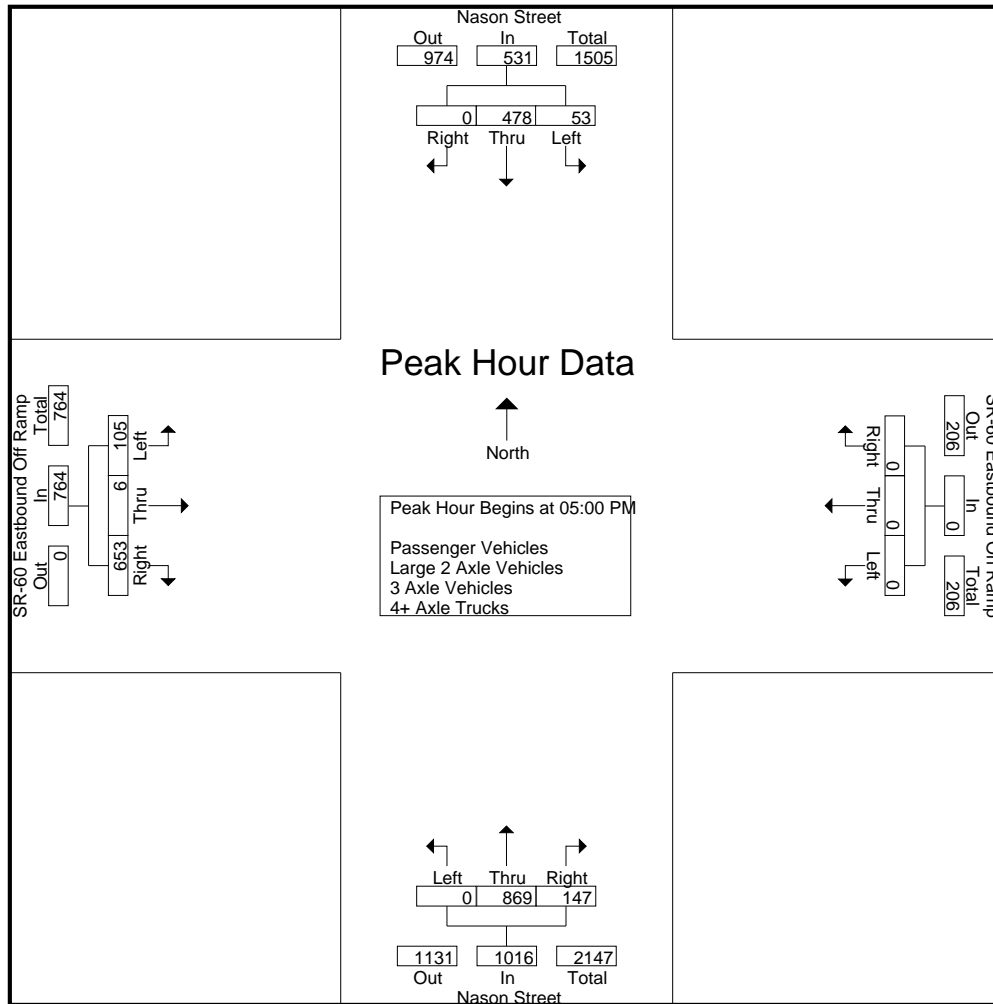
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	13	84	0	97	0	0	0	0	0	199	26	225	20	1	125	146	468
04:15 PM	6	93	0	99	0	0	0	0	0	195	37	232	25	1	151	177	508
04:30 PM	10	107	0	117	0	0	0	0	0	220	33	253	21	0	137	158	528
04:45 PM	10	107	0	117	0	0	0	0	0	213	38	251	24	0	143	167	535
Total	39	391	0	430	0	0	0	0	0	827	134	961	90	2	556	648	2039
05:00 PM	9	113	0	122	0	0	0	0	0	213	43	256	29	2	158	189	567
05:15 PM	13	126	0	139	0	0	0	0	0	234	38	272	23	1	178	202	613
05:30 PM	21	127	0	148	0	0	0	0	0	206	30	236	26	2	147	175	559
05:45 PM	10	112	0	122	0	0	0	0	0	216	36	252	27	1	170	198	572
Total	53	478	0	531	0	0	0	0	0	869	147	1016	105	6	653	764	2311
Grand Total	92	869	0	961	0	0	0	0	0	1696	281	1977	195	8	1209	1412	4350
Apprch %	9.6	90.4	0		0	0	0		0	85.8	14.2		13.8	0.6	85.6		
Total %	2.1	20	0	22.1	0	0	0	0	0	39	6.5	45.4	4.5	0.2	27.8	32.5	
Passenger Vehicles	89	859	0	948	0	0	0	0	0	1682	277	1959	189	7	1202	1398	4305
% Passenger Vehicles	96.7	98.8	0	98.6	0	0	0	0	0	99.2	98.6	99.1	96.9	87.5	99.4	99	99
Large 2 Axle Vehicles	3	6	0	9	0	0	0	0	0	13	2	15	6	1	6	13	37
% Large 2 Axle Vehicles	3.3	0.7	0	0.9	0	0	0	0	0	0.8	0.7	0.8	3.1	12.5	0.5	0.9	0.9
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% 3 Axle Vehicles	0	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	3	0	3	0	0	0	0	0	1	2	3	0	0	1	1	7
% 4+ Axle Trucks	0	0.3	0	0.3	0	0	0	0	0	0.1	0.7	0.2	0	0	0.1	0.1	0.2

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	9	113	0	122	0	0	0	0	0	213	43	256	29	2	158	189	567
05:15 PM	13	126	0	139	0	0	0	0	0	234	38	272	23	1	178	202	613
05:30 PM	21	127	0	148	0	0	0	0	0	206	30	236	26	2	147	175	559
05:45 PM	10	112	0	122	0	0	0	0	0	216	36	252	27	1	170	198	572
Total Volume	53	478	0	531	0	0	0	0	0	869	147	1016	105	6	653	764	2311
% App. Total	10	90	0		0	0	0		0	85.5	14.5		13.7	0.8	85.5		
PHF	.631	.941	.000	.897	.000	.000	.000	.000	.000	.928	.855	.934	.905	.750	.917	.946	.942

City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E PM
 Site Code : 00318351
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM				05:00 PM			
+0 mins.	9	113	0	122	0	0	0	0	0	220	33	253	29	2	158	189
+15 mins.	13	126	0	139	0	0	0	0	0	213	38	251	23	1	178	202
+30 mins.	21	127	0	148	0	0	0	0	0	213	43	256	26	2	147	175
+45 mins.	10	112	0	122	0	0	0	0	0	234	38	272	27	1	170	198
Total Volume	53	478	0	531	0	0	0	0	0	880	152	1032	105	6	653	764
% App. Total	10	90	0		0	0	0		0	85.3	14.7		13.7	0.8	85.5	
PHF	.631	.941	.000	.897	.000	.000	.000	.000	.000	.940	.884	.949	.905	.750	.917	.946

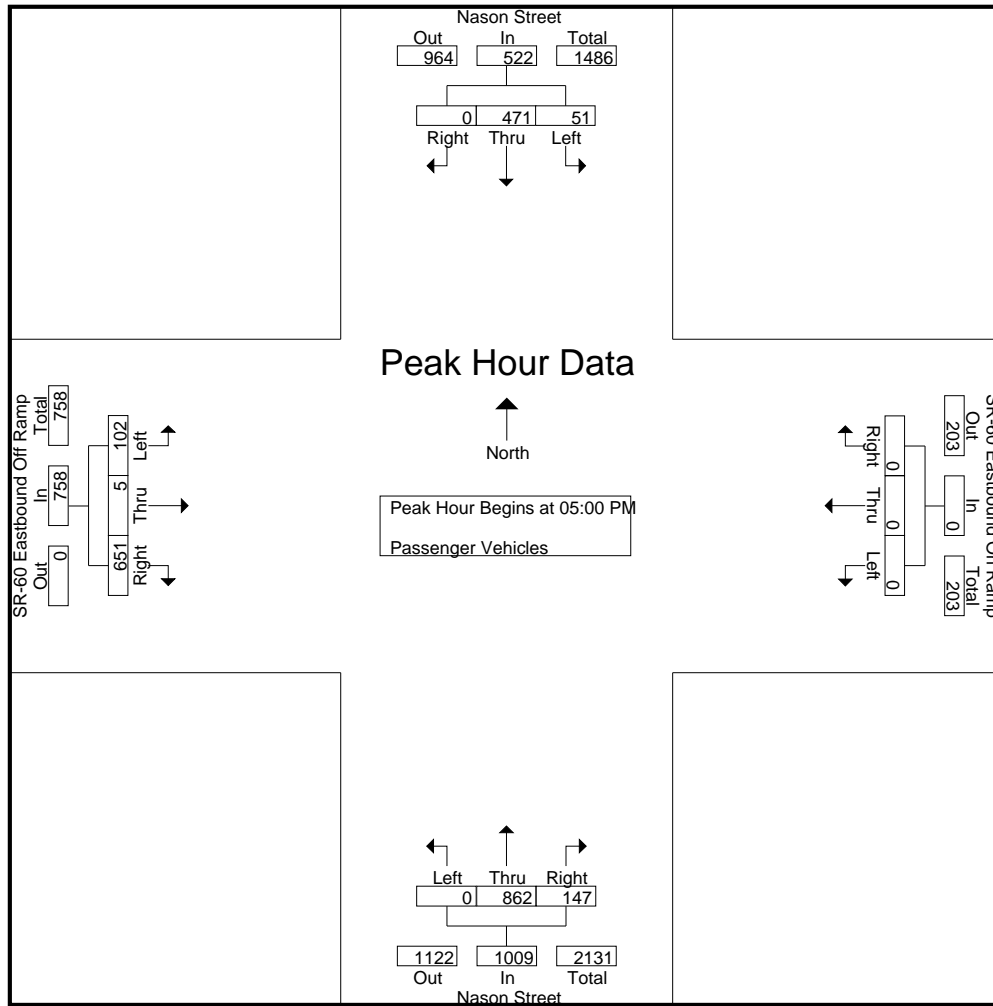
City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E PM
 Site Code : 00318351
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Groups Printed- Passenger Vehicles

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	12	82	0	94	0	0	0	0	0	196	25	221	18	1	124	143	458
04:15 PM	6	92	0	98	0	0	0	0	0	194	36	230	25	1	151	177	505
04:30 PM	10	107	0	117	0	0	0	0	0	217	33	250	20	0	133	153	520
04:45 PM	10	107	0	117	0	0	0	0	0	213	36	249	24	0	143	167	533
Total	38	388	0	426	0	0	0	0	0	820	130	950	87	2	551	640	2016
05:00 PM	8	110	0	118	0	0	0	0	0	212	43	255	28	1	158	187	560
05:15 PM	12	126	0	138	0	0	0	0	0	232	38	270	23	1	178	202	610
05:30 PM	21	126	0	147	0	0	0	0	0	204	30	234	25	2	145	172	553
05:45 PM	10	109	0	119	0	0	0	0	0	214	36	250	26	1	170	197	566
Total	51	471	0	522	0	0	0	0	0	862	147	1009	102	5	651	758	2289
Grand Total	89	859	0	948	0	0	0	0	0	1682	277	1959	189	7	1202	1398	4305
Apprch %	9.4	90.6	0		0	0	0		0	85.9	14.1		13.5	0.5	86		
Total %	2.1	20	0	22	0	0	0	0	0	39.1	6.4	45.5	4.4	0.2	27.9	32.5	

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	8	110	0	118	0	0	0	0	0	212	43	255	28	1	158	187	560
05:15 PM	12	126	0	138	0	0	0	0	0	232	38	270	23	1	178	202	610
05:30 PM	21	126	0	147	0	0	0	0	0	204	30	234	25	2	145	172	553
05:45 PM	10	109	0	119	0	0	0	0	0	214	36	250	26	1	170	197	566
Total Volume	51	471	0	522	0	0	0	0	0	862	147	1009	102	5	651	758	2289
% App. Total	9.8	90.2	0		0	0	0		0	85.4	14.6		13.5	0.7	85.9		
PHF	.607	.935	.000	.888	.000	.000	.000	.000	.000	.929	.855	.934	.911	.625	.914	.938	.938



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.	8	110	0	118	0	0	0	0	0	212	43	255	28	1	158	187
+15 mins.	12	126	0	138	0	0	0	0	0	232	38	270	23	1	178	202
+30 mins.	21	126	0	147	0	0	0	0	0	204	30	234	25	2	145	172
+45 mins.	10	109	0	119	0	0	0	0	0	214	36	250	26	1	170	197
Total Volume	51	471	0	522	0	0	0	0	0	862	147	1009	102	5	651	758
% App. Total	9.8	90.2	0		0	0	0	0	0	85.4	14.6		13.5	0.7	85.9	
PHF	.607	.935	.000	.888	.000	.000	.000	.000	.000	.929	.855	.934	.911	.625	.914	.938

City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	1	1	0	2	0	0	0	0	0	3	0	3	2	0	0	2	7
04:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	3	0	3	1	0	4	5	8
04:45 PM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
Total	1	2	0	3	0	0	0	0	0	7	2	9	3	0	4	7	19
05:00 PM	1	1	0	2	0	0	0	0	0	1	0	1	1	1	0	2	5
05:15 PM	1	0	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	1	0	2	3	5
05:45 PM	0	2	0	2	0	0	0	0	0	2	0	2	1	0	0	1	5
Total	2	4	0	6	0	0	0	0	0	6	0	6	3	1	2	6	18
Grand Total	3	6	0	9	0	0	0	0	0	13	2	15	6	1	6	13	37
Apprch %	33.3	66.7	0		0	0	0		0	86.7	13.3		46.2	7.7	46.2		
Total %	8.1	16.2	0	24.3	0	0	0	0	0	35.1	5.4	40.5	16.2	2.7	16.2	35.1	

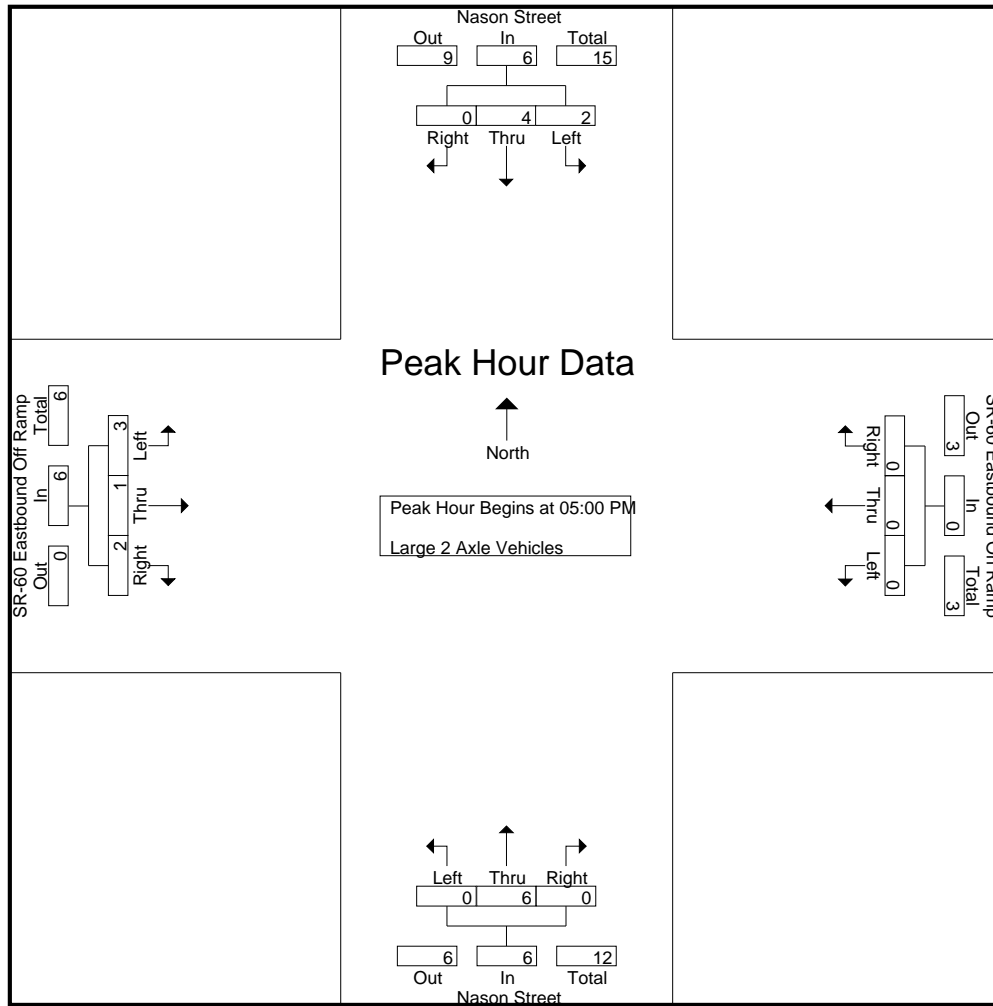
Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	1	1	0	2	0	0	0	0	0	1	0	1	1	1	0	2	5
05:15 PM	1	0	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	1	0	2	3	5
05:45 PM	0	2	0	2	0	0	0	0	0	2	0	2	1	0	0	1	5
Total Volume	2	4	0	6	0	0	0	0	0	6	0	6	3	1	2	6	18
% App. Total	33.3	66.7	0		0	0	0		0	100	0		50	16.7	33.3		
PHF	.500	.500	.000	.750	.000	.000	.000	.000	.000	.750	.000	.750	.750	.250	.250	.500	.900

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

City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 2



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

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	1	1	0	2	0	0	0	0	0	1	0	1	1	1	0	2
+15 mins.	1	0	0	1	0	0	0	0	0	2	0	2	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	1	0	1	1	0	2	3
+45 mins.	0	2	0	2	0	0	0	0	0	2	0	2	1	0	0	1
Total Volume	2	4	0	6	0	0	0	0	0	6	0	6	3	1	2	6
% App. Total	33.3	66.7	0		0	0	0	0	0	100	0		50	16.7	33.3	
PHF	.500	.500	.000	.750	.000	.000	.000	.000	.000	.750	.000	.750	.750	.250	.250	.500

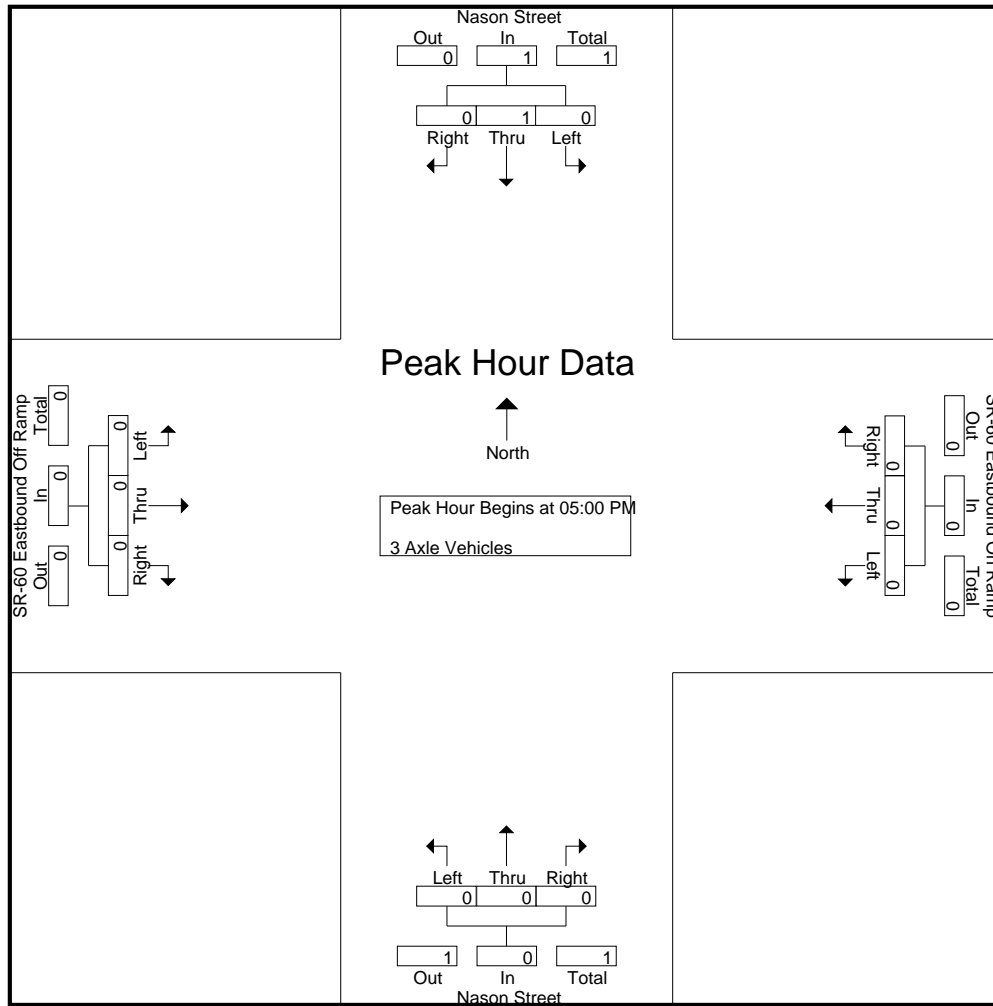
City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Apprch %	0	100	0		0	0	0		0	0	0		0	0	0		
Total %	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250



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

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

City of Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 02_MRV_Nason_60E PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

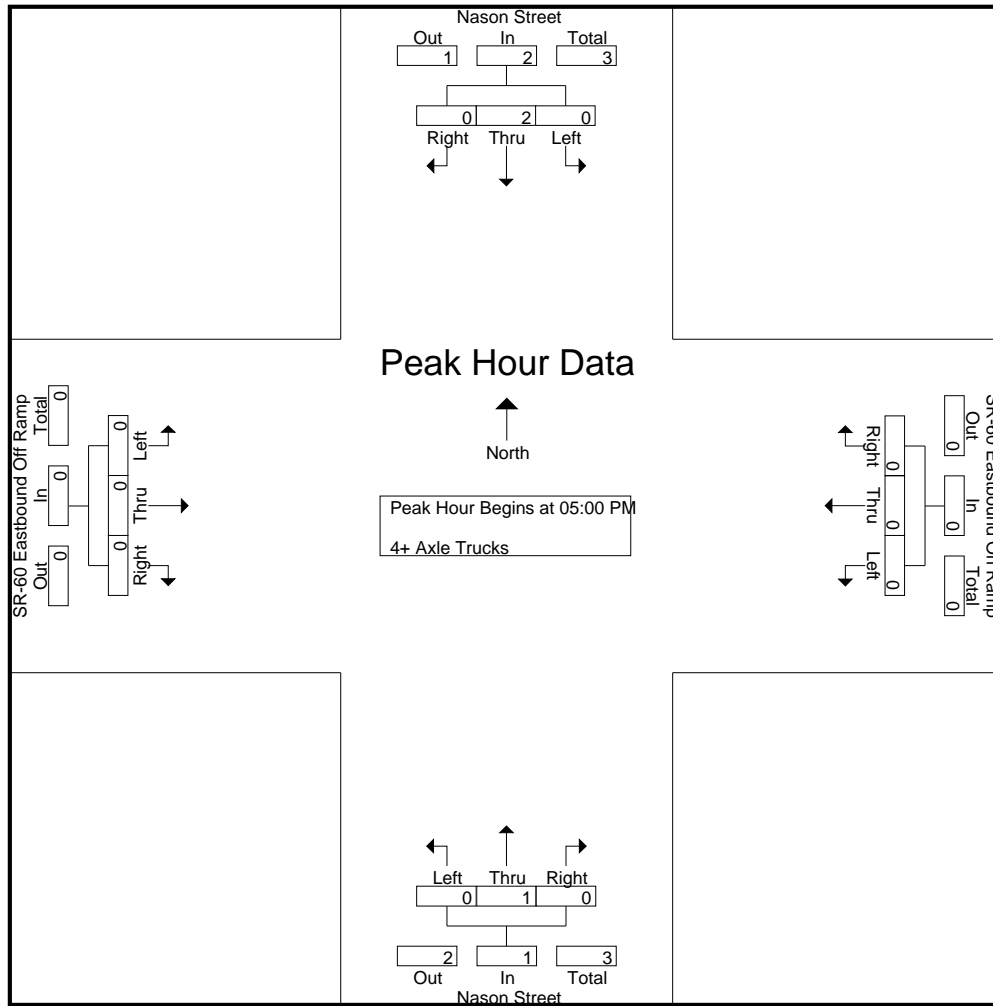
Groups Printed- 4+ Axle Trucks

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	1	1	3
04:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	2	2	0	0	1	1	4
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
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Grand Total	0	3	0	3	0	0	0	0	0	1	2	3	0	0	1	1	7
Apprch %	0	100	0		0	0	0		0	33.3	66.7		0	0	100		
Total %	0	42.9	0	42.9	0	0	0	0	0	14.3	28.6	42.9	0	0	14.3	14.3	

Start Time	Nason Street Southbound				SR-60 Eastbound On Ramp Westbound				Nason Street Northbound				SR-60 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
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
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.750

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



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

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

Location: Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps



Date: 4/26/2018
 Day: Thursday

PEDESTRIANS

	North Leg Nason Street	East Leg SR-60 Eastbound Ramps	South Leg Nason Street	West Leg SR-60 Eastbound Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	2	2
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	4	4
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	2	2
8:15 AM	0	0	0	1	1
8:30 AM	0	0	0	1	1
8:45 AM	0	1	0	0	1
TOTAL VOLUMES:	0	1	0	10	11

	North Leg Nason Street	East Leg SR-60 Eastbound Ramps	South Leg Nason Street	West Leg SR-60 Eastbound Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
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	8	8
5:15 PM	0	0	0	2	2
5:30 PM	0	0	1	1	2
5:45 PM	0	0	0	2	2
TOTAL VOLUMES:	0	0	1	16	17

Location: Moreno Valley
 N/S: Nason Street
 E/W: SR-60 Eastbound Ramps



Date: 4/26/2018
 Day: Thursday

BICYCLES

	Southbound Nason Street			Westbound SR-60 Eastbound Ramps			Northbound Nason Street			Eastbound SR-60 Eastbound Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	5	0	0	0	0	0	0	0	0	0	1	6
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	7	0	0	0	0	0	0	0	0	0	1	8

	Southbound Nason Street			Westbound SR-60 Eastbound Ramps			Northbound Nason Street			Eastbound SR-60 Eastbound Ramps			
	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	1	0	0	0	1	0	0	0	0	0	0	2
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	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	1	0	1	0	0	0	0	4

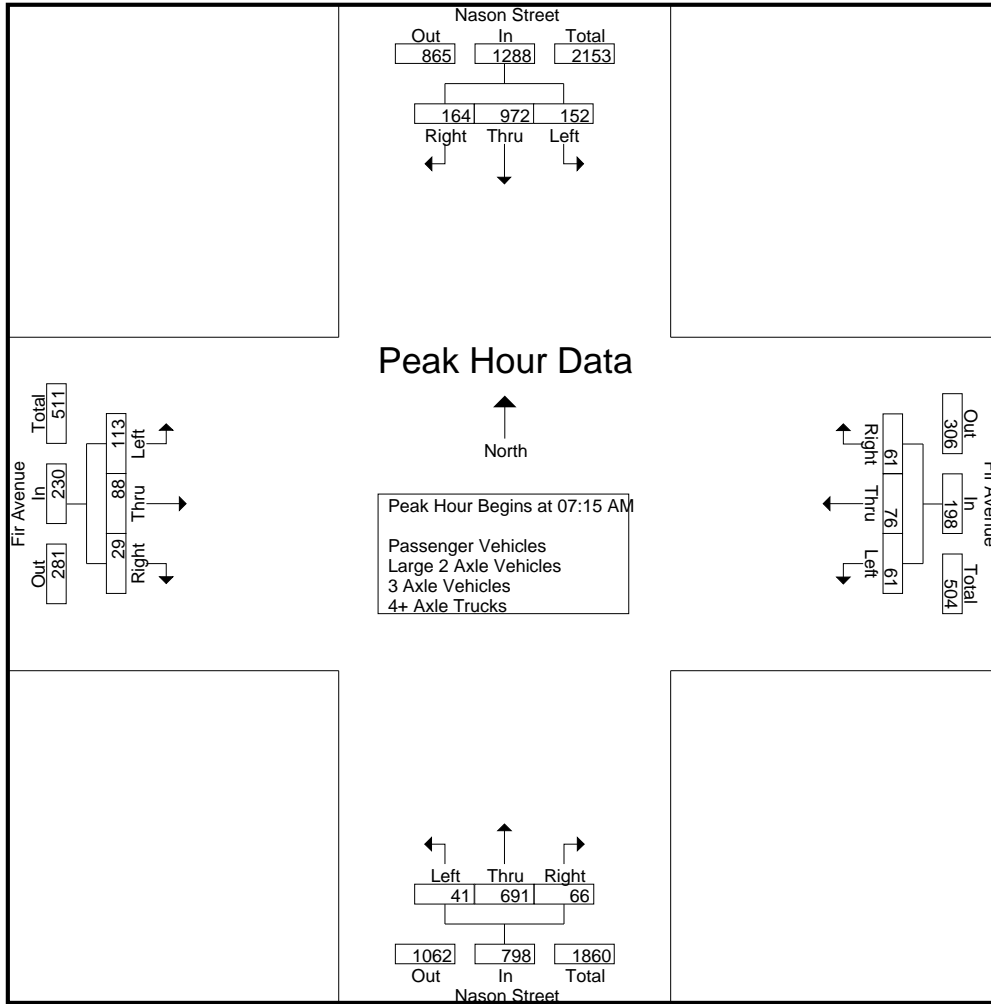
City of Moreno Valley
 N/S: Nason Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 03_MRV_Nason_Fir AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

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

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	19	171	10	200	15	4	10	29	1	160	9	170	43	14	1	58	457
07:15 AM	27	234	23	284	11	11	16	38	2	132	17	151	25	16	4	45	518
07:30 AM	29	315	52	396	22	23	16	61	6	180	14	200	32	20	9	61	718
07:45 AM	30	281	67	378	13	20	16	49	20	219	14	253	33	29	9	71	751
Total	105	1001	152	1258	61	58	58	177	29	691	54	774	133	79	23	235	2444
08:00 AM	66	142	22	230	15	22	13	50	13	160	21	194	23	23	7	53	527
08:15 AM	52	126	14	192	9	20	13	42	6	105	26	137	28	16	1	45	416
08:30 AM	42	134	11	187	14	10	22	46	4	121	20	145	15	16	1	32	410
08:45 AM	43	102	18	163	19	14	15	48	3	81	18	102	19	19	1	39	352
Total	203	504	65	772	57	66	63	186	26	467	85	578	85	74	10	169	1705
Grand Total	308	1505	217	2030	118	124	121	363	55	1158	139	1352	218	153	33	404	4149
Apprch %	15.2	74.1	10.7		32.5	34.2	33.3		4.1	85.7	10.3		54	37.9	8.2		
Total %	7.4	36.3	5.2	48.9	2.8	3	2.9	8.7	1.3	27.9	3.4	32.6	5.3	3.7	0.8	9.7	
Passenger Vehicles	304	1483	214	2001	118	122	117	357	55	1146	138	1339	218	150	33	401	4098
% Passenger Vehicles	98.7	98.5	98.6	98.6	100	98.4	96.7	98.3	100	99	99.3	99	100	98	100	99.3	98.8
Large 2 Axle Vehicles	3	16	3	22	0	2	3	5	0	9	1	10	0	3	0	3	40
% Large 2 Axle Vehicles	1	1.1	1.4	1.1	0	1.6	2.5	1.4	0	0.8	0.7	0.7	0	2	0	0.7	1
3 Axle Vehicles	1	3	0	4	0	0	1	1	0	2	0	2	0	0	0	0	7
% 3 Axle Vehicles	0.3	0.2	0	0.2	0	0	0.8	0.3	0	0.2	0	0.1	0	0	0	0	0.2
4+ Axle Trucks	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
% 4+ Axle Trucks	0	0.2	0	0.1	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0.1

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	27	234	23	284	11	11	16	38	2	132	17	151	25	16	4	45	518
07:30 AM	29	315	52	396	22	23	16	61	6	180	14	200	32	20	9	61	718
07:45 AM	30	281	67	378	13	20	16	49	20	219	14	253	33	29	9	71	751
08:00 AM	66	142	22	230	15	22	13	50	13	160	21	194	23	23	7	53	527
Total Volume	152	972	164	1288	61	76	61	198	41	691	66	798	113	88	29	230	2514
% App. Total	11.8	75.5	12.7		30.8	38.4	30.8		5.1	86.6	8.3		49.1	38.3	12.6		
PHF	.576	.771	.612	.813	.693	.826	.953	.811	.513	.789	.786	.789	.856	.759	.806	.810	.837



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				07:15 AM				07:00 AM			
+0 mins.	27	234	23	284	22	23	16	61	2	132	17	151	43	14	1	58
+15 mins.	29	315	52	396	13	20	16	49	6	180	14	200	25	16	4	45
+30 mins.	30	281	67	378	15	22	13	50	20	219	14	253	32	20	9	61
+45 mins.	66	142	22	230	9	20	13	42	13	160	21	194	33	29	9	71
Total Volume	152	972	164	1288	59	85	58	202	41	691	66	798	133	79	23	235
% App. Total	11.8	75.5	12.7		29.2	42.1	28.7		5.1	86.6	8.3		56.6	33.6	9.8	
PHF	.576	.771	.612	.813	.670	.924	.906	.828	.513	.789	.786	.789	.773	.681	.639	.827

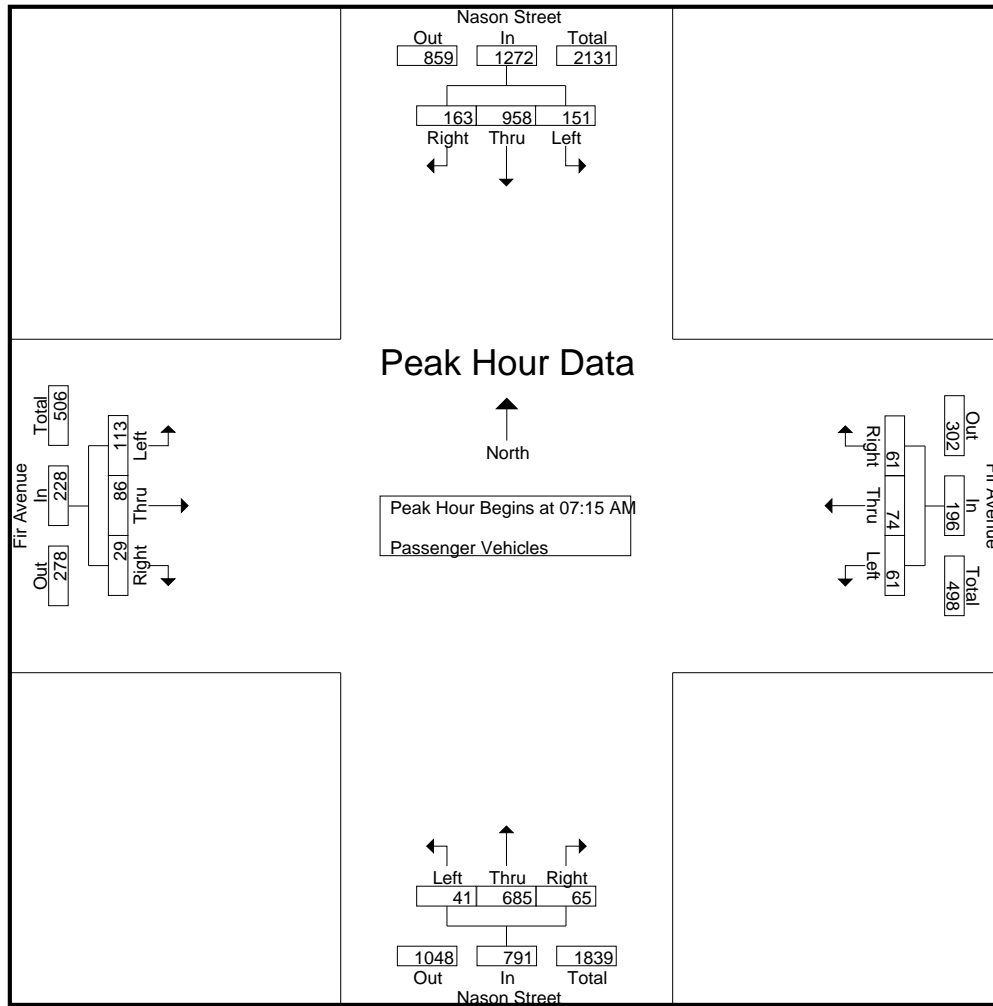
City of Moreno Valley
 N/S: Nason Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 03_MRV_Nason_Fir AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	18	171	10	199	15	4	9	28	1	159	9	169	43	14	1	58	454
07:15 AM	27	230	23	280	11	11	16	38	2	130	16	148	25	15	4	44	510
07:30 AM	29	310	52	391	22	22	16	60	6	180	14	200	32	20	9	61	712
07:45 AM	29	278	66	373	13	20	16	49	20	219	14	253	33	28	9	70	745
Total	103	989	151	1243	61	57	57	175	29	688	53	770	133	77	23	233	2421
08:00 AM	66	140	22	228	15	21	13	49	13	156	21	190	23	23	7	53	520
08:15 AM	52	124	13	189	9	20	12	41	6	103	26	135	28	15	1	44	409
08:30 AM	42	131	11	184	14	10	22	46	4	118	20	142	15	16	1	32	404
08:45 AM	41	99	17	157	19	14	13	46	3	81	18	102	19	19	1	39	344
Total	201	494	63	758	57	65	60	182	26	458	85	569	85	73	10	168	1677
Grand Total	304	1483	214	2001	118	122	117	357	55	1146	138	1339	218	150	33	401	4098
Apprch %	15.2	74.1	10.7		33.1	34.2	32.8		4.1	85.6	10.3		54.4	37.4	8.2		
Total %	7.4	36.2	5.2	48.8	2.9	3	2.9	8.7	1.3	28	3.4	32.7	5.3	3.7	0.8	9.8	

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	27	230	23	280	11	11	16	38	2	130	16	148	25	15	4	44	510
07:30 AM	29	310	52	391	22	22	16	60	6	180	14	200	32	20	9	61	712
07:45 AM	29	278	66	373	13	20	16	49	20	219	14	253	33	28	9	70	745
08:00 AM	66	140	22	228	15	21	13	49	13	156	21	190	23	23	7	53	520
Total Volume	151	958	163	1272	61	74	61	196	41	685	65	791	113	86	29	228	2487
% App. Total	11.9	75.3	12.8		31.1	37.8	31.1		5.2	86.6	8.2		49.6	37.7	12.7		
PHF	.572	.773	.617	.813	.693	.841	.953	.817	.513	.782	.774	.782	.856	.768	.806	.814	.835



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.	27	230	23	280	11	11	16	38	2	130	16	148	25	15	4	44
+15 mins.	29	310	52	391	22	22	16	60	6	180	14	200	32	20	9	61
+30 mins.	29	278	66	373	13	20	16	49	20	219	14	253	33	28	9	70
+45 mins.	66	140	22	228	15	21	13	49	13	156	21	190	23	23	7	53
Total Volume	151	958	163	1272	61	74	61	196	41	685	65	791	113	86	29	228
% App. Total	11.9	75.3	12.8		31.1	37.8	31.1		5.2	86.6	8.2		49.6	37.7	12.7	
PHF	.572	.773	.617	.813	.693	.841	.953	.817	.513	.782	.774	.782	.856	.768	.806	.814

City of Moreno Valley
 N/S: Nason Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 03_MRV_Nason_Fir AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

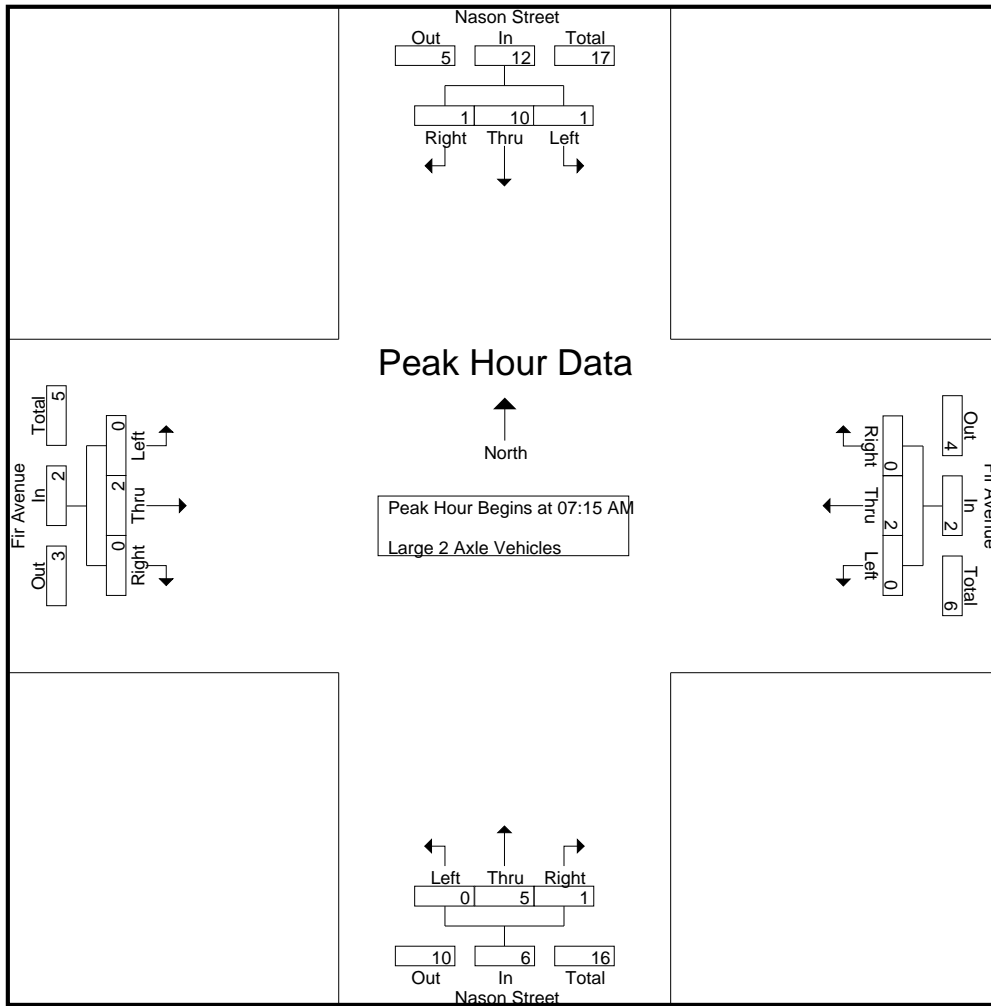
Groups Printed- Large 2 Axle Vehicles

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
07:15 AM	0	3	0	3	0	0	0	0	0	1	1	2	0	1	0	1	6
07:30 AM	0	4	0	4	0	1	0	1	0	0	0	0	0	0	0	0	5
07:45 AM	1	2	1	4	0	0	0	0	0	0	0	0	0	1	0	1	5
Total	1	9	1	11	0	1	1	2	0	2	1	3	0	2	0	2	18
08:00 AM	0	1	0	1	0	1	0	1	0	4	0	4	0	0	0	0	6
08:15 AM	0	0	1	1	0	0	1	1	0	2	0	2	0	1	0	1	5
08:30 AM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
08:45 AM	2	3	1	6	0	0	1	1	0	0	0	0	0	0	0	0	7
Total	2	7	2	11	0	1	2	3	0	7	0	7	0	1	0	1	22
Grand Total	3	16	3	22	0	2	3	5	0	9	1	10	0	3	0	3	40
Apprch %	13.6	72.7	13.6		0	40	60		0	90	10		0	100	0		
Total %	7.5	40	7.5	55	0	5	7.5	12.5	0	22.5	2.5	25	0	7.5	0	7.5	

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	3	0	3	0	0	0	0	0	1	1	2	0	1	0	1	6
07:30 AM	0	4	0	4	0	1	0	1	0	0	0	0	0	0	0	0	5
07:45 AM	1	2	1	4	0	0	0	0	0	0	0	0	0	1	0	1	5
08:00 AM	0	1	0	1	0	1	0	1	0	4	0	4	0	0	0	0	6
Total Volume	1	10	1	12	0	2	0	2	0	5	1	6	0	2	0	2	22
% App. Total	8.3	83.3	8.3		0	100	0		0	83.3	16.7		0	100	0		
PHF	.250	.625	.250	.750	.000	.500	.000	.500	.000	.313	.250	.375	.000	.500	.000	.500	.917

City of Moreno Valley
 N/S: Nason Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 03_MRV_Nason_Fir AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 2

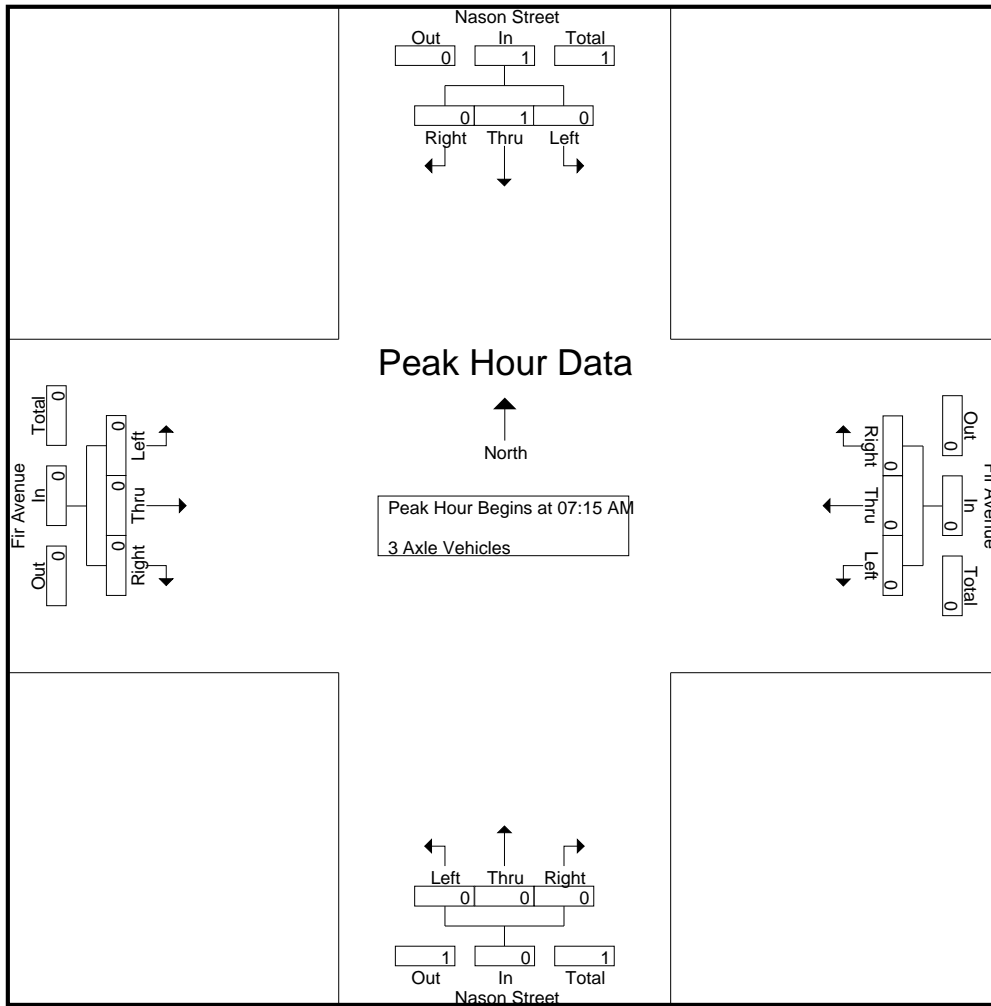


Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	3	0	3	0	0	0	0	0	1	1	2	0	1	0	1
+15 mins.	0	4	0	4	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	1	2	1	4	0	0	0	0	0	0	0	0	0	1	0	1
+45 mins.	0	1	0	1	0	1	0	1	0	4	0	4	0	0	0	0
Total Volume	1	10	1	12	0	2	0	2	0	5	1	6	0	2	0	2
% App. Total	8.3	83.3	8.3		0	100	0		0	83.3	16.7		0	100	0	
PHF	.250	.625	.250	.750	.000	.500	.000	.500	.000	.313	.250	.375	.000	.500	.000	.500

City of Moreno Valley
 N/S: Nason Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 03_MRV_Nason_Fir AM
 Site Code : 00318351
 Start Date : 4/26/2018
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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	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

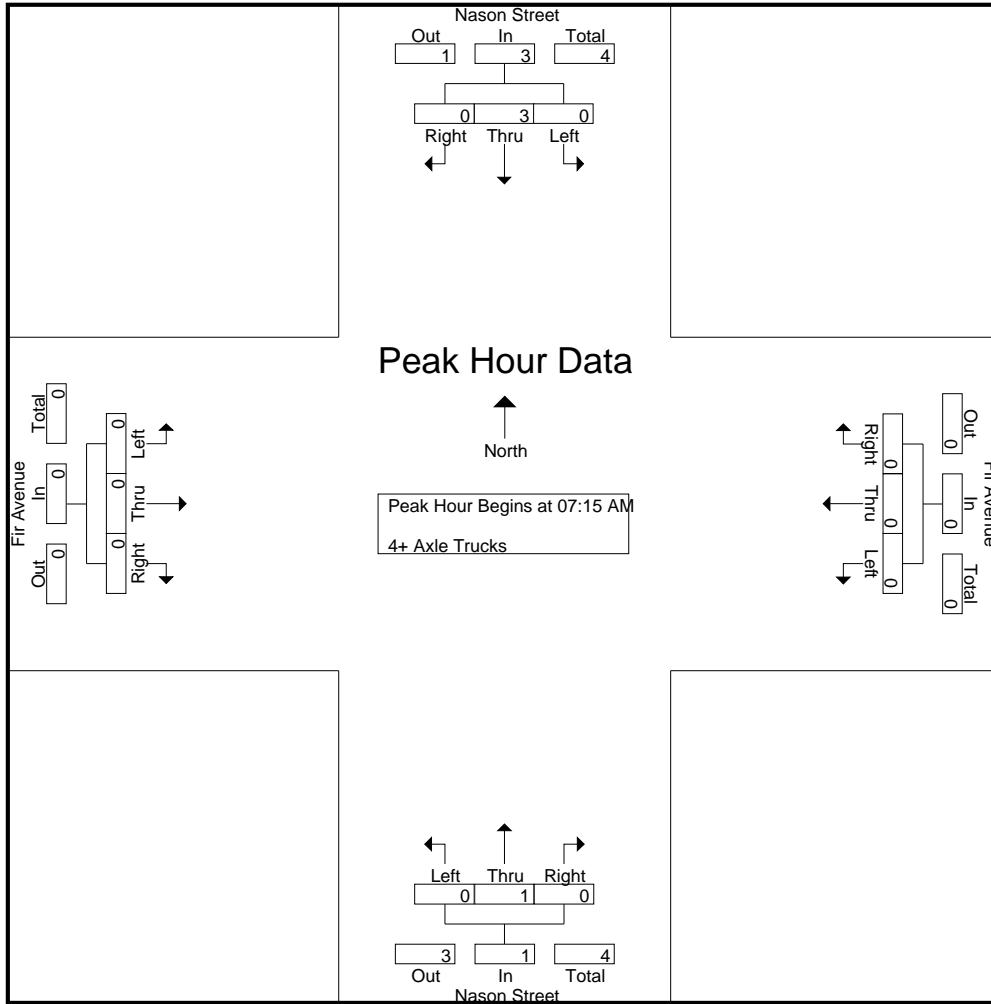
City of Moreno Valley
 N/S: Nason Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 03_MRV_Nason_Fir AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	1	0	0	0	0	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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
08:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	75	0	75	0	0	0	0	0	25	0	25	0	0	0	0	

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	0	1	0	0	0	0	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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.500



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	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

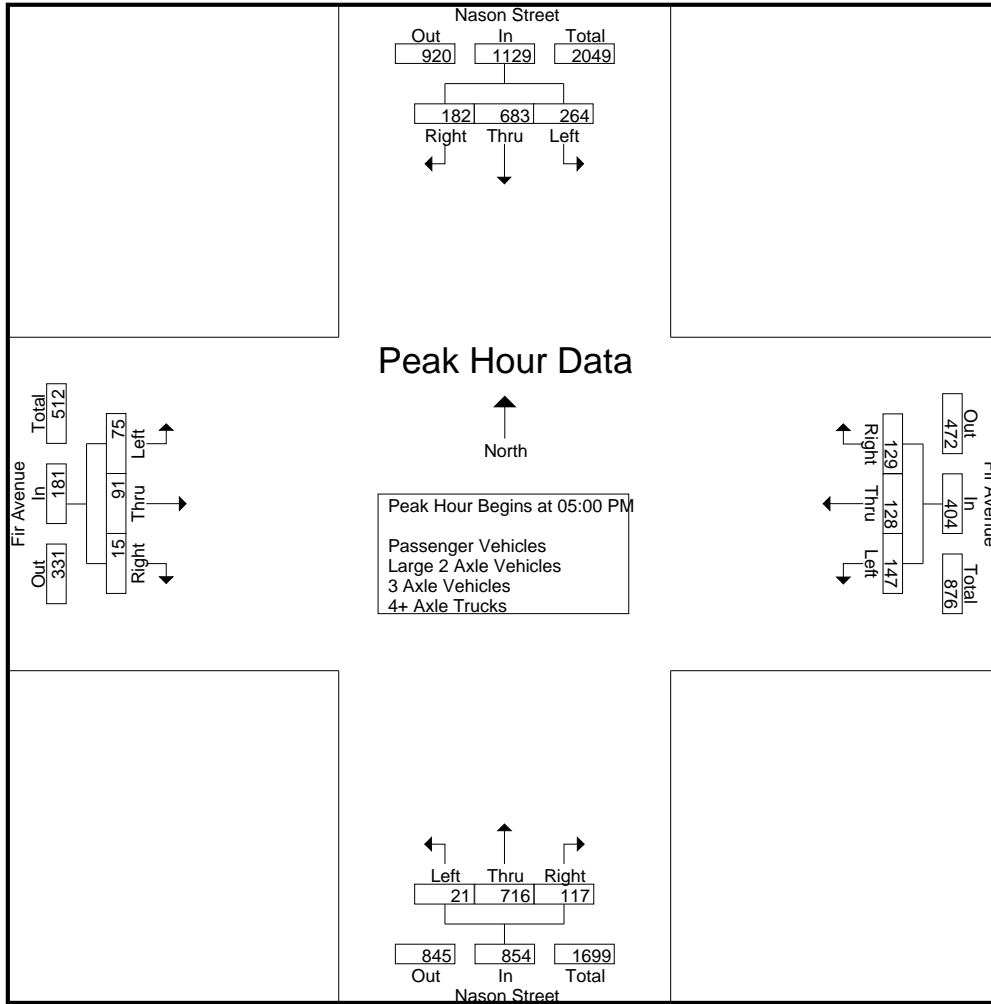
City of Moreno Valley
 N/S: Nason Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 03_MRV_Nason_Fir PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

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

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	49	129	27	205	41	37	27	105	5	154	35	194	26	18	3	47	551
04:15 PM	63	158	36	257	34	26	31	91	1	161	36	198	18	25	5	48	594
04:30 PM	74	136	35	245	38	33	51	122	5	173	18	196	19	19	3	41	604
04:45 PM	58	150	31	239	44	30	35	109	9	168	37	214	20	17	3	40	602
Total	244	573	129	946	157	126	144	427	20	656	126	802	83	79	14	176	2351
05:00 PM	66	171	50	287	30	32	40	102	6	168	20	194	18	21	2	41	624
05:15 PM	72	175	46	293	39	31	28	98	3	217	32	252	10	24	2	36	679
05:30 PM	54	167	40	261	36	25	28	89	7	180	34	221	25	21	4	50	621
05:45 PM	72	170	46	288	42	40	33	115	5	151	31	187	22	25	7	54	644
Total	264	683	182	1129	147	128	129	404	21	716	117	854	75	91	15	181	2568
Grand Total	508	1256	311	2075	304	254	273	831	41	1372	243	1656	158	170	29	357	4919
Apprch %	24.5	60.5	15		36.6	30.6	32.9		2.5	82.9	14.7		44.3	47.6	8.1		
Total %	10.3	25.5	6.3	42.2	6.2	5.2	5.5	16.9	0.8	27.9	4.9	33.7	3.2	3.5	0.6	7.3	
Passenger Vehicles	506	1245	308	2059	302	253	267	822	41	1361	242	1644	158	169	28	355	4880
% Passenger Vehicles	99.6	99.1	99	99.2	99.3	99.6	97.8	98.9	100	99.2	99.6	99.3	100	99.4	96.6	99.4	99.2
Large 2 Axle Vehicles	2	6	3	11	2	1	5	8	0	10	1	11	0	1	1	2	32
% Large 2 Axle Vehicles	0.4	0.5	1	0.5	0.7	0.4	1.8	1	0	0.7	0.4	0.7	0	0.6	3.4	0.6	0.7
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% 3 Axle Vehicles	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	4	0	4	0	0	1	1	0	1	0	1	0	0	0	0	6
% 4+ Axle Trucks	0	0.3	0	0.2	0	0	0.4	0.1	0	0.1	0	0.1	0	0	0	0	0.1

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	66	171	50	287	30	32	40	102	6	168	20	194	18	21	2	41	624
05:15 PM	72	175	46	293	39	31	28	98	3	217	32	252	10	24	2	36	679
05:30 PM	54	167	40	261	36	25	28	89	7	180	34	221	25	21	4	50	621
05:45 PM	72	170	46	288	42	40	33	115	5	151	31	187	22	25	7	54	644
Total Volume	264	683	182	1129	147	128	129	404	21	716	117	854	75	91	15	181	2568
% App. Total	23.4	60.5	16.1		36.4	31.7	31.9		2.5	83.8	13.7		41.4	50.3	8.3		
PHF	.917	.976	.910	.963	.875	.800	.806	.878	.750	.825	.860	.847	.750	.910	.536	.838	.946



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

	05:00 PM				04:30 PM				04:45 PM				05:00 PM			
+0 mins.	66	171	50	287	38	33	51	122	9	168	37	214	18	21	2	41
+15 mins.	72	175	46	293	44	30	35	109	6	168	20	194	10	24	2	36
+30 mins.	54	167	40	261	30	32	40	102	3	217	32	252	25	21	4	50
+45 mins.	72	170	46	288	39	31	28	98	7	180	34	221	22	25	7	54
Total Volume	264	683	182	1129	151	126	154	431	25	733	123	881	75	91	15	181
% App. Total	23.4	60.5	16.1		35	29.2	35.7		2.8	83.2	14		41.4	50.3	8.3	
PHF	.917	.976	.910	.963	.858	.955	.755	.883	.694	.844	.831	.874	.750	.910	.536	.838

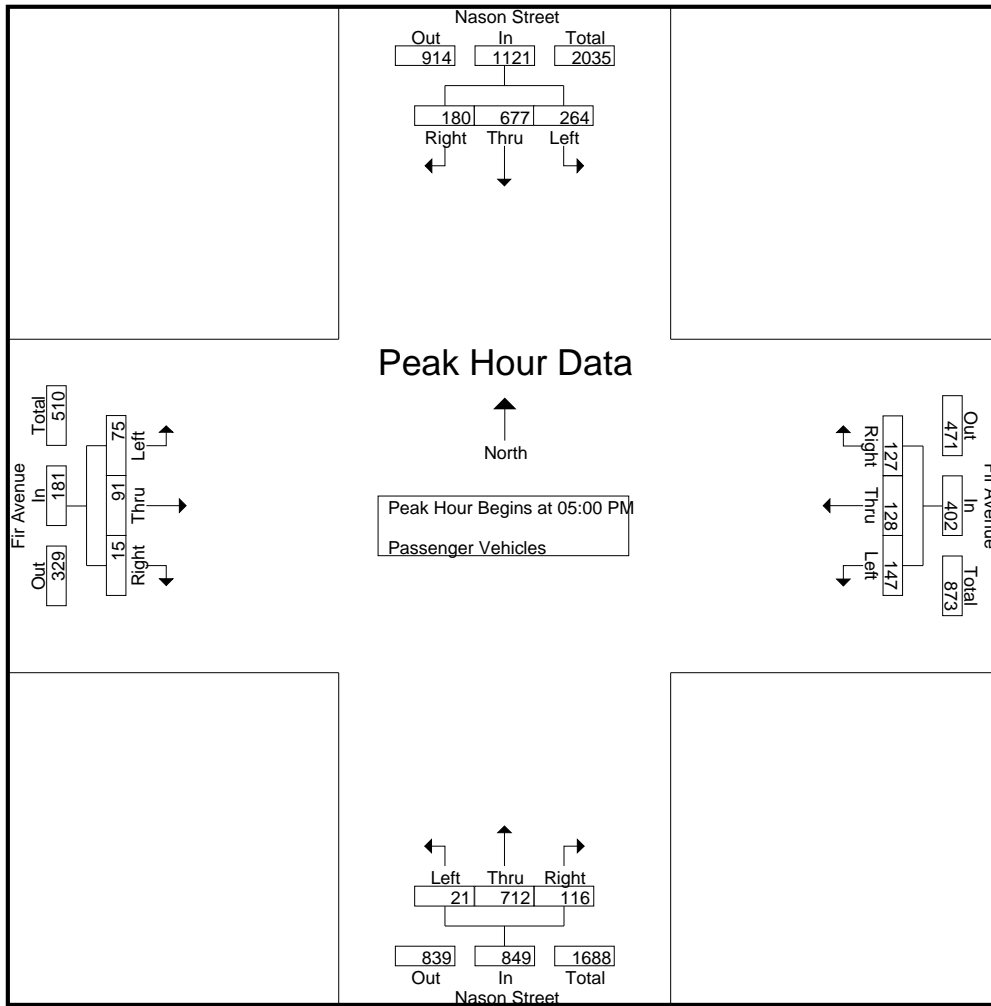
City of Moreno Valley
 N/S: Nason Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 03_MRV_Nason_Fir PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	49	126	26	201	41	37	26	104	5	150	35	190	26	18	3	47	542
04:15 PM	63	156	36	255	34	26	31	91	1	161	36	198	18	25	5	48	592
04:30 PM	72	136	35	243	37	32	50	119	5	171	18	194	19	18	3	40	596
04:45 PM	58	150	31	239	43	30	33	106	9	167	37	213	20	17	2	39	597
Total	242	568	128	938	155	125	140	420	20	649	126	795	83	78	13	174	2327
05:00 PM	66	168	50	284	30	32	39	101	6	167	20	193	18	21	2	41	619
05:15 PM	72	174	46	292	39	31	27	97	3	217	31	251	10	24	2	36	676
05:30 PM	54	166	40	260	36	25	28	89	7	179	34	220	25	21	4	50	619
05:45 PM	72	169	44	285	42	40	33	115	5	149	31	185	22	25	7	54	639
Total	264	677	180	1121	147	128	127	402	21	712	116	849	75	91	15	181	2553
Grand Total	506	1245	308	2059	302	253	267	822	41	1361	242	1644	158	169	28	355	4880
Apprch %	24.6	60.5	15		36.7	30.8	32.5		2.5	82.8	14.7		44.5	47.6	7.9		
Total %	10.4	25.5	6.3	42.2	6.2	5.2	5.5	16.8	0.8	27.9	5	33.7	3.2	3.5	0.6	7.3	

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	66	168	50	284	30	32	39	101	6	167	20	193	18	21	2	41	619
05:15 PM	72	174	46	292	39	31	27	97	3	217	31	251	10	24	2	36	676
05:30 PM	54	166	40	260	36	25	28	89	7	179	34	220	25	21	4	50	619
05:45 PM	72	169	44	285	42	40	33	115	5	149	31	185	22	25	7	54	639
Total Volume	264	677	180	1121	147	128	127	402	21	712	116	849	75	91	15	181	2553
% App. Total	23.6	60.4	16.1		36.6	31.8	31.6		2.5	83.9	13.7		41.4	50.3	8.3		
PHF	.917	.973	.900	.960	.875	.800	.814	.874	.750	.820	.853	.846	.750	.910	.536	.838	.944



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.	66	168	50	284	30	32	39	101	6	167	20	193	18	21	2	41
+15 mins.	72	174	46	292	39	31	27	97	3	217	31	251	10	24	2	36
+30 mins.	54	166	40	260	36	25	28	89	7	179	34	220	25	21	4	50
+45 mins.	72	169	44	285	42	40	33	115	5	149	31	185	22	25	7	54
Total Volume	264	677	180	1121	147	128	127	402	21	712	116	849	75	91	15	181
% App. Total	23.6	60.4	16.1		36.6	31.8	31.6		2.5	83.9	13.7		41.4	50.3	8.3	
PHF	.917	.973	.900	.960	.875	.800	.814	.874	.750	.820	.853	.846	.750	.910	.536	.838

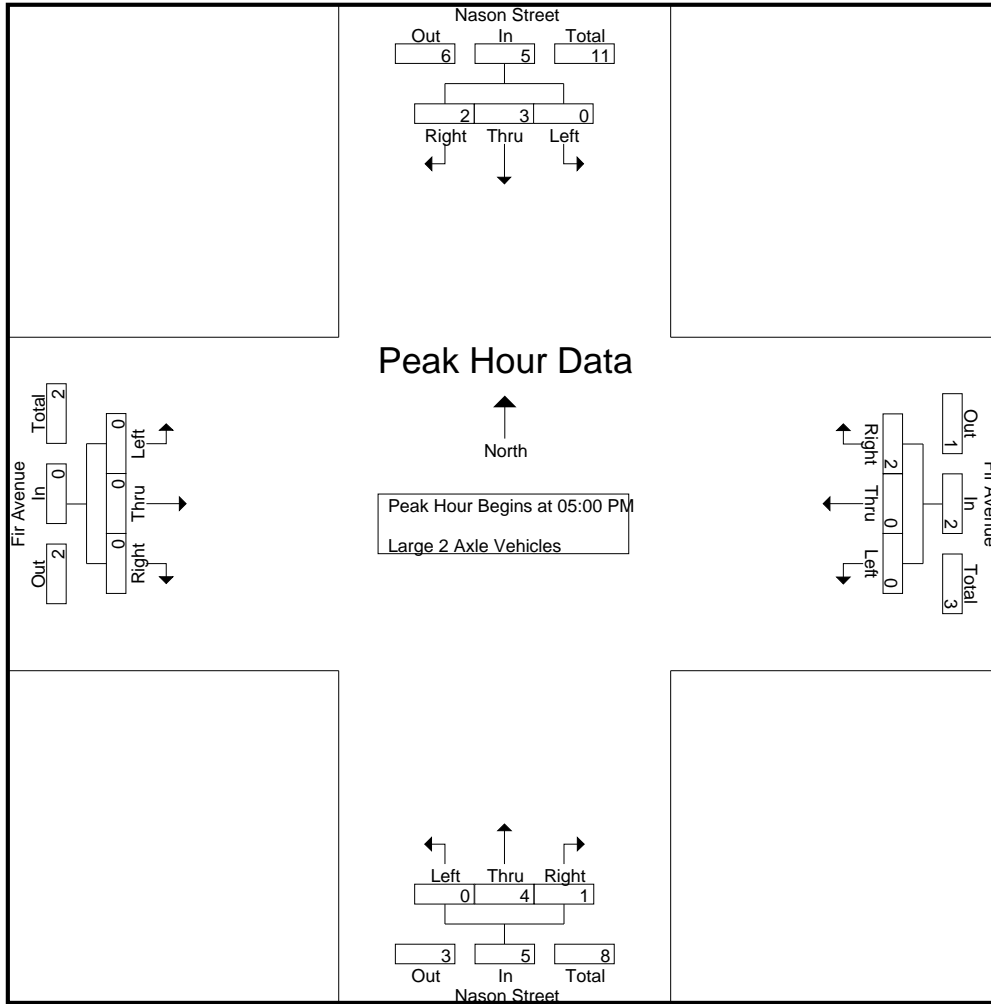
City of Moreno Valley
 N/S: Nason Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 03_MRV_Nason_Fir PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	1	1	2	0	0	0	0	0	3	0	3	0	0	0	0	5
04:15 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30 PM	2	0	0	2	1	1	1	3	0	2	0	2	0	1	0	1	8
04:45 PM	0	0	0	0	1	0	2	3	0	1	0	1	0	0	1	1	5
Total	2	3	1	6	2	1	3	6	0	6	0	6	0	1	1	2	20
05:00 PM	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
05:15 PM	0	1	0	1	0	0	1	1	0	0	1	1	0	0	0	0	3
05:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:45 PM	0	0	2	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total	0	3	2	5	0	0	2	2	0	4	1	5	0	0	0	0	12
Grand Total	2	6	3	11	2	1	5	8	0	10	1	11	0	1	1	2	32
Apprch %	18.2	54.5	27.3		25	12.5	62.5		0	90.9	9.1		0	50	50		
Total %	6.2	18.8	9.4	34.4	6.2	3.1	15.6	25	0	31.2	3.1	34.4	0	3.1	3.1	6.2	

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
05:15 PM	0	1	0	1	0	0	1	1	0	0	1	1	0	0	0	0	3
05:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:45 PM	0	0	2	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total Volume	0	3	2	5	0	0	2	2	0	4	1	5	0	0	0	0	12
% App. Total	0	60	40		0	0	100		0	80	20		0	0	0		
PHF	.000	.750	.250	.625	.000	.000	.500	.500	.000	.500	.250	.625	.000	.000	.000	.000	.750



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

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0
+15 mins.	0	1	0	1	0	0	1	1	0	0	1	1	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	0	2	2	0	0	0	0	0	2	0	2	0	0	0	0
Total Volume	0	3	2	5	0	0	2	2	0	4	1	5	0	0	0	0
% App. Total	0	60	40		0	0	100		0	80	20		0	0	0	
PHF	.000	.750	.250	.625	.000	.000	.500	.500	.000	.500	.250	.625	.000	.000	.000	.000

City of Moreno Valley
 N/S: Nason Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 03_MRV_Nason_Fir PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

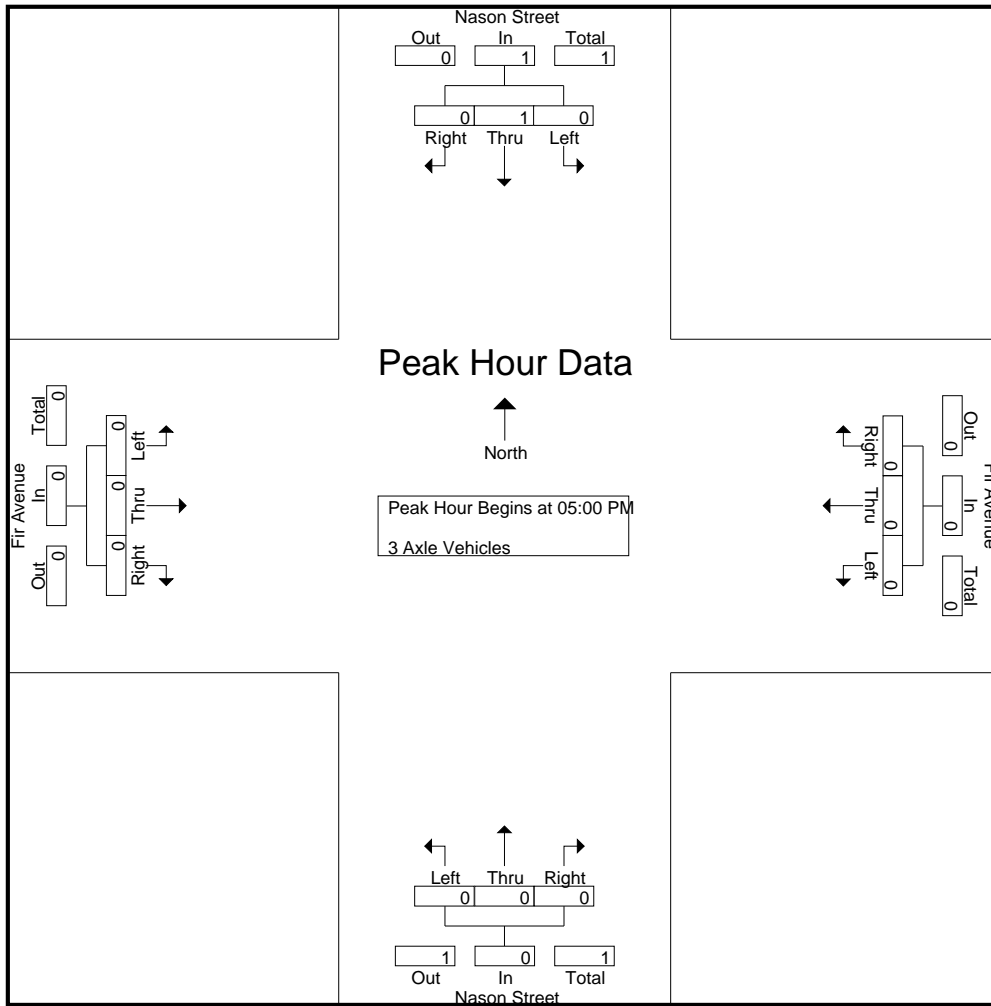
Groups Printed- 3 Axle Vehicles

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Apprch %	0	100	0		0	0	0		0	0	0		0	0	0		
Total %	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	

Start Time	Nason Street Southbound				Fir Avenue Westbound				Nason Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

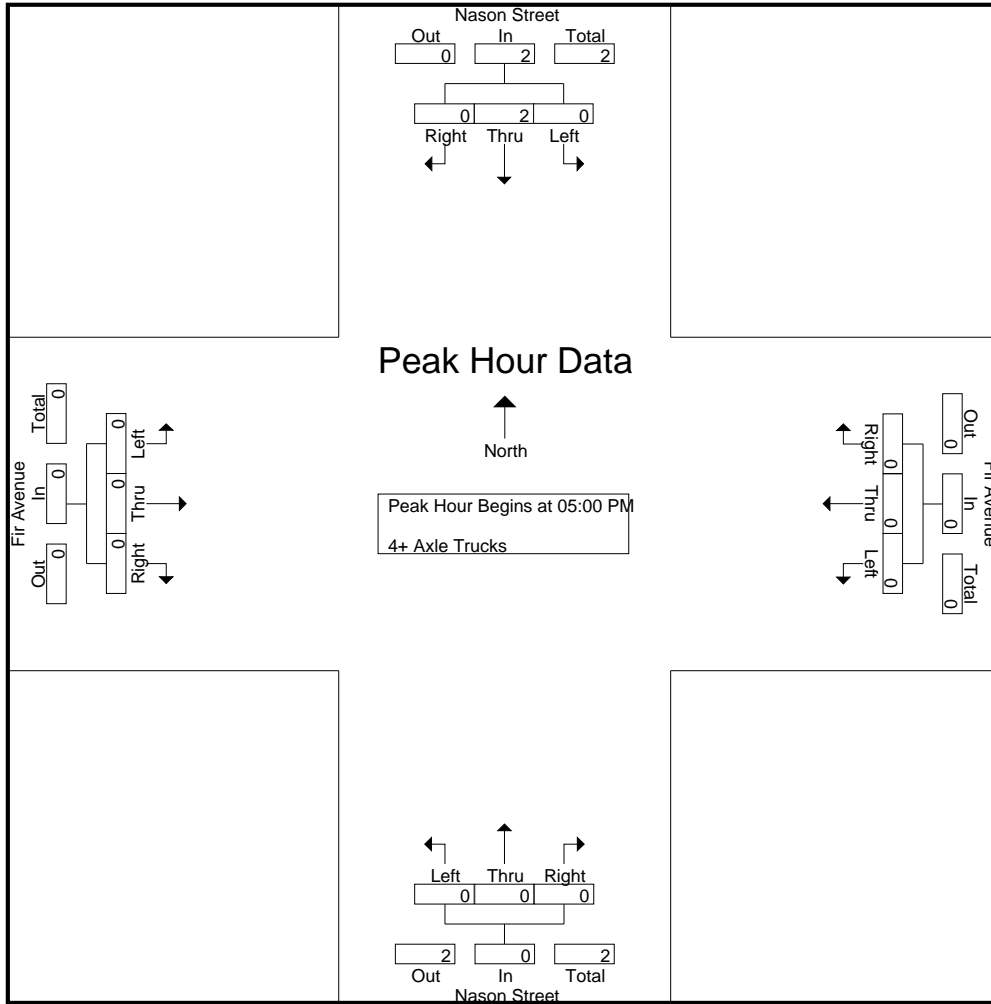
City of Moreno Valley
 N/S: Nason Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 03_MRV_Nason_Fir PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 2



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

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



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

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Location: Moreno Valley
 N/S: Nason Street
 E/W: Fir Avenue



Date: 4/26/2018
 Day: Thursday

PEDESTRIANS

	North Leg Nason Street	East Leg Fir Avenue	South Leg Nason Street	West Leg Fir Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	1	0	0	1
7:15 AM	1	2	1	1	5
7:30 AM	0	0	0	3	3
7:45 AM	2	1	0	0	3
8:00 AM	1	0	0	1	2
8:15 AM	0	1	1	1	3
8:30 AM	0	1	0	0	1
8:45 AM	0	1	2	0	3
TOTAL VOLUMES:	4	7	4	6	21

	North Leg Nason Street	East Leg Fir Avenue	South Leg Nason Street	West Leg Fir Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	2	0	1	3
4:15 PM	0	2	0	1	3
4:30 PM	0	1	0	0	1
4:45 PM	0	2	0	0	2
5:00 PM	0	3	3	1	7
5:15 PM	0	5	0	2	7
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	15	3	5	23

Location: Moreno Valley
 N/S: Nason Street
 E/W: Fir Avenue



Date: 4/26/2018
 Day: Thursday

BICYCLES

	Southbound Nason Street			Westbound Fir Avenue			Northbound Nason Street			Eastbound Fir Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	5	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	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	7	1	0	0	1	0	0	0	0	0	0	9

	Southbound Nason Street			Westbound Fir Avenue			Northbound Nason Street			Eastbound Fir Avenue			
	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	2	0	0	0	0	0	0	0	0	0	2
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	1	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
TOTAL VOLUMES:	0	0	3	0	0	0	0	0	1	0	0	0	4

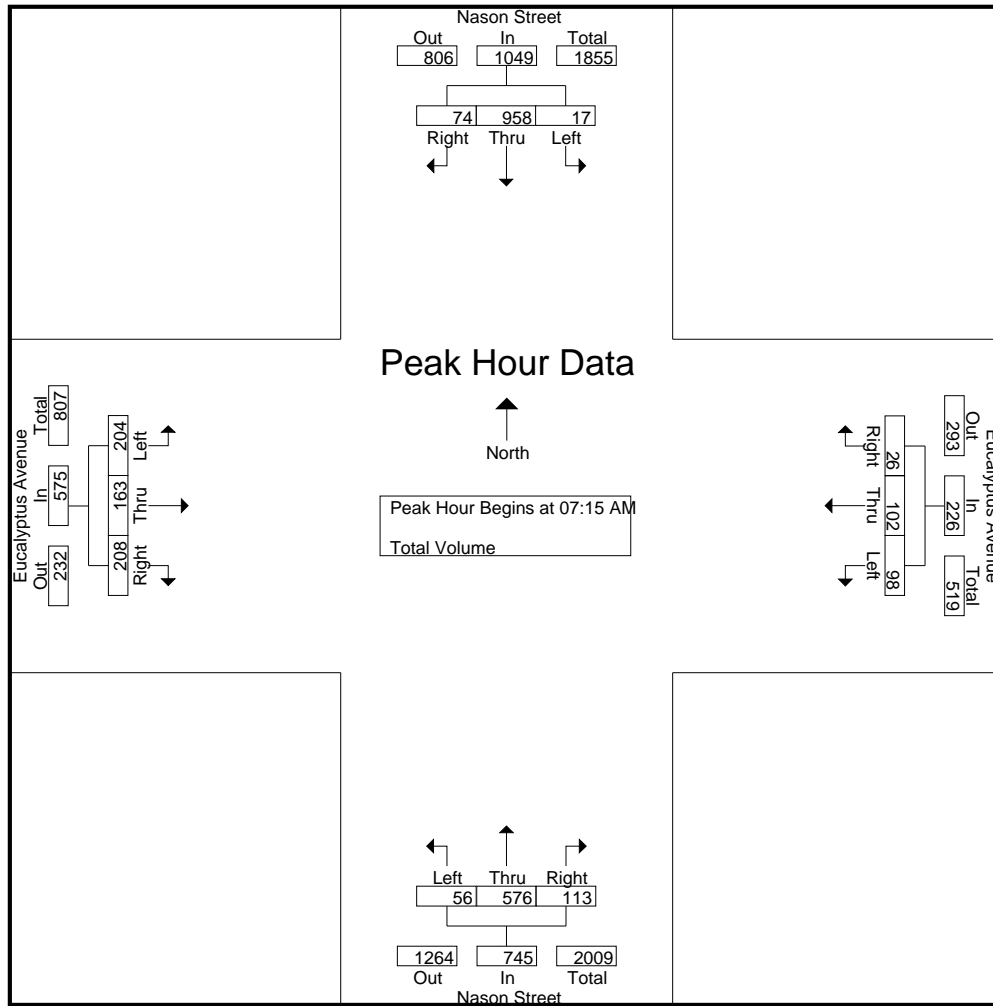
City of Moreno Valley
 N/S: Nason Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Nason_Eucalyptus AM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Total Volume

Start Time	Nason Street Southbound				Eucalyptus Avenue Westbound				Nason Street Northbound				Eucalyptus Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	3	168	14	185	24	15	1	40	2	161	17	180	19	14	18	51	456
07:15 AM	0	206	17	223	18	13	9	40	3	110	13	126	21	11	16	48	437
07:30 AM	4	298	28	330	25	22	8	55	16	150	14	180	47	35	55	137	702
07:45 AM	4	302	15	321	37	38	6	81	29	172	40	241	80	55	69	204	847
Total	11	974	74	1059	104	88	24	216	50	593	84	727	167	115	158	440	2442
08:00 AM	9	152	14	175	18	29	3	50	8	144	46	198	56	62	68	186	609
08:15 AM	2	126	11	139	16	15	0	31	6	137	39	182	8	21	11	40	392
08:30 AM	4	130	12	146	11	18	3	32	6	110	30	146	11	15	9	35	359
08:45 AM	4	124	5	133	13	8	4	25	12	104	41	157	12	15	7	34	349
Total	19	532	42	593	58	70	10	138	32	495	156	683	87	113	95	295	1709
Grand Total	30	1506	116	1652	162	158	34	354	82	1088	240	1410	254	228	253	735	4151
Apprch %	1.8	91.2	7		45.8	44.6	9.6		5.8	77.2	17		34.6	31	34.4		
Total %	0.7	36.3	2.8	39.8	3.9	3.8	0.8	8.5	2	26.2	5.8	34	6.1	5.5	6.1	17.7	

Start Time	Nason Street Southbound				Eucalyptus Avenue Westbound				Nason Street Northbound				Eucalyptus Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	206	17	223	18	13	9	40	3	110	13	126	21	11	16	48	437
07:30 AM	4	298	28	330	25	22	8	55	16	150	14	180	47	35	55	137	702
07:45 AM	4	302	15	321	37	38	6	81	29	172	40	241	80	55	69	204	847
08:00 AM	9	152	14	175	18	29	3	50	8	144	46	198	56	62	68	186	609
Total Volume	17	958	74	1049	98	102	26	226	56	576	113	745	204	163	208	575	2595
% App. Total	1.6	91.3	7.1		43.4	45.1	11.5		7.5	77.3	15.2		35.5	28.3	36.2		
PHF	.472	.793	.661	.795	.662	.671	.722	.698	.483	.837	.614	.773	.638	.657	.754	.705	.766



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

	07:00 AM				07:15 AM				07:30 AM				07:45 AM			
+0 mins.	3	168	14	185	18	13	9	40	16	150	14	180	21	11	16	48
+15 mins.	0	206	17	223	25	22	8	55	29	172	40	241	47	35	55	137
+30 mins.	4	298	28	330	37	38	6	81	8	144	46	198	80	55	69	204
+45 mins.	4	302	15	321	18	29	3	50	6	137	39	182	56	62	68	186
Total Volume	11	974	74	1059	98	102	26	226	59	603	139	801	204	163	208	575
% App. Total	1	92	7		43.4	45.1	11.5		7.4	75.3	17.4		35.5	28.3	36.2	
PHF	.688	.806	.661	.802	.662	.671	.722	.698	.509	.876	.755	.831	.638	.657	.754	.705

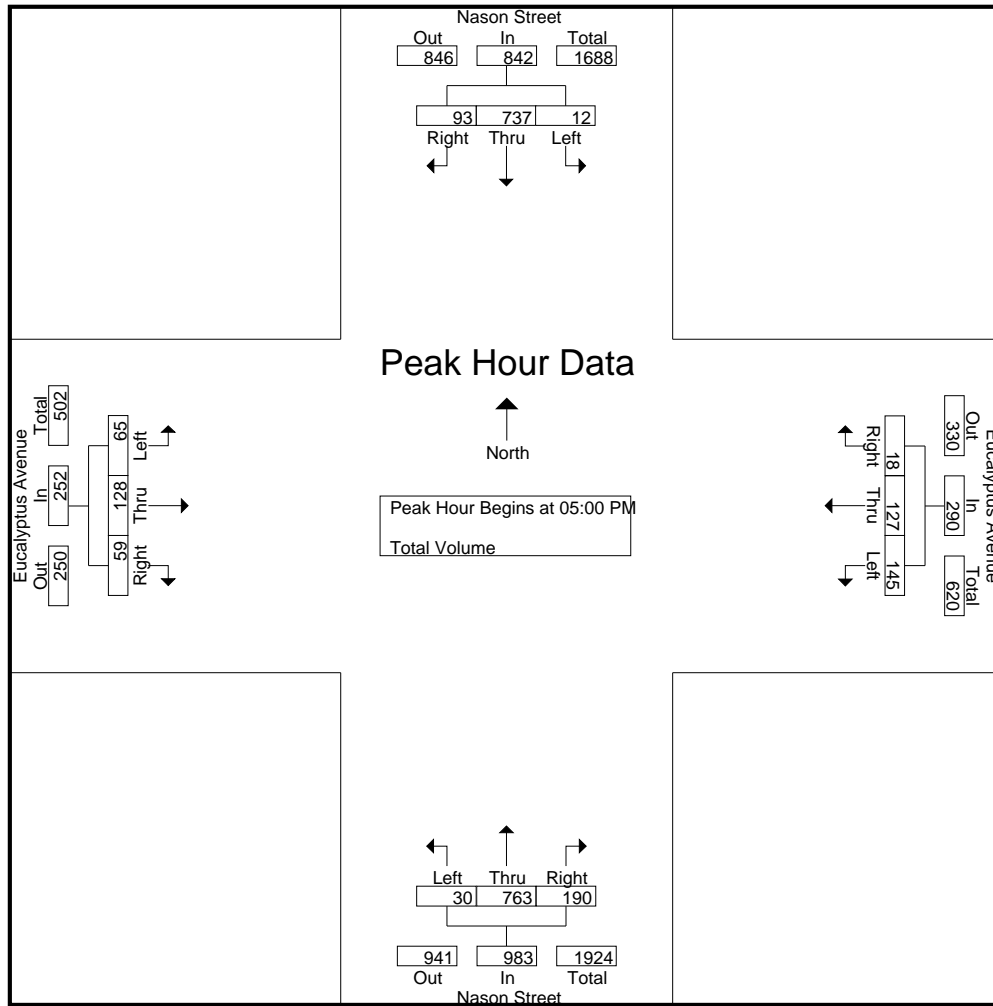
City of Moreno Valley
 N/S: Nason Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MR_V_Nason_Eucalyptus PM
 Site Code : 00318351
 Start Date : 4/26/2018
 Page No : 1

Groups Printed- Total Volume

Start Time	Nason Street Southbound				Eucalyptus Avenue Westbound				Nason Street Northbound				Eucalyptus Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	5	156	25	186	35	31	3	69	6	187	35	228	19	27	12	58	541
04:15 PM	6	159	12	177	26	40	3	69	9	168	55	232	18	28	14	60	538
04:30 PM	3	170	15	188	41	32	3	76	14	197	36	247	14	22	17	53	564
04:45 PM	2	167	16	185	34	35	5	74	6	191	48	245	13	30	11	54	558
Total	16	652	68	736	136	138	14	288	35	743	174	952	64	107	54	225	2201
05:00 PM	4	170	24	198	39	32	3	74	8	172	41	221	16	27	14	57	550
05:15 PM	3	198	21	222	44	37	5	86	4	226	59	289	19	26	18	63	660
05:30 PM	1	179	22	202	33	31	6	70	7	184	46	237	17	46	15	78	587
05:45 PM	4	190	26	220	29	27	4	60	11	181	44	236	13	29	12	54	570
Total	12	737	93	842	145	127	18	290	30	763	190	983	65	128	59	252	2367
Grand Total	28	1389	161	1578	281	265	32	578	65	1506	364	1935	129	235	113	477	4568
Apprch %	1.8	88	10.2		48.6	45.8	5.5		3.4	77.8	18.8		27	49.3	23.7		
Total %	0.6	30.4	3.5	34.5	6.2	5.8	0.7	12.7	1.4	33	8	42.4	2.8	5.1	2.5	10.4	

Start Time	Nason Street Southbound				Eucalyptus Avenue Westbound				Nason Street Northbound				Eucalyptus Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	4	170	24	198	39	32	3	74	8	172	41	221	16	27	14	57	550
05:15 PM	3	198	21	222	44	37	5	86	4	226	59	289	19	26	18	63	660
05:30 PM	1	179	22	202	33	31	6	70	7	184	46	237	17	46	15	78	587
05:45 PM	4	190	26	220	29	27	4	60	11	181	44	236	13	29	12	54	570
Total Volume	12	737	93	842	145	127	18	290	30	763	190	983	65	128	59	252	2367
% App. Total	1.4	87.5	11		50	43.8	6.2		3.1	77.6	19.3		25.8	50.8	23.4		
PHF	.750	.931	.894	.948	.824	.858	.750	.843	.682	.844	.805	.850	.855	.696	.819	.808	.897



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

	05:00 PM				04:30 PM				04:30 PM				04:45 PM			
+0 mins.	4	170	24	198	41	32	3	76	14	197	36	247	13	30	11	54
+15 mins.	3	198	21	222	34	35	5	74	6	191	48	245	16	27	14	57
+30 mins.	1	179	22	202	39	32	3	74	8	172	41	221	19	26	18	63
+45 mins.	4	190	26	220	44	37	5	86	4	226	59	289	17	46	15	78
Total Volume	12	737	93	842	158	136	16	310	32	786	184	1002	65	129	58	252
% App. Total	1.4	87.5	11		51	43.9	5.2		3.2	78.4	18.4		25.8	51.2	23	
PHF	.750	.931	.894	.948	.898	.919	.800	.901	.571	.869	.780	.867	.855	.701	.806	.808

Location: Moreno Valley
 N/S: Nason Street
 E/W: Eucalyptus Avenue



Date: 4/26/2018
 Day: Thursday

PEDESTRIANS

	North Leg Nason Street	East Leg Eucalyptus Avenue	South Leg Nason Street	West Leg Eucalyptus Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	1	3	1	5
7:15 AM	0	5	9	0	14
7:30 AM	0	6	15	5	26
7:45 AM	6	9	23	37	75
8:00 AM	0	4	10	1	15
8:15 AM	0	2	5	3	10
8:30 AM	0	1	3	0	4
8:45 AM	0	4	0	1	5
TOTAL VOLUMES:	6	32	68	48	154

	North Leg Nason Street	East Leg Eucalyptus Avenue	South Leg Nason Street	West Leg Eucalyptus Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	2	3	4	3	12
4:15 PM	0	3	2	4	9
4:30 PM	2	5	2	2	11
4:45 PM	0	0	0	0	0
5:00 PM	6	0	0	7	13
5:15 PM	1	2	2	3	8
5:30 PM	1	1	1	1	4
5:45 PM	1	0	0	2	3
TOTAL VOLUMES:	13	14	11	22	60

Location: Moreno Valley
 N/S: Nason Street
 E/W: Eucalyptus Avenue



Date: 4/26/2018
 Day: Thursday

BICYCLES

	Southbound Nason Street			Westbound Eucalyptus Avenue			Northbound Nason Street			Eastbound Eucalyptus Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	1	2
7:15 AM	0	1	1	0	0	0	0	0	0	0	0	1	3
7:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
7:45 AM	0	9	0	0	0	0	0	0	0	1	0	0	10
8:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	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	11	2	2	0	0	0	0	0	1	0	2	18

	Southbound Nason Street			Westbound Eucalyptus Avenue			Northbound Nason Street			Eastbound Eucalyptus Avenue			
	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	1	0	0	0	0	0	0	1	0	2
5:45 PM	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

City of Moreno Valley
 N/S: Nason Street
 E/W: Dracaea Avenue
 Weather: Clear

File Name : MRVNADRAM
 Site Code : 00318643
 Start Date : 9/11/2018
 Page No : 1

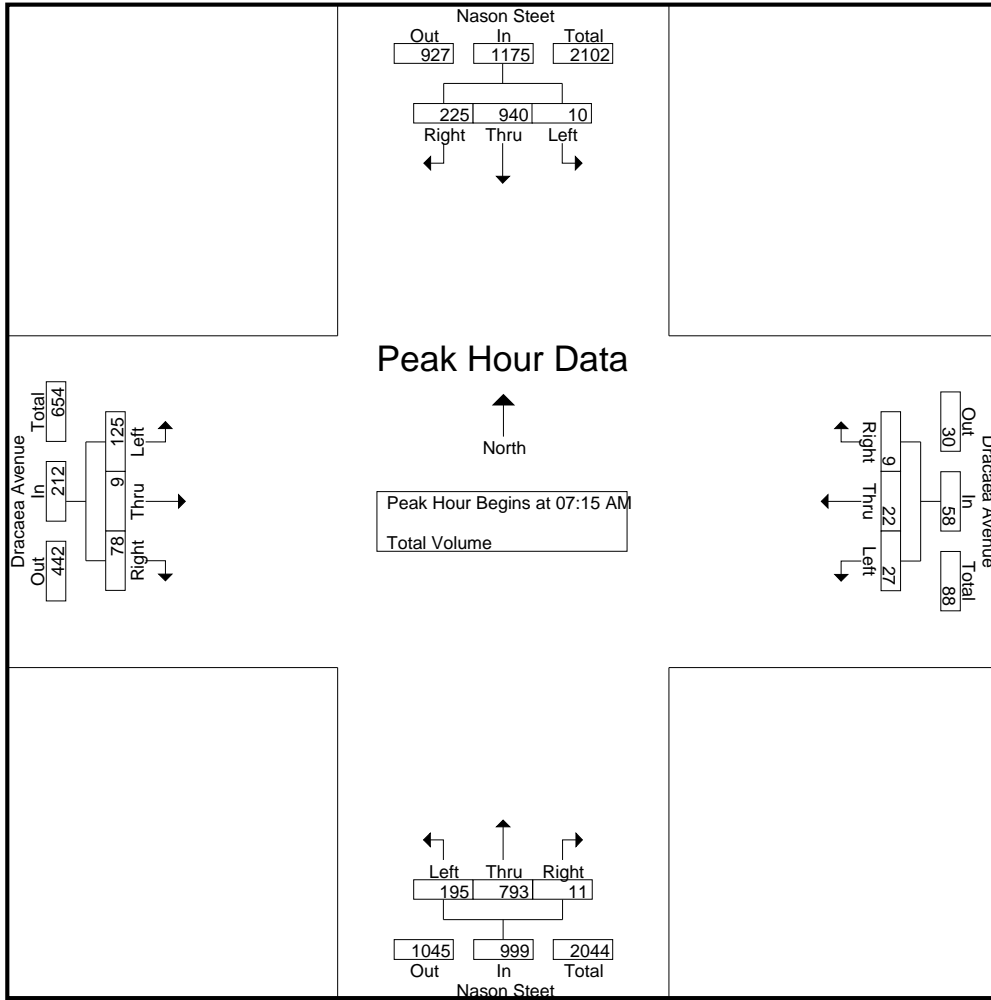
Groups Printed- Total Volume

Start Time	Nason Steet Southbound				Dracaea Avenue Westbound				Nason Steet Northbound				Dracaea Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	189	29	218	6	0	2	8	11	188	2	201	23	1	9	33	460
07:15 AM	0	211	42	253	7	2	2	11	38	173	3	214	24	2	9	35	513
07:30 AM	2	222	66	290	8	4	3	15	59	166	2	227	32	1	22	55	587
07:45 AM	2	261	70	333	11	14	3	28	78	235	4	317	32	2	31	65	743
Total	4	883	207	1094	32	20	10	62	186	762	11	959	111	6	71	188	2303
08:00 AM	6	246	47	299	1	2	1	4	20	219	2	241	37	4	16	57	601
08:15 AM	1	161	13	175	2	0	0	2	5	140	1	146	11	0	5	16	339
08:30 AM	2	124	6	132	5	1	0	6	4	100	2	106	14	0	4	18	262
08:45 AM	0	113	8	121	1	0	3	4	1	117	2	120	8	1	3	12	257
Total	9	644	74	727	9	3	4	16	30	576	7	613	70	5	28	103	1459
Grand Total	13	1527	281	1821	41	23	14	78	216	1338	18	1572	181	11	99	291	3762
Apprch %	0.7	83.9	15.4		52.6	29.5	17.9		13.7	85.1	1.1		62.2	3.8	34		
Total %	0.3	40.6	7.5	48.4	1.1	0.6	0.4	2.1	5.7	35.6	0.5	41.8	4.8	0.3	2.6	7.7	

Start Time	Nason Steet Southbound				Dracaea Avenue Westbound				Nason Steet Northbound				Dracaea Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	211	42	253	7	2	2	11	38	173	3	214	24	2	9	35	513
07:30 AM	2	222	66	290	8	4	3	15	59	166	2	227	32	1	22	55	587
07:45 AM	2	261	70	333	11	14	3	28	78	235	4	317	32	2	31	65	743
08:00 AM	6	246	47	299	1	2	1	4	20	219	2	241	37	4	16	57	601
Total Volume	10	940	225	1175	27	22	9	58	195	793	11	999	125	9	78	212	2444
% App. Total	0.9	80	19.1		46.6	37.9	15.5		19.5	79.4	1.1		59	4.2	36.8		
PHF	.417	.900	.804	.882	.614	.393	.750	.518	.625	.844	.688	.788	.845	.563	.629	.815	.822

City of Moreno Valley
 N/S: Nason Street
 E/W: Dracaea Avenue
 Weather: Clear

File Name : MRVNADRAM
 Site Code : 00318643
 Start Date : 9/11/2018
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	0	211	42	253	6	0	2	8	38	173	3	214	24	2	9	35
+15 mins.	2	222	66	290	7	2	2	11	59	166	2	227	32	1	22	55
+30 mins.	2	261	70	333	8	4	3	15	78	235	4	317	32	2	31	65
+45 mins.	6	246	47	299	11	14	3	28	20	219	2	241	37	4	16	57
Total Volume	10	940	225	1175	32	20	10	62	195	793	11	999	125	9	78	212
% App. Total	0.9	80	19.1		51.6	32.3	16.1		19.5	79.4	1.1		59	4.2	36.8	
PHF	.417	.900	.804	.882	.727	.357	.833	.554	.625	.844	.688	.788	.845	.563	.629	.815

City of Moreno Valley
 N/S: Nason Street
 E/W: Dracaea Avenue
 Weather: Clear

File Name : MRVNADRPM
 Site Code : 00318643
 Start Date : 9/11/2018
 Page No : 1

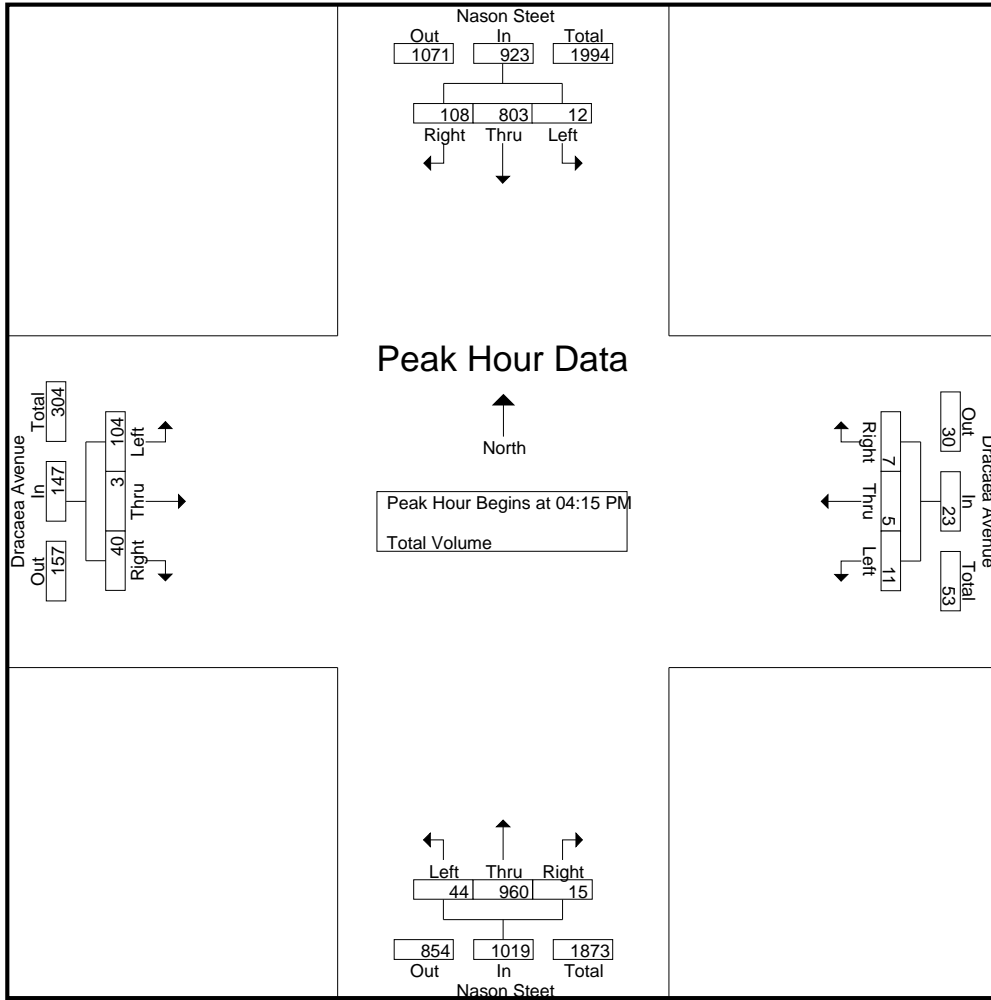
Groups Printed- Total Volume

Start Time	Nason Steet Southbound				Dracaea Avenue Westbound				Nason Steet Northbound				Dracaea Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	4	157	23	184	1	2	4	7	5	232	6	243	14	3	4	21	455
04:15 PM	3	159	23	185	3	2	0	5	13	215	5	233	26	0	14	40	463
04:30 PM	1	190	27	218	3	1	2	6	6	215	1	222	34	1	8	43	489
04:45 PM	3	228	30	261	1	0	1	2	12	259	6	277	21	1	6	28	568
Total	11	734	103	848	8	5	7	20	36	921	18	975	95	5	32	132	1975
05:00 PM	5	226	28	259	4	2	4	10	13	271	3	287	23	1	12	36	592
05:15 PM	5	145	18	168	0	0	0	0	9	168	4	181	14	0	3	17	366
05:30 PM	4	171	35	210	3	3	3	9	9	189	3	201	29	0	8	37	457
05:45 PM	8	175	22	205	4	0	3	7	12	233	6	251	33	1	14	48	511
Total	22	717	103	842	11	5	10	26	43	861	16	920	99	2	37	138	1926
Grand Total	33	1451	206	1690	19	10	17	46	79	1782	34	1895	194	7	69	270	3901
Apprch %	2	85.9	12.2		41.3	21.7	37		4.2	94	1.8		71.9	2.6	25.6		
Total %	0.8	37.2	5.3	43.3	0.5	0.3	0.4	1.2	2	45.7	0.9	48.6	5	0.2	1.8	6.9	

Start Time	Nason Steet Southbound				Dracaea Avenue Westbound				Nason Steet Northbound				Dracaea Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	3	159	23	185	3	2	0	5	13	215	5	233	26	0	14	40	463
04:30 PM	1	190	27	218	3	1	2	6	6	215	1	222	34	1	8	43	489
04:45 PM	3	228	30	261	1	0	1	2	12	259	6	277	21	1	6	28	568
05:00 PM	5	226	28	259	4	2	4	10	13	271	3	287	23	1	12	36	592
Total Volume	12	803	108	923	11	5	7	23	44	960	15	1019	104	3	40	147	2112
% App. Total	1.3	87	11.7		47.8	21.7	30.4		4.3	94.2	1.5		70.7	2	27.2		
PHF	.600	.880	.900	.884	.688	.625	.438	.575	.846	.886	.625	.888	.765	.750	.714	.855	.892

City of Moreno Valley
 N/S: Nason Street
 E/W: Dracaea Avenue
 Weather: Clear

File Name : MRVNADRPM
 Site Code : 00318643
 Start Date : 9/11/2018
 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				05:00 PM				04:15 PM				04:15 PM			
+0 mins.	3	159	23	185	4	2	4	10	13	215	5	233	26	0	14	40
+15 mins.	1	190	27	218	0	0	0	0	6	215	1	222	34	1	8	43
+30 mins.	3	228	30	261	3	3	3	9	12	259	6	277	21	1	6	28
+45 mins.	5	226	28	259	4	0	3	7	13	271	3	287	23	1	12	36
Total Volume	12	803	108	923	11	5	10	26	44	960	15	1019	104	3	40	147
% App. Total	1.3	87	11.7		42.3	19.2	38.5		4.3	94.2	1.5		70.7	2	27.2	
PHF	.600	.880	.900	.884	.688	.417	.625	.650	.846	.886	.625	.888	.765	.750	.714	.855

Location: Moreno Valley
 N/S: Nason Street
 E/W: Dracaea Avenue



Date: 9/11/2018
 Day: Tuesday

PEDESTRIANS

	North Leg Nason Street	East Leg Dracaea Avenue	South Leg Nason Street	West Leg Dracaea Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	1	2	3
7:15 AM	2	1	1	2	6
7:30 AM	4	0	2	1	7
7:45 AM	4	1	1	5	11
8:00 AM	2	0	0	0	2
8:15 AM	2	0	1	2	5
8:30 AM	0	0	0	0	0
8:45 AM	1	1	0	0	2
TOTAL VOLUMES:	15	3	6	12	36

	North Leg Nason Street	East Leg Dracaea Avenue	South Leg Nason Street	West Leg Dracaea Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	10	0	0	0	10
4:30 PM	0	0	0	0	0
4:45 PM	6	0	0	0	6
5:00 PM	2	0	0	0	2
5:15 PM	3	0	2	2	7
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	21	0	2	2	25

Location: Moreno Valley
 N/S: Nason Street
 E/W: Dracaea Avenue



Date: 9/11/2018
 Day: Tuesday

BICYCLES

	Southbound Nason Street			Westbound Dracaea Avenue			Northbound Nason Street			Eastbound Dracaea Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
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	1	0	0	2
7:45 AM	0	0	0	0	0	1	0	1	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	1	1
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	1	0	4	0	1	0	1	7

	Southbound Nason Street			Westbound Dracaea Avenue			Northbound Nason Street			Eastbound Dracaea Avenue			
	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	1	0	0	0	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	1	0	2
TOTAL VOLUMES:	0	2	0	0	0	0	0	0	0	0	1	0	3

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nason St & Cottonwood Ave
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-034
 Date: 11/9/2017

TOTAL VEHICLES

NS/EW Streets:	Nason St				Nason St				Cottonwood Ave				Cottonwood Ave					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1 NL	3 NT	0 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU		
7:00 AM	1	104	1	0	8	167	10	0	12	2	6	0	0	6	11	0	328	
7:15 AM	3	108	1	0	2	169	21	0	17	2	4	0	2	9	11	0	349	
7:30 AM	3	187	2	0	7	211	31	0	26	9	6	0	2	14	38	0	536	
7:45 AM	10	173	1	0	7	274	36	0	34	17	11	0	1	18	36	0	618	
8:00 AM	7	122	1	0	5	150	25	0	19	11	1	0	0	11	2	0	354	
8:15 AM	4	88	2	0	1	125	9	0	10	9	6	0	0	4	0	0	258	
8:30 AM	5	98	3	0	2	110	18	0	15	7	7	0	3	4	2	0	274	
8:45 AM	9	109	0	0	1	116	17	0	16	4	6	0	0	10	2	0	290	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	4.03%	94.91%	1.06%	0.00%	2.17%	86.86%	10.97%	0.00%	57.98%	23.74%	18.29%	0.00%	4.30%	40.86%	54.84%	0.00%	3007	
PEAK HR :	07:15 AM - 08:15 AM																	TOTAL
PEAK HR VOL :	23	590	5	0	21	804	113	0	96	39	22	0	5	52	87	0	1857	
PEAK HR FACTOR :	0.575	0.789	0.625	0.000	0.750	0.734	0.785	0.000	0.706	0.574	0.500	0.000	0.625	0.722	0.572	0.000	0.751	
	0.805				0.740				0.633				0.655					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1 NL	3 NT	0 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	1 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU		
4:00 PM	7	167	0	0	6	129	24	0	23	14	3	0	1	2	4	0	380	
4:15 PM	1	177	1	0	7	150	19	0	26	7	7	0	2	11	15	0	423	
4:30 PM	7	233	1	0	7	155	28	0	22	5	9	0	0	11	5	0	483	
4:45 PM	4	188	3	0	6	181	18	0	15	3	9	0	0	12	7	0	446	
5:00 PM	8	211	2	0	8	141	25	0	26	10	11	0	0	8	5	0	455	
5:15 PM	11	190	1	0	4	153	27	0	14	6	10	0	2	6	5	0	429	
5:30 PM	9	161	2	0	2	172	39	0	24	6	6	0	0	9	5	0	435	
5:45 PM	12	157	3	0	6	170	29	0	24	7	14	0	3	5	5	0	435	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	3.79%	95.37%	0.84%	0.00%	3.05%	83.07%	13.88%	0.00%	57.81%	19.27%	22.92%	0.00%	6.50%	52.03%	41.46%	0.00%	3486	
PEAK HR :	04:30 PM - 05:30 PM																	TOTAL
PEAK HR VOL :	30	822	7	0	25	630	98	0	77	24	39	0	2	37	22	0	1813	
PEAK HR FACTOR :	0.682	0.882	0.583	0.000	0.781	0.870	0.875	0.000	0.740	0.600	0.886	0.000	0.250	0.771	0.786	0.000	0.938	
	0.891				0.918				0.745				0.803					

Nason St & Alessandro Blvd

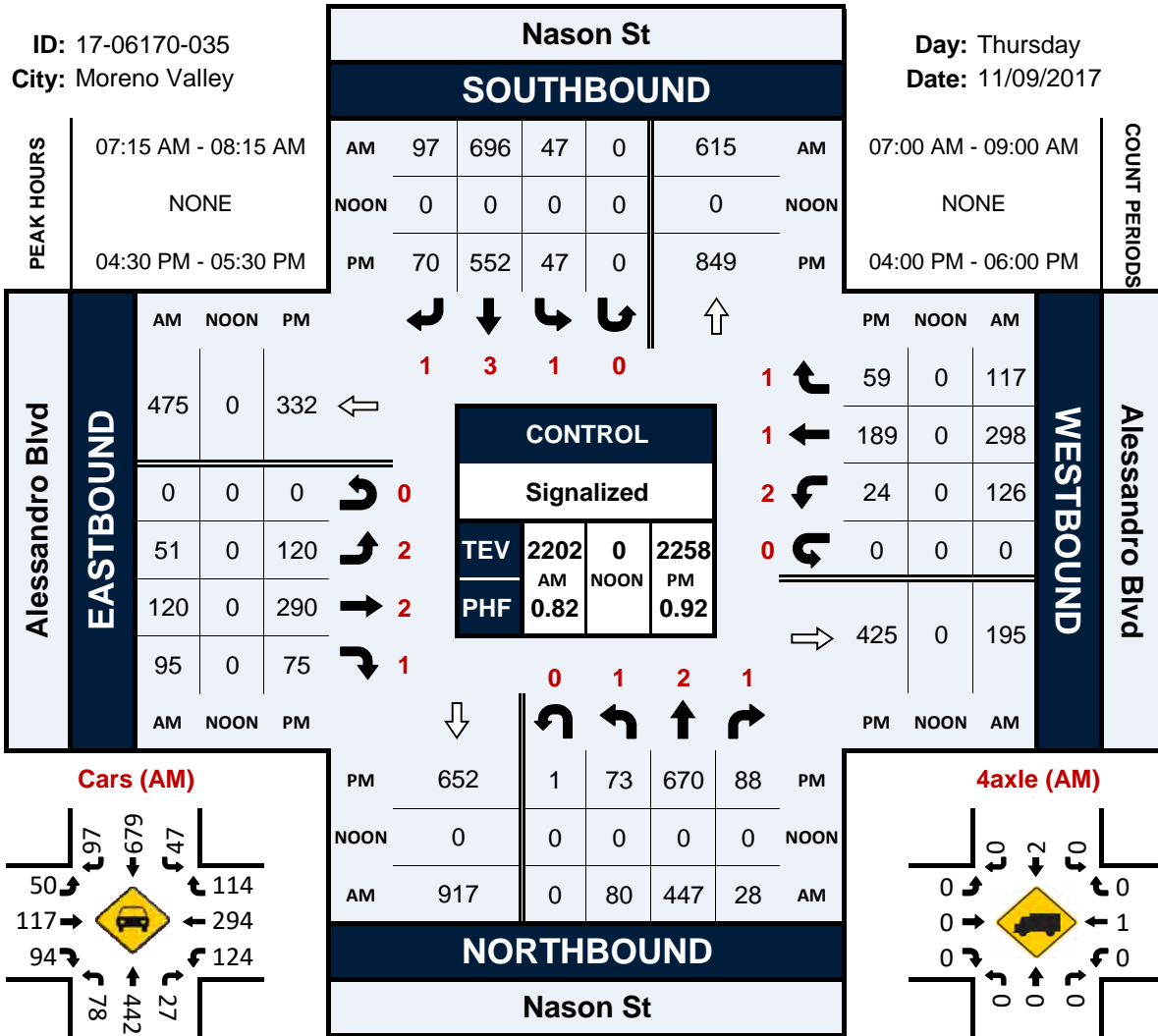
Peak Hour Turning Movement Count

ID: 17-06170-035

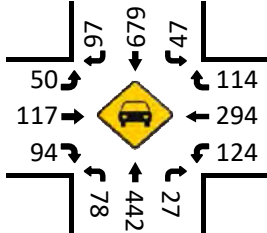
City: Moreno Valley

Day: Thursday

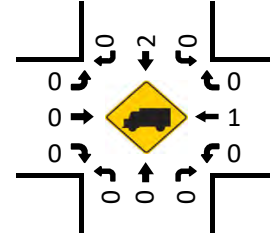
Date: 11/09/2017



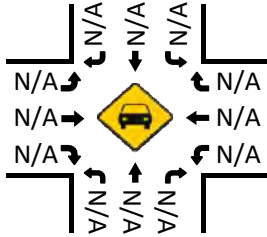
Cars (AM)



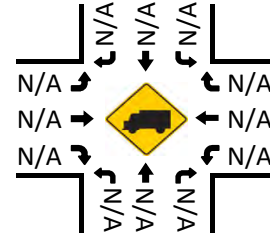
4axle (AM)



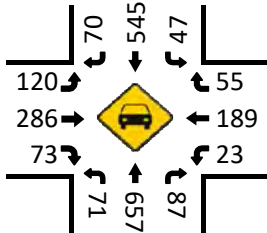
Cars (NOON)



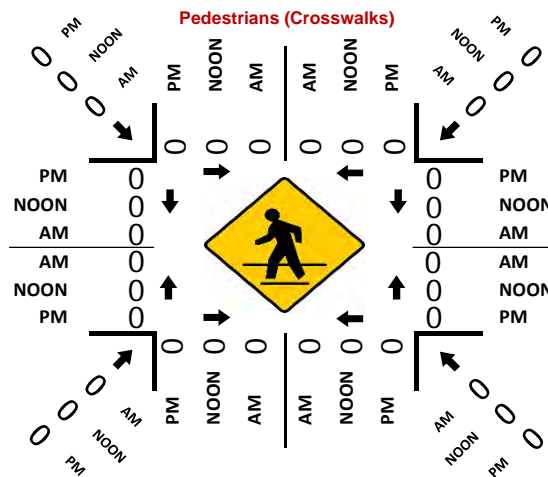
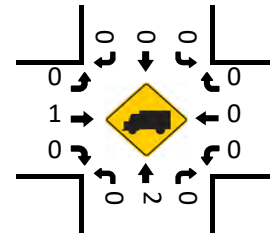
4axle (NOON)



Cars (PM)



4axle (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Nason St & Alessandro Blvd
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-035
 Date: 11/9/2017

Total

NS/EW Streets:	Nason St				Nason St				Alessandro Blvd				Alessandro Blvd				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1 NL	2 NT	1 NR	0 NU	1 SL	3 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	2 WL	1 WT	1 WR	0 WU	TOTAL
7:00 AM	13	70	3	0	8	139	15	0	14	22	10	0	24	54	16	0	388
7:15 AM	22	89	7	0	6	156	26	0	5	23	15	0	26	86	22	0	483
7:30 AM	20	129	10	0	10	183	26	0	18	32	22	0	31	84	45	0	610
7:45 AM	24	126	6	0	22	231	22	0	17	31	35	0	50	76	35	0	675
8:00 AM	14	103	5	0	9	126	23	0	11	34	23	0	19	52	15	0	434
8:15 AM	12	73	3	0	10	100	12	0	11	27	18	0	21	42	9	0	338
8:30 AM	8	70	3	0	7	104	11	0	21	47	20	0	19	52	17	0	379
8:45 AM	5	81	7	0	12	109	6	0	18	36	12	0	10	61	23	0	380
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	13.07%	82.06%	4.87%	0.00%	6.12%	83.61%	10.27%	0.00%	22.03%	48.28%	29.69%	0.00%	22.50%	57.03%	20.47%	0.00%	3687
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	80	447	28	0	47	696	97	0	51	120	95	0	126	298	117	0	2202
PEAK HR FACTOR :	0.833	0.866	0.700	0.000	0.534	0.753	0.933	0.000	0.708	0.882	0.679	0.000	0.630	0.866	0.650	0.000	0.816
	0.873				0.764				0.801				0.840				
PM	1 NL	2 NT	1 NR	0 NU	1 SL	3 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	2 WL	1 WT	1 WR	0 WU	TOTAL
4:00 PM	23	117	13	0	11	109	14	0	20	63	16	0	4	68	22	0	480
4:15 PM	19	144	11	0	12	133	15	0	27	64	15	0	7	60	11	0	518
4:30 PM	20	197	33	1	11	134	17	0	33	80	18	0	9	45	14	0	612
4:45 PM	20	159	14	0	16	153	18	0	32	66	17	0	6	48	11	0	560
5:00 PM	21	155	16	0	10	131	18	0	37	72	19	0	3	55	20	0	557
5:15 PM	12	159	25	0	10	134	17	0	18	72	21	0	6	41	14	0	529
5:30 PM	10	144	13	1	13	124	15	2	26	66	13	0	6	63	9	0	505
5:45 PM	9	140	11	0	25	163	12	3	26	44	14	0	4	48	15	0	514
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	9.01%	81.71%	9.15%	0.13%	8.18%	81.89%	9.55%	0.38%	24.91%	59.95%	15.13%	0.00%	7.64%	72.67%	19.69%	0.00%	4275
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	73	670	88	1	47	552	70	0	120	290	75	0	24	189	59	0	2258
PEAK HR FACTOR :	0.869	0.850	0.667	0.250	0.734	0.902	0.972	0.000	0.811	0.906	0.893	0.000	0.667	0.859	0.738	0.000	0.922
	0.829				0.894				0.926				0.872				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nason St & Alessandro Blvd
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-035
 Date: 11/9/2017

Cars

NS/EW Streets:	Nason St				Nason St				Alessandro Blvd				Alessandro Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	3 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	2 WL	1 WT	1 WR	0 WU	
7:00 AM	13	70	3	0	8	137	15	0	14	22	8	0	24	54	15	0	383
7:15 AM	21	86	6	0	6	152	26	0	5	22	15	0	25	85	22	0	471
7:30 AM	19	128	10	0	10	176	26	0	18	32	22	0	31	84	44	0	600
7:45 AM	24	125	6	0	22	229	22	0	16	30	35	0	50	75	34	0	668
8:00 AM	14	103	5	0	9	122	23	0	11	33	22	0	18	50	14	0	424
8:15 AM	11	72	1	0	9	99	12	0	11	26	17	0	21	42	9	0	330
8:30 AM	8	65	3	0	7	101	10	0	21	47	19	0	19	50	15	0	365
8:45 AM	5	78	6	0	11	109	6	0	18	34	11	0	10	56	23	0	367
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	13.04%	82.43%	4.54%	0.00%	6.09%	83.52%	10.39%	0.00%	22.40%	48.33%	29.27%	0.00%	22.76%	57.01%	20.23%	0.00%	3608
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	78	442	27	0	47	679	97	0	50	117	94	0	124	294	114	0	2163
PEAK HR FACTOR :	0.81	0.863	0.675	0.000	0.534	0.741	0.933	0.000	0.694	0.886	0.671	0.000	0.620	0.865	0.648	0.000	0.810
	0.871				0.754				0.806				0.836				

NS/EW Streets:	Nason St				Nason St				Alessandro Blvd				Alessandro Blvd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	3 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	2 WL	1 WT	1 WR	0 WU	
4:00 PM	22	115	12	0	11	104	14	0	20	62	16	0	4	66	22	0	468
4:15 PM	19	141	11	0	12	132	15	0	27	62	15	0	7	58	11	0	510
4:30 PM	20	196	32	1	11	132	17	0	33	78	17	0	8	45	13	0	603
4:45 PM	19	156	14	0	16	152	18	0	32	66	16	0	6	48	11	0	554
5:00 PM	20	152	16	0	10	130	18	0	37	70	19	0	3	55	17	0	547
5:15 PM	12	153	25	0	10	131	17	0	18	72	21	0	6	41	14	0	520
5:30 PM	9	142	13	1	13	123	15	2	26	66	13	0	5	62	9	0	499
5:45 PM	8	139	10	0	25	160	12	3	26	44	12	0	4	48	15	0	506
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	8.85%	81.89%	9.12%	0.14%	8.29%	81.66%	9.67%	0.38%	25.23%	59.91%	14.86%	0.00%	7.44%	73.18%	19.38%	0.00%	4207
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	71	657	87	1	47	545	70	0	120	286	73	0	23	189	55	0	2224
PEAK HR FACTOR :	0.89	0.838	0.680	0.250	0.734	0.896	0.972	0.000	0.811	0.917	0.869	0.000	0.719	0.859	0.809	0.000	0.922
	0.819				0.890				0.936				0.890				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nason St & Alessandro Blvd
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-035
 Date: 11/9/2017

2axle

NS/EW Streets:	Nason St				Nason St				Alessandro Blvd				Alessandro Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	4
7:15 AM	1	3	1	0	0	3	0	0	0	1	0	0	1	1	0	0	11
7:30 AM	1	1	0	0	0	5	0	0	0	0	0	0	0	0	1	0	8
7:45 AM	0	1	0	0	0	2	0	0	1	1	0	0	0	1	1	0	7
8:00 AM	0	0	0	0	0	4	0	0	0	1	1	0	1	1	0	0	8
8:15 AM	1	0	2	0	1	1	0	0	0	1	1	0	0	0	0	0	7
8:30 AM	0	5	0	0	0	3	1	0	0	0	1	0	0	2	2	0	14
8:45 AM	0	3	1	0	1	0	0	0	0	2	1	0	0	5	0	0	13
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	15.00%	65.00%	20.00%	0.00%	8.70%	86.96%	4.35%	0.00%	7.69%	46.15%	46.15%	0.00%	12.50%	62.50%	25.00%	0.00%	72
PEAK HR:	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL:	2	5	1	0	0	14	0	0	1	3	1	0	2	3	2	0	34
PEAK HR FACTOR:	0.500	0.417	0.250	0.000	0.000	0.700	0.000	0.000	0.250	0.750	0.250	0.000	0.500	0.750	0.500	0.000	0.773
	0.400				0.700				0.625				0.875				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	1	2	1	0	0	3	0	0	0	1	0	0	0	2	0	0	10
4:15 PM	0	3	0	0	0	1	0	0	0	2	0	0	0	2	0	0	8
4:30 PM	0	1	1	0	0	2	0	0	0	1	1	0	1	0	1	0	8
4:45 PM	1	3	0	0	0	1	0	0	0	0	1	0	0	0	0	0	6
5:00 PM	1	2	0	0	0	1	0	0	0	1	0	0	0	0	3	0	8
5:15 PM	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	0	8
5:30 PM	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	3
5:45 PM	1	1	1	0	0	3	0	0	0	0	2	0	0	0	0	0	8
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	20.00%	68.00%	12.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	55.56%	44.44%	0.00%	20.00%	40.00%	40.00%	0.00%	59
PEAK HR:	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL:	2	11	1	0	0	7	0	0	0	2	2	0	1	0	4	0	30
PEAK HR FACTOR:	0.50	0.550	0.250	0.000	0.000	0.583	0.000	0.000	0.000	0.500	0.500	0.000	0.250	0.000	0.333	0.000	0.938
	0.700				0.583				0.500				0.417				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nason St & Alessandro Blvd
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-035
 Date: 11/9/2017

3axle

NS/EW Streets:	Nason St				Nason St				Alessandro Blvd				Alessandro Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	3 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	2 WL	1 WT	1 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	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	0	1	0	1
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	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	0	0	0	0
TOTAL VOLUMES :	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	4
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0.00%	0.00%	100.00%	0.00%	4
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500
					0.250												

NS/EW Streets:	Nason St				Nason St				Alessandro Blvd				Alessandro Blvd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	3 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	2 WL	1 WT	1 WR	0 WU	
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	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	0	0	0	0
5:00 PM	0	0	0	0	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	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	3
APPROACH %'s :	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	3
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
					0.250												

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nason St & Alessandro Blvd
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-035
 Date: 11/9/2017

4axle

NS/EW Streets:	Nason St				Nason St				Alessandro Blvd				Alessandro Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	3 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	2 WL	1 WT	1 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	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	1	0	0	1
8:15 AM	0	0	0	0	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	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0.00%	100.00%	0.00%	0.00%	0	0	0	0	0.00%	100.00%	0.00%	0.00%	3
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.750
					0.500								0.250				

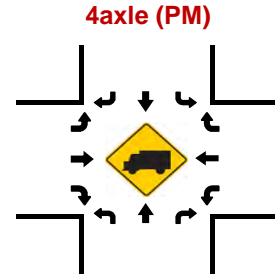
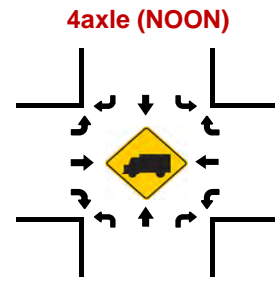
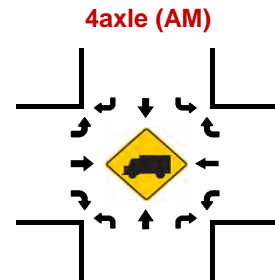
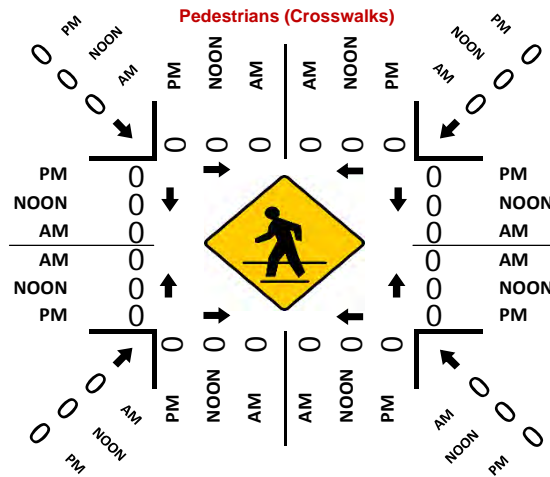
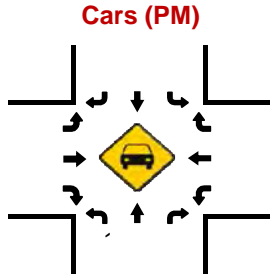
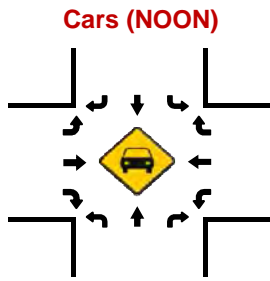
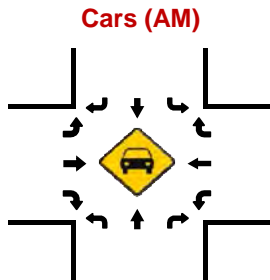
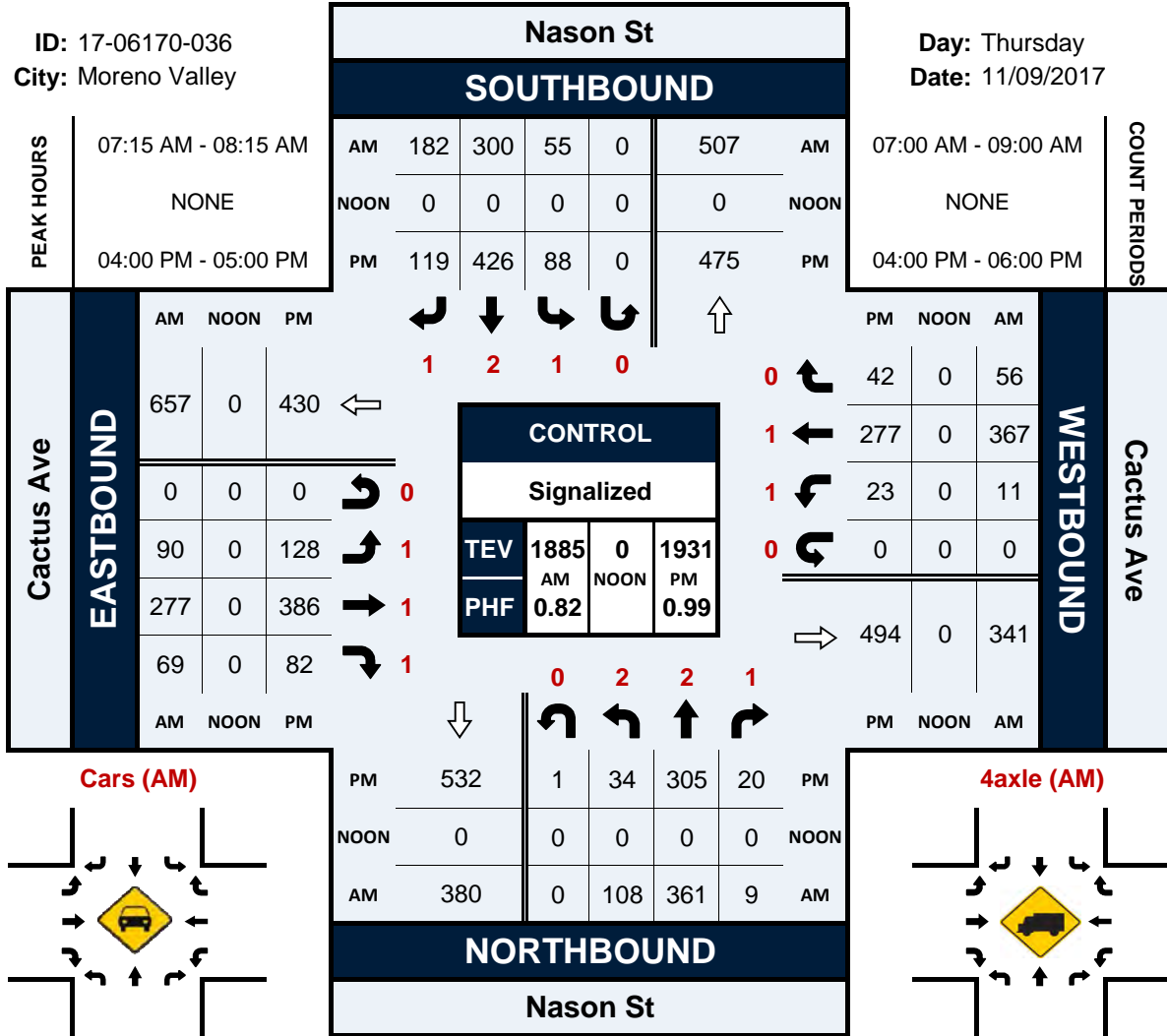
NS/EW Streets:	Nason St				Nason St				Alessandro Blvd				Alessandro Blvd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	3 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	2 WL	1 WT	1 WR	0 WU	
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	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	1	0	0	0	0	0	0	2
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	4	0	0	0	1	0	0	0	1	0	0	0	0	0	0	6
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.00	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.375
					0.500								0.250				

Nason St & Cactus Ave

Peak Hour Turning Movement Count

ID: 17-06170-036
City: Moreno Valley

Day: Thursday
Date: 11/09/2017



National Data & Surveying Services

Intersection Turning Movement Count

Location: Nason St & Cactus Ave
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-036
 Date: 11/9/2017

Total

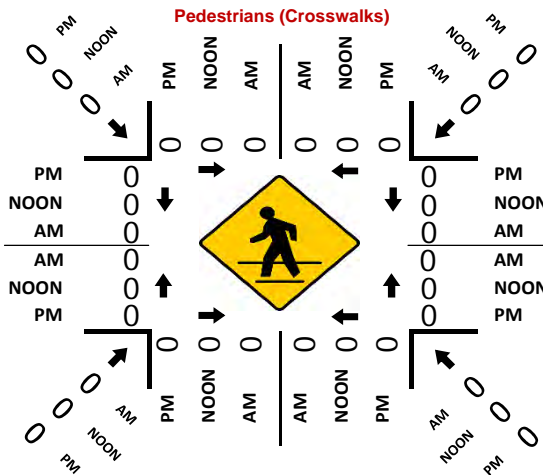
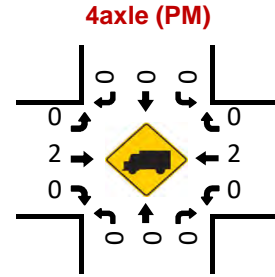
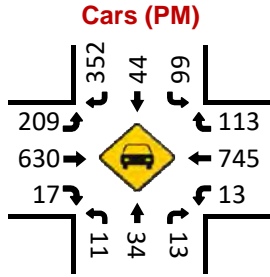
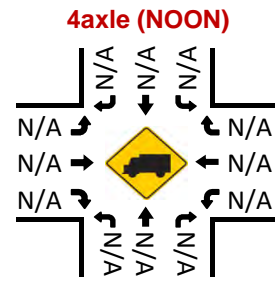
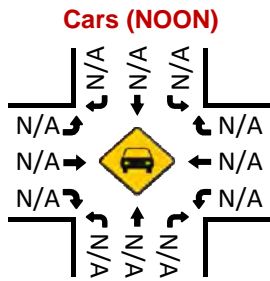
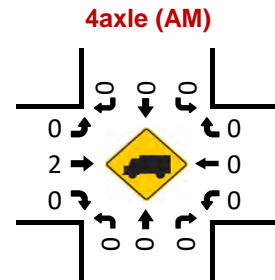
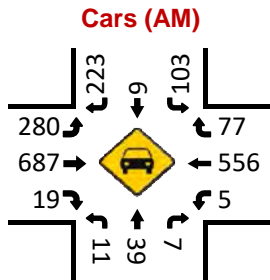
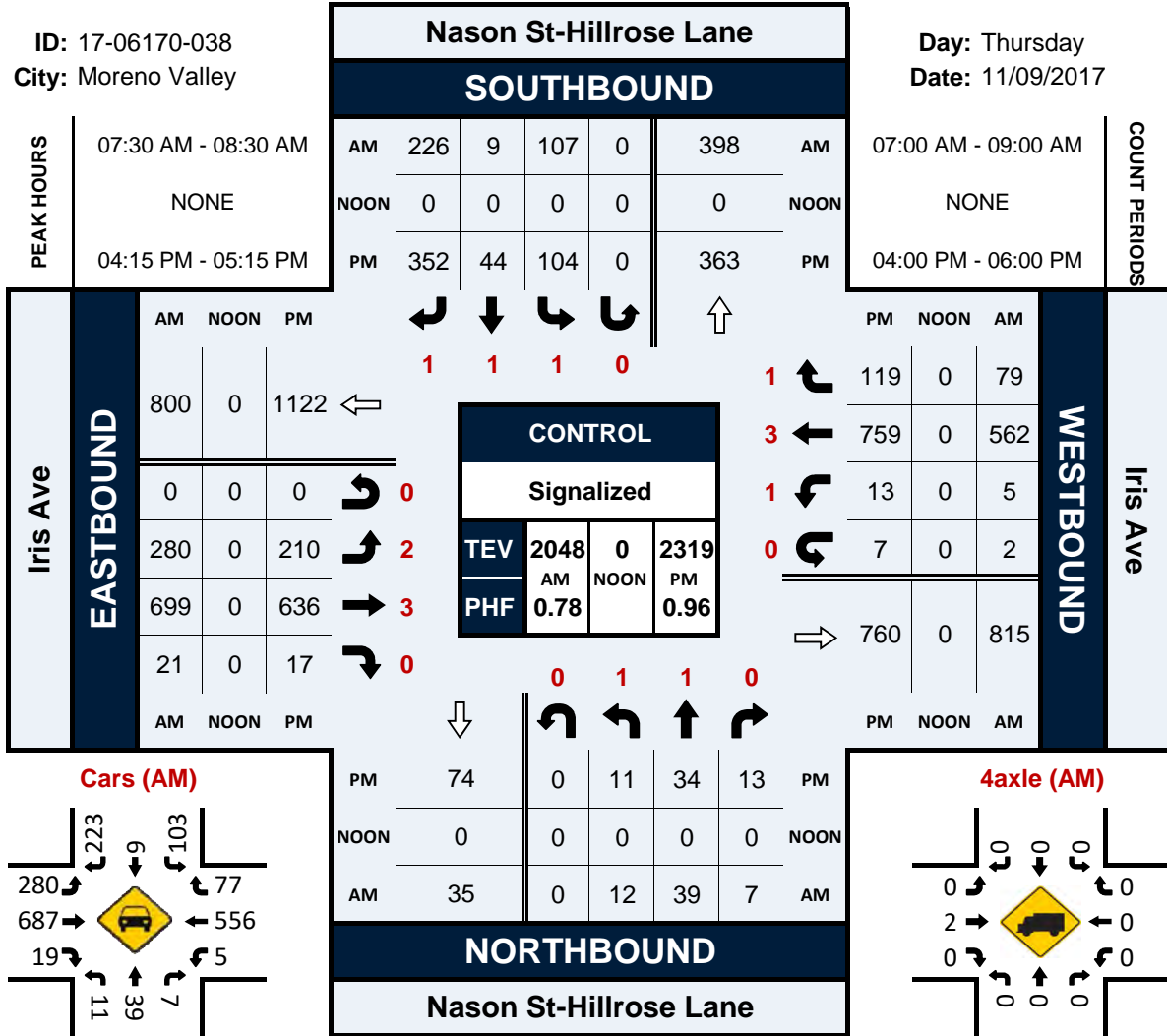
NS/EW Streets:	Nason St				Nason St				Cactus Ave				Cactus Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	22	78	4	0	6	68	31	0	12	29	7	0	0	70	12	1	340
7:15 AM	17	79	3	0	8	68	42	0	22	36	5	0	5	86	17	0	388
7:30 AM	25	99	2	0	17	91	51	0	21	58	17	0	2	97	16	0	496
7:45 AM	45	99	0	0	23	80	48	0	27	93	17	0	3	127	16	0	578
8:00 AM	21	84	4	0	7	61	41	0	20	90	30	0	1	57	7	0	423
8:15 AM	13	58	0	0	10	53	27	0	20	55	9	0	1	58	8	0	312
8:30 AM	15	50	5	0	13	62	21	0	13	95	24	0	2	77	13	0	390
8:45 AM	16	59	1	0	3	51	25	0	17	61	10	0	2	110	13	0	368
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	21.78%	75.84%	2.38%	0.00%	9.59%	58.88%	31.53%	0.00%	19.29%	65.61%	15.10%	0.00%	2.00%	85.14%	12.73%	0.12%	3295
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	108	361	9	0	55	300	182	0	90	277	69	0	11	367	56	0	1885
PEAK HR FACTOR :	0.600	0.912	0.563	0.000	0.598	0.824	0.892	0.000	0.833	0.745	0.575	0.000	0.550	0.722	0.824	0.000	0.815
	0.830				0.844				0.779				0.743				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	7	77	7	0	18	97	23	0	29	108	21	0	8	82	12	0	489
4:15 PM	9	83	7	0	18	106	35	0	24	88	16	0	3	82	10	0	481
4:30 PM	13	77	3	0	30	111	34	0	32	93	20	0	8	53	8	0	482
4:45 PM	5	68	3	1	22	112	27	0	43	97	25	0	4	60	12	0	479
5:00 PM	14	93	2	0	20	109	36	0	26	64	13	0	6	60	20	0	463
5:15 PM	8	83	2	0	32	101	30	0	33	95	22	0	4	63	19	0	492
5:30 PM	10	76	2	1	21	116	23	0	32	65	23	0	6	45	12	0	432
5:45 PM	6	62	2	0	22	114	23	0	37	63	18	0	8	44	15	0	414
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	9.99%	85.85%	3.88%	0.28%	14.30%	67.66%	18.05%	0.00%	23.55%	61.91%	14.54%	0.00%	7.30%	75.93%	16.77%	0.00%	3732
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	34	305	20	1	88	426	119	0	128	386	82	0	23	277	42	0	1931
PEAK HR FACTOR :	0.654	0.919	0.714	0.250	0.733	0.951	0.850	0.000	0.744	0.894	0.820	0.000	0.719	0.845	0.875	0.000	0.987
	0.909				0.904				0.903				0.838				

Nason St-Hillrose Lane & Iris Ave

Peak Hour Turning Movement Count

ID: 17-06170-038
City: Moreno Valley

Day: Thursday
Date: 11/09/2017



National Data & Surveying Services

Intersection Turning Movement Count

Location: Nason St-Hillrose Lane & Iris Ave
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-038
 Date: 11/9/2017

Total

NS/EW Streets:	Nason St-Hillrose Lane				Nason St-Hillrose Lane				Iris Ave				Iris Ave					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	2 EL	3 ET	0 ER	0 EU	1 WL	3 WT	1 WR	0 WU		
7:00 AM	9	10	5	0	11	4	63	0	58	111	2	0	2	134	17	1	427	
7:15 AM	5	11	1	0	7	3	66	0	57	117	5	0	3	131	21	1	428	
7:30 AM	2	13	4	0	26	2	53	0	77	127	7	0	2	178	21	1	513	
7:45 AM	5	14	0	0	30	4	99	0	107	200	7	0	0	160	32	0	658	
8:00 AM	2	9	2	0	28	2	42	0	58	187	3	0	0	99	13	1	446	
8:15 AM	3	3	1	0	23	1	32	0	38	185	4	0	3	125	13	0	431	
8:30 AM	2	3	1	0	17	5	40	0	29	184	1	0	1	112	22	2	419	
8:45 AM	2	6	1	0	17	2	38	0	40	142	1	0	1	139	16	3	408	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	30	69	15	0	159	23	433	0	464	1253	30	0	12	1078	155	9	3730	
	26.32%	60.53%	13.16%	0.00%	25.85%	3.74%	70.41%	0.00%	26.56%	71.72%	1.72%	0.00%	0.96%	85.96%	12.36%	0.72%		
PEAK HR :	07:30 AM - 08:30 AM																	TOTAL
PEAK HR VOL :	12	39	7	0	107	9	226	0	280	699	21	0	5	562	79	2	2048	
PEAK HR FACTOR :	0.600	0.696	0.438	0.000	0.892	0.563	0.571	0.000	0.654	0.874	0.750	0.000	0.417	0.789	0.617	0.500	0.778	
	0.763				0.643				0.796				0.802					
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	2 EL	3 ET	0 ER	0 EU	1 WL	3 WT	1 WR	0 WU		
4:00 PM	4	9	3	0	23	9	72	0	62	182	5	0	3	184	23	0	579	
4:15 PM	1	7	2	0	29	6	85	0	55	154	4	0	5	179	22	0	549	
4:30 PM	3	9	2	0	31	6	86	0	46	156	6	0	1	178	34	1	559	
4:45 PM	4	6	4	0	27	15	102	0	48	177	3	0	2	191	25	2	606	
5:00 PM	3	12	5	0	17	17	79	0	61	149	4	0	5	211	38	4	605	
5:15 PM	1	8	0	0	22	8	96	2	59	149	4	0	7	159	20	1	536	
5:30 PM	4	6	0	0	24	9	95	1	44	161	4	0	4	173	22	0	547	
5:45 PM	0	6	3	0	27	14	106	0	50	133	4	0	1	164	18	1	527	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	20	63	19	0	200	84	721	3	425	1261	34	0	28	1439	202	9	4508	
	19.61%	61.76%	18.63%	0.00%	19.84%	8.33%	71.53%	0.30%	24.71%	73.31%	1.98%	0.00%	1.67%	85.76%	12.04%	0.54%		
PEAK HR :	04:15 PM - 05:15 PM																	TOTAL
PEAK HR VOL :	11	34	13	0	104	44	352	0	210	636	17	0	13	759	119	7	2319	
PEAK HR FACTOR :	0.688	0.708	0.650	0.000	0.839	0.647	0.863	0.000	0.861	0.898	0.708	0.000	0.650	0.899	0.783	0.438	0.957	
	0.725				0.868				0.946				0.870					

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nason St-Hillrose Lane & Iris Ave
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-038
 Date: 11/9/2017

Cars

NS/EW Streets:	Nason St-Hillrose Lane				Nason St-Hillrose Lane				Iris Ave				Iris Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	2 EL	3 ET	0 ER	0 EU	1 WL	3 WT	1 WR	0 WU	
7:00 AM	9	10	5	0	9	4	63	0	57	105	2	0	2	133	17	1	417
7:15 AM	5	11	1	0	6	3	64	0	57	113	5	0	3	129	19	1	417
7:30 AM	2	13	4	0	23	2	52	0	77	125	7	0	2	174	21	1	503
7:45 AM	4	14	0	0	30	4	99	0	107	198	5	0	0	159	30	0	650
8:00 AM	2	9	2	0	27	2	41	0	58	183	3	0	0	99	13	1	440
8:15 AM	3	3	1	0	23	1	31	0	38	181	4	0	3	124	13	0	425
8:30 AM	2	3	1	0	17	5	40	0	28	179	1	0	1	111	21	2	411
8:45 AM	2	5	1	0	16	2	38	0	39	139	1	0	1	136	15	3	398
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	25.89%	60.71%	13.39%	0.00%	25.08%	3.82%	71.10%	0.00%	26.93%	71.44%	1.64%	0.00%	0.97%	86.23%	12.06%	0.73%	3661
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	11	39	7	0	103	9	223	0	280	687	19	0	5	556	77	2	2018
PEAK HR FACTOR :	0.69	0.696	0.438	0.000	0.858	0.563	0.563	0.000	0.654	0.867	0.679	0.000	0.417	0.799	0.642	0.500	0.776
	0.750				0.630				0.795				0.808				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	2 EL	3 ET	0 ER	0 EU	1 WL	3 WT	1 WR	0 WU	
4:00 PM	4	8	3	0	23	9	70	0	59	180	5	0	3	180	22	0	566
4:15 PM	1	7	2	0	28	6	85	0	55	150	4	0	5	178	20	0	541
4:30 PM	3	9	2	0	31	6	86	0	46	155	6	0	1	173	33	1	552
4:45 PM	4	6	4	0	23	15	102	0	48	176	3	0	2	187	24	2	596
5:00 PM	3	12	5	0	17	17	79	0	60	149	4	0	5	207	36	4	598
5:15 PM	1	8	0	0	22	8	94	2	58	148	4	0	7	158	20	1	531
5:30 PM	4	6	0	0	24	9	95	1	43	161	3	0	4	172	22	0	544
5:45 PM	0	6	3	0	27	13	104	0	50	133	4	0	1	162	16	1	520
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	19.80%	61.39%	18.81%	0.00%	19.58%	8.33%	71.79%	0.30%	24.59%	73.47%	1.94%	0.00%	1.70%	86.04%	11.72%	0.55%	4448
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	11	34	13	0	99	44	352	0	209	630	17	0	13	745	113	7	2287
PEAK HR FACTOR :	0.69	0.708	0.650	0.000	0.798	0.647	0.863	0.000	0.871	0.895	0.708	0.000	0.650	0.900	0.785	0.438	0.956
	0.725				0.884				0.943				0.871				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nason St-Hillrose Lane & Iris Ave
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-038
 Date: 11/9/2017

2axle

NS/EW Streets:	Nason St-Hillrose Lane				Nason St-Hillrose Lane				Iris Ave				Iris Ave					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
7:00 AM	0	0	0	0	2	0	0	0	1	6	0	0	0	1	0	0	0	10
7:15 AM	0	0	0	0	1	0	1	0	0	3	0	0	0	0	2	2	0	9
7:30 AM	0	0	0	0	3	0	1	0	0	2	0	0	0	0	4	0	0	10
7:45 AM	1	0	0	0	0	0	0	0	0	1	2	0	0	0	1	1	0	6
8:00 AM	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	1	0	0	3	0	0	0	0	1	0	0	5
8:30 AM	0	0	0	0	0	0	0	0	1	5	0	0	0	0	1	1	0	8
8:45 AM	0	1	0	0	1	0	0	0	1	3	0	0	0	0	2	1	0	9
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	1	1	0	0	8	0	4	0	3	25	2	0	0	12	5	0	61	
	50.00%	50.00%	0.00%	0.00%	66.67%	0.00%	33.33%	0.00%	10.00%	83.33%	6.67%	0.00%	0.00%	70.59%	29.41%	0.00%		
PEAK HR :	07:30 AM - 08:30 AM																TOTAL	
PEAK HR VOL :	1	0	0	0	4	0	3	0	0	8	2	0	0	6	1	0	25	
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.333	0.000	0.750	0.000	0.000	0.667	0.250	0.000	0.000	0.375	0.250	0.000	0.625	
				0.250			0.438				0.833				0.438			
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
4:00 PM	0	1	0	0	0	0	1	0	2	1	0	0	0	3	1	0	9	
4:15 PM	0	0	0	0	1	0	0	0	0	3	0	0	0	0	2	0	6	
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	5	
4:45 PM	0	0	0	0	4	0	0	0	0	1	0	0	0	2	1	0	8	
5:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	3	2	0	6	
5:15 PM	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	4	
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	0	4	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	1	0	0	5	1	2	0	4	6	1	0	0	15	9	0	44	
	0.00%	100.00%	0.00%	0.00%	62.50%	12.50%	25.00%	0.00%	36.36%	54.55%	9.09%	0.00%	0.00%	62.50%	37.50%	0.00%		
PEAK HR :	04:15 PM - 05:15 PM																TOTAL	
PEAK HR VOL :	0	0	0	0	5	0	0	0	1	4	0	0	0	9	6	0	25	
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.313	0.000	0.000	0.000	0.250	0.333	0.000	0.000	0.000	0.563	0.750	0.000	0.781	
							0.313				0.417				0.750			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nason St-Hillrose Lane & Iris Ave
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-038
 Date: 11/9/2017

3axle

NS/EW Streets:	Nason St-Hillrose Lane				Nason St-Hillrose Lane				Iris Ave				Iris Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	2 EL	3 ET	0 ER	0 EU	1 WL	3 WT	1 WR	0 WU	TOTAL
7:00 AM	0	0	0	0	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	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	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	1	0	0	0	0	1	0	2
8:00 AM	0	0	0	0	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	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	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	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	4
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.250	0.000	0.375
									0.500				0.250				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	1 NT	0 NR	0 NU	1 SL	1 ST	1 SR	0 SU	2 EL	3 ET	0 ER	0 EU	1 WL	3 WT	1 WR	0 WU	TOTAL
4:00 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	3
4:15 PM	0	0	0	0	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	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	9
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.750
													0.750				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nason St-Hillrose Lane & Iris Ave
 City: Moreno Valley
 Control: Signalized

Project ID: 17-06170-038
 Date: 11/9/2017

4axle

NS/EW Streets:	Nason St-Hillrose Lane				Nason St-Hillrose Lane				Iris Ave				Iris Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	1	0	2	3	0	0	1	3	1	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	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	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	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	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	4
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	1	0	2	3	0	0	1	3	1	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
4:30 PM	0	0	0	0	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	1	0	0	1
5:00 PM	0	0	0	0	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	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0.00%	0.00%	100.00%	0.00%	25.00%	75.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	7
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.500

APPENDIX B-2:

YEAR 2021 TRAFFIC COUNT SHEETS

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir AM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 1

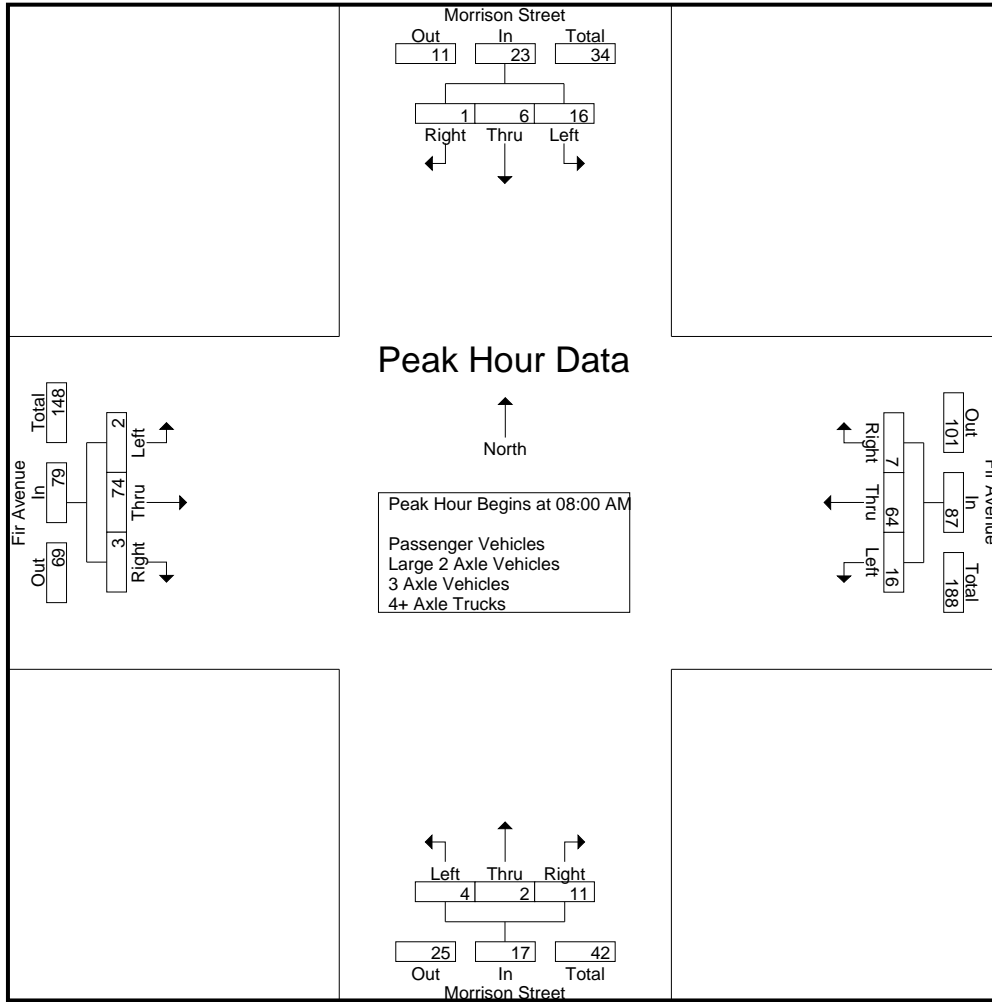
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	2	0	0	2	4	12	0	16	0	0	2	2	1	18	2	21	41
07:15 AM	1	0	0	1	4	8	0	12	2	1	2	5	0	13	2	15	33
07:30 AM	2	1	0	3	4	12	0	16	0	0	3	3	0	14	0	14	36
07:45 AM	3	0	0	3	6	10	0	16	0	3	4	7	0	9	1	10	36
Total	8	1	0	9	18	42	0	60	2	4	11	17	1	54	5	60	146
08:00 AM	3	3	0	6	4	7	1	12	1	0	0	1	0	22	0	22	41
08:15 AM	4	0	0	4	1	23	2	26	1	1	7	9	0	15	0	15	54
08:30 AM	5	2	1	8	7	16	2	25	1	1	2	4	2	20	1	23	60
08:45 AM	4	1	0	5	4	18	2	24	1	0	2	3	0	17	2	19	51
Total	16	6	1	23	16	64	7	87	4	2	11	17	2	74	3	79	206
Grand Total	24	7	1	32	34	106	7	147	6	6	22	34	3	128	8	139	352
Apprch %	75	21.9	3.1		23.1	72.1	4.8		17.6	17.6	64.7		2.2	92.1	5.8		
Total %	6.8	2	0.3	9.1	9.7	30.1	2	41.8	1.7	1.7	6.2	9.7	0.9	36.4	2.3	39.5	
Passenger Vehicles	24	7	1	32	33	106	7	146	6	6	20	32	3	127	7	137	347
% Passenger Vehicles	100	100	100	100	97.1	100	100	99.3	100	100	90.9	94.1	100	99.2	87.5	98.6	98.6
Large 2 Axle Vehicles	0	0	0	0	1	0	0	1	0	0	2	2	0	1	1	2	5
% Large 2 Axle Vehicles	0	0	0	0	2.9	0	0	0.7	0	0	9.1	5.9	0	0.8	12.5	1.4	1.4
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	3	3	0	6	4	7	1	12	1	0	0	1	0	22	0	22	41
08:15 AM	4	0	0	4	1	23	2	26	1	1	7	9	0	15	0	15	54
08:30 AM	5	2	1	8	7	16	2	25	1	1	2	4	2	20	1	23	60
08:45 AM	4	1	0	5	4	18	2	24	1	0	2	3	0	17	2	19	51
Total Volume	16	6	1	23	16	64	7	87	4	2	11	17	2	74	3	79	206
% App. Total	69.6	26.1	4.3		18.4	73.6	8		23.5	11.8	64.7		2.5	93.7	3.8		
PHF	.800	.500	.250	.719	.571	.696	.875	.837	1.00	.500	.393	.472	.250	.841	.375	.859	.858

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir AM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 2



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

	08:00 AM				08:00 AM				07:45 AM				08:00 AM			
+0 mins.	3	3	0	6	4	7	1	12	0	3	4	7	0	22	0	22
+15 mins.	4	0	0	4	1	23	2	26	1	0	0	1	0	15	0	15
+30 mins.	5	2	1	8	7	16	2	25	1	1	7	9	2	20	1	23
+45 mins.	4	1	0	5	4	18	2	24	1	1	2	4	0	17	2	19
Total Volume	16	6	1	23	16	64	7	87	3	5	13	21	2	74	3	79
% App. Total	69.6	26.1	4.3		18.4	73.6	8		14.3	23.8	61.9		2.5	93.7	3.8	
PHF	.800	.500	.250	.719	.571	.696	.875	.837	.750	.417	.464	.583	.250	.841	.375	.859

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir AM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 1

Groups Printed- Passenger Vehicles

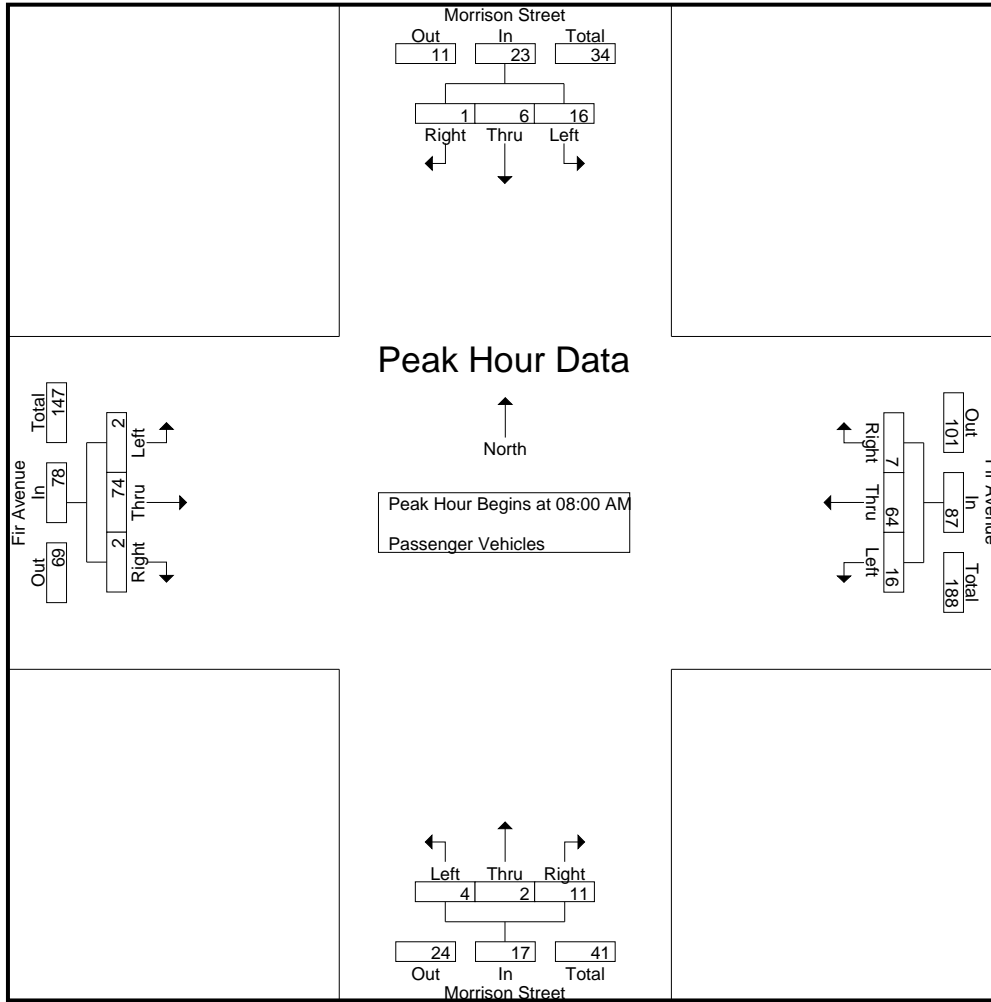
Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	2	0	0	2	4	12	0	16	0	0	0	0	1	18	2	21	39
07:15 AM	1	0	0	1	4	8	0	12	2	1	2	5	0	12	2	14	32
07:30 AM	2	1	0	3	4	12	0	16	0	0	3	3	0	14	0	14	36
07:45 AM	3	0	0	3	5	10	0	15	0	3	4	7	0	9	1	10	35
Total	8	1	0	9	17	42	0	59	2	4	9	15	1	53	5	59	142
08:00 AM	3	3	0	6	4	7	1	12	1	0	0	1	0	22	0	22	41
08:15 AM	4	0	0	4	1	23	2	26	1	1	7	9	0	15	0	15	54
08:30 AM	5	2	1	8	7	16	2	25	1	1	2	4	2	20	0	22	59
08:45 AM	4	1	0	5	4	18	2	24	1	0	2	3	0	17	2	19	51
Total	16	6	1	23	16	64	7	87	4	2	11	17	2	74	2	78	205
Grand Total	24	7	1	32	33	106	7	146	6	6	20	32	3	127	7	137	347
Apprch %	75	21.9	3.1		22.6	72.6	4.8		18.8	18.8	62.5		2.2	92.7	5.1		
Total %	6.9	2	0.3	9.2	9.5	30.5	2	42.1	1.7	1.7	5.8	9.2	0.9	36.6	2	39.5	

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
08:00 AM	3	3	0	6	4	7	1	12	1	0	0	1	0	22	0	22	41
08:15 AM	4	0	0	4	1	23	2	26	1	1	7	9	0	15	0	15	54
08:30 AM	5	2	1	8	7	16	2	25	1	1	2	4	2	20	0	22	59
08:45 AM	4	1	0	5	4	18	2	24	1	0	2	3	0	17	2	19	51
Total Volume	16	6	1	23	16	64	7	87	4	2	11	17	2	74	2	78	205
% App. Total	69.6	26.1	4.3		18.4	73.6	8		23.5	11.8	64.7		2.6	94.9	2.6		
PHF	.800	.500	.250	.719	.571	.696	.875	.837	1.00	.500	.393	.472	.250	.841	.250	.886	.869

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

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir AM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 2



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

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	3	3	0	6	4	7	1	12	1	0	0	1	0	22	0	22
+15 mins.	4	0	0	4	1	23	2	26	1	1	7	9	0	15	0	15
+30 mins.	5	2	1	8	7	16	2	25	1	1	2	4	2	20	0	22
+45 mins.	4	1	0	5	4	18	2	24	1	0	2	3	0	17	2	19
Total Volume	16	6	1	23	16	64	7	87	4	2	11	17	2	74	2	78
% App. Total	69.6	26.1	4.3		18.4	73.6	8		23.5	11.8	64.7		2.6	94.9	2.6	
PHF	.800	.500	.250	.719	.571	.696	.875	.837	1.000	.500	.393	.472	.250	.841	.250	.886

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir AM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

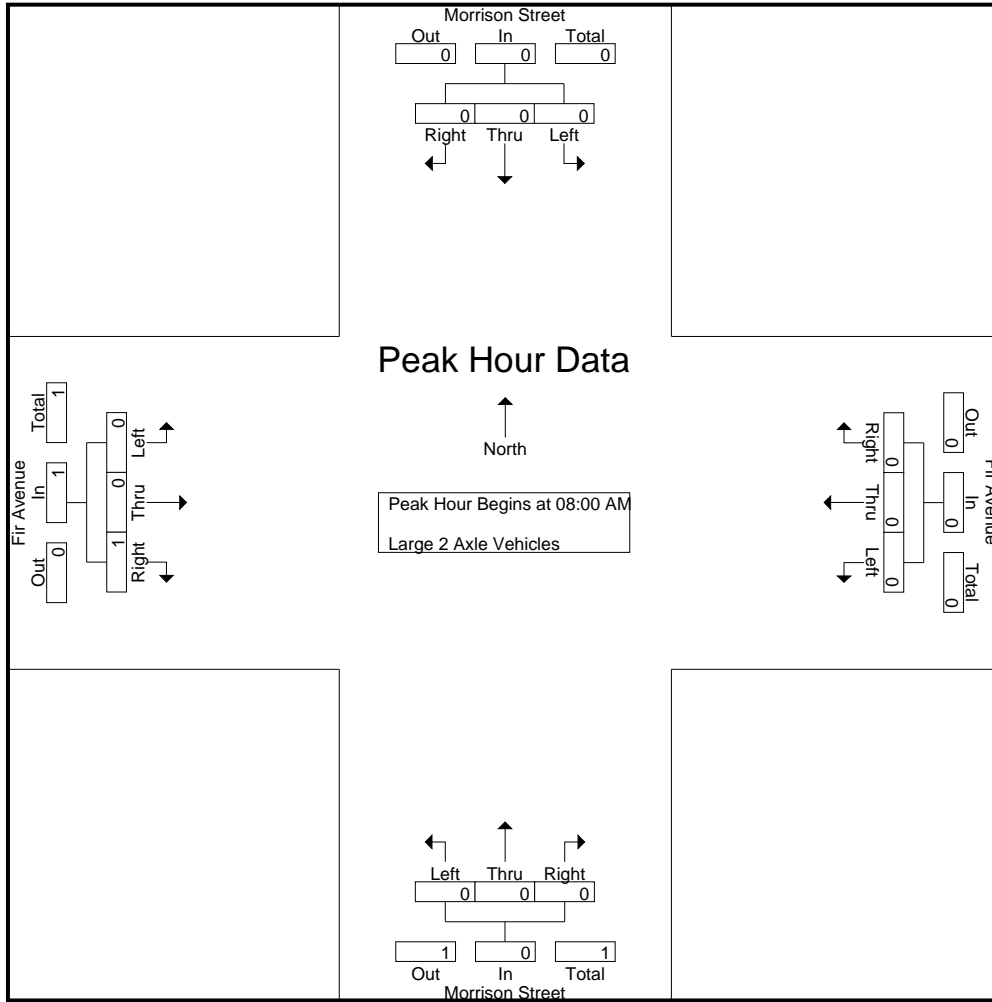
Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	1	0	0	1	0	0	2	2	0	1	0	1	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Grand Total	0	0	0	0	1	0	0	1	0	0	2	2	0	1	1	2	5
Apprch %	0	0	0		100	0	0		0	0	100		0	50	50		
Total %	0	0	0	0	20	0	0	20	0	0	40	40	0	20	20	40	

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0	0		0	0	0		0	0	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250

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

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir AM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 2



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

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

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir AM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

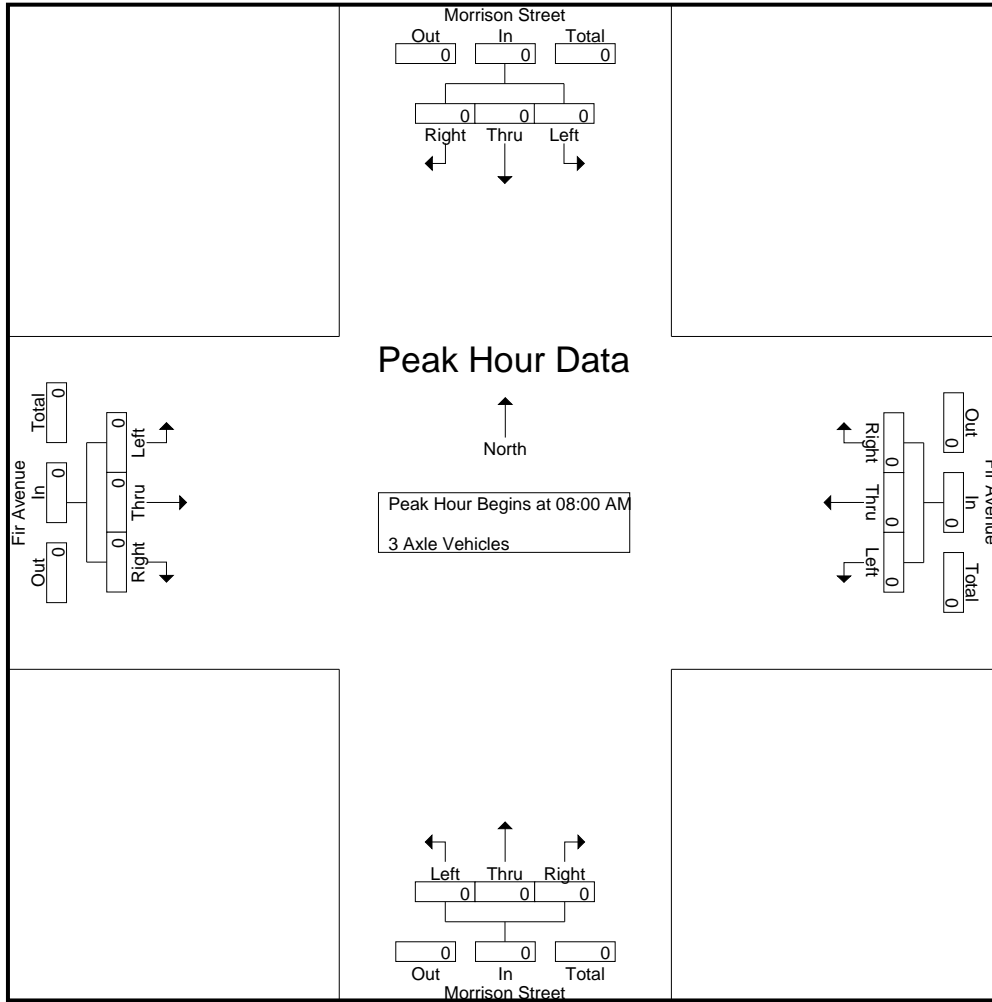
Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir AM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 2



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

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

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir AM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

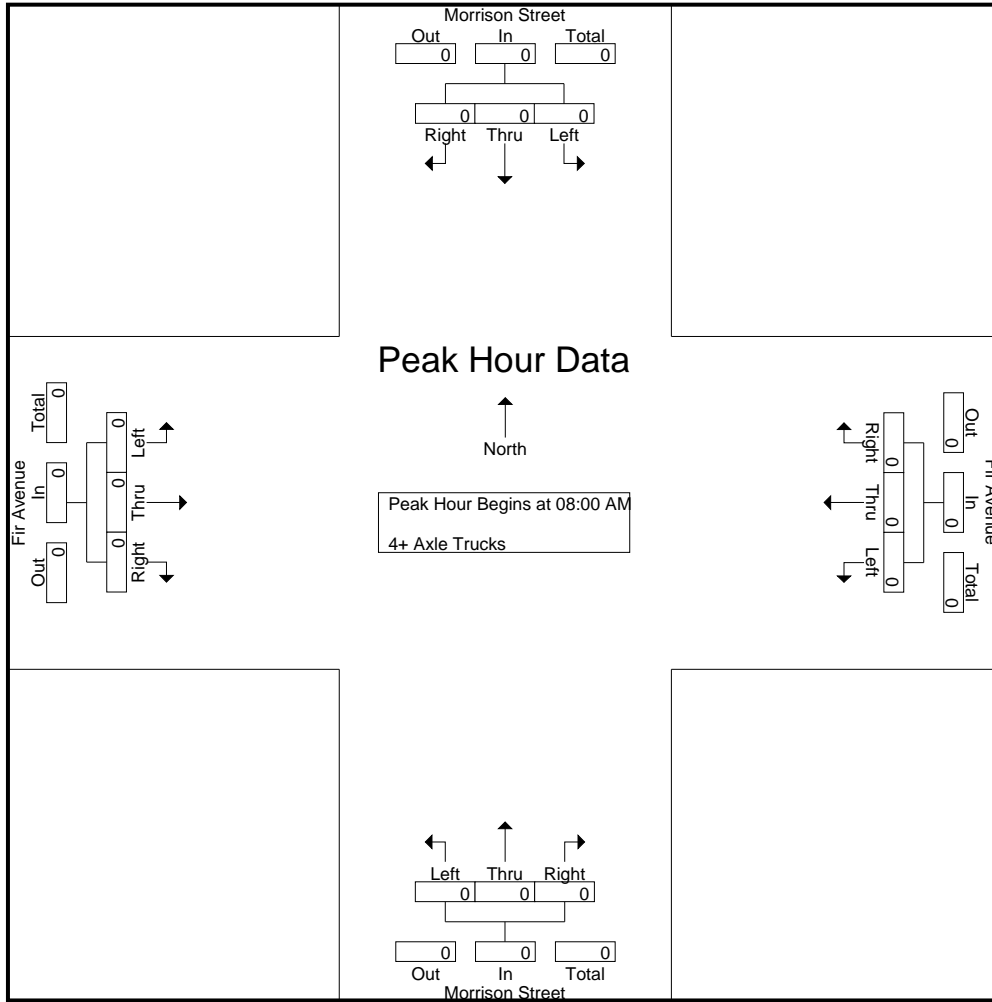
Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir AM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 2



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

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

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir PM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 1

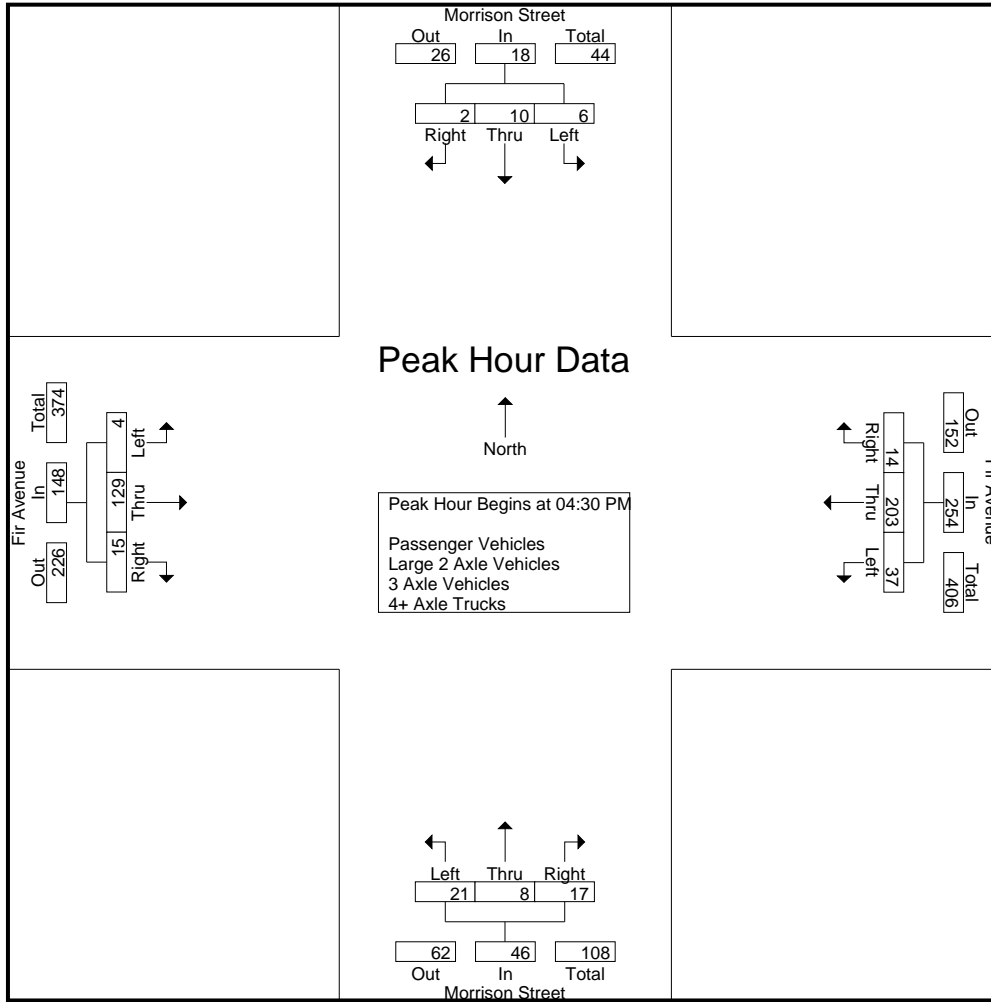
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	3	4	0	7	4	46	1	51	5	4	4	13	0	37	3	40	111
04:15 PM	1	2	1	4	12	42	3	57	6	0	5	11	0	27	5	32	104
04:30 PM	0	2	0	2	12	48	4	64	4	2	8	14	1	33	4	38	118
04:45 PM	4	4	1	9	10	50	5	65	5	4	2	11	0	25	4	29	114
Total	8	12	2	22	38	186	13	237	20	10	19	49	1	122	16	139	447
05:00 PM	2	1	0	3	5	56	1	62	8	1	3	12	2	31	1	34	111
05:15 PM	0	3	1	4	10	49	4	63	4	1	4	9	1	40	6	47	123
05:30 PM	1	0	0	1	14	45	3	62	4	1	1	6	1	34	3	38	107
05:45 PM	4	1	0	5	16	54	4	74	5	1	5	11	0	30	5	35	125
Total	7	5	1	13	45	204	12	261	21	4	13	38	4	135	15	154	466
Grand Total	15	17	3	35	83	390	25	498	41	14	32	87	5	257	31	293	913
Apprch %	42.9	48.6	8.6		16.7	78.3	5		47.1	16.1	36.8		1.7	87.7	10.6		
Total %	1.6	1.9	0.3	3.8	9.1	42.7	2.7	54.5	4.5	1.5	3.5	9.5	0.5	28.1	3.4	32.1	
Passenger Vehicles	15	17	3	35	83	389	25	497	41	14	32	87	5	256	31	292	911
% Passenger Vehicles	100	100	100	100	100	99.7	100	99.8	100	100	100	100	100	99.6	100	99.7	99.8
Large 2 Axle Vehicles	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
% Large 2 Axle Vehicles	0	0	0	0	0	0.3	0	0.2	0	0	0	0	0	0.4	0	0.3	0.2
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	2	0	2	12	48	4	64	4	2	8	14	1	33	4	38	118
04:45 PM	4	4	1	9	10	50	5	65	5	4	2	11	0	25	4	29	114
05:00 PM	2	1	0	3	5	56	1	62	8	1	3	12	2	31	1	34	111
05:15 PM	0	3	1	4	10	49	4	63	4	1	4	9	1	40	6	47	123
Total Volume	6	10	2	18	37	203	14	254	21	8	17	46	4	129	15	148	466
% App. Total	33.3	55.6	11.1		14.6	79.9	5.5		45.7	17.4	37		2.7	87.2	10.1		
PHF	.375	.625	.500	.500	.771	.906	.700	.977	.656	.500	.531	.821	.500	.806	.625	.787	.947

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir PM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 2



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

	04:00 PM				05:00 PM				04:00 PM				05:00 PM			
+0 mins.	3	4	0	7	5	56	1	62	5	4	4	13	2	31	1	34
+15 mins.	1	2	1	4	10	49	4	63	6	0	5	11	1	40	6	47
+30 mins.	0	2	0	2	14	45	3	62	4	2	8	14	1	34	3	38
+45 mins.	4	4	1	9	16	54	4	74	5	4	2	11	0	30	5	35
Total Volume	8	12	2	22	45	204	12	261	20	10	19	49	4	135	15	154
% App. Total	36.4	54.5	9.1		17.2	78.2	4.6		40.8	20.4	38.8		2.6	87.7	9.7	
PHF	.500	.750	.500	.611	.703	.911	.750	.882	.833	.625	.594	.875	.500	.844	.625	.819

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir PM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	3	4	0	7	4	46	1	51	5	4	4	13	0	37	3	40	111
04:15 PM	1	2	1	4	12	42	3	57	6	0	5	11	0	27	5	32	104
04:30 PM	0	2	0	2	12	47	4	63	4	2	8	14	1	32	4	37	116
04:45 PM	4	4	1	9	10	50	5	65	5	4	2	11	0	25	4	29	114
Total	8	12	2	22	38	185	13	236	20	10	19	49	1	121	16	138	445
05:00 PM	2	1	0	3	5	56	1	62	8	1	3	12	2	31	1	34	111
05:15 PM	0	3	1	4	10	49	4	63	4	1	4	9	1	40	6	47	123
05:30 PM	1	0	0	1	14	45	3	62	4	1	1	6	1	34	3	38	107
05:45 PM	4	1	0	5	16	54	4	74	5	1	5	11	0	30	5	35	125
Total	7	5	1	13	45	204	12	261	21	4	13	38	4	135	15	154	466
Grand Total	15	17	3	35	83	389	25	497	41	14	32	87	5	256	31	292	911
Apprch %	42.9	48.6	8.6		16.7	78.3	5		47.1	16.1	36.8		1.7	87.7	10.6		
Total %	1.6	1.9	0.3	3.8	9.1	42.7	2.7	54.6	4.5	1.5	3.5	9.5	0.5	28.1	3.4	32.1	

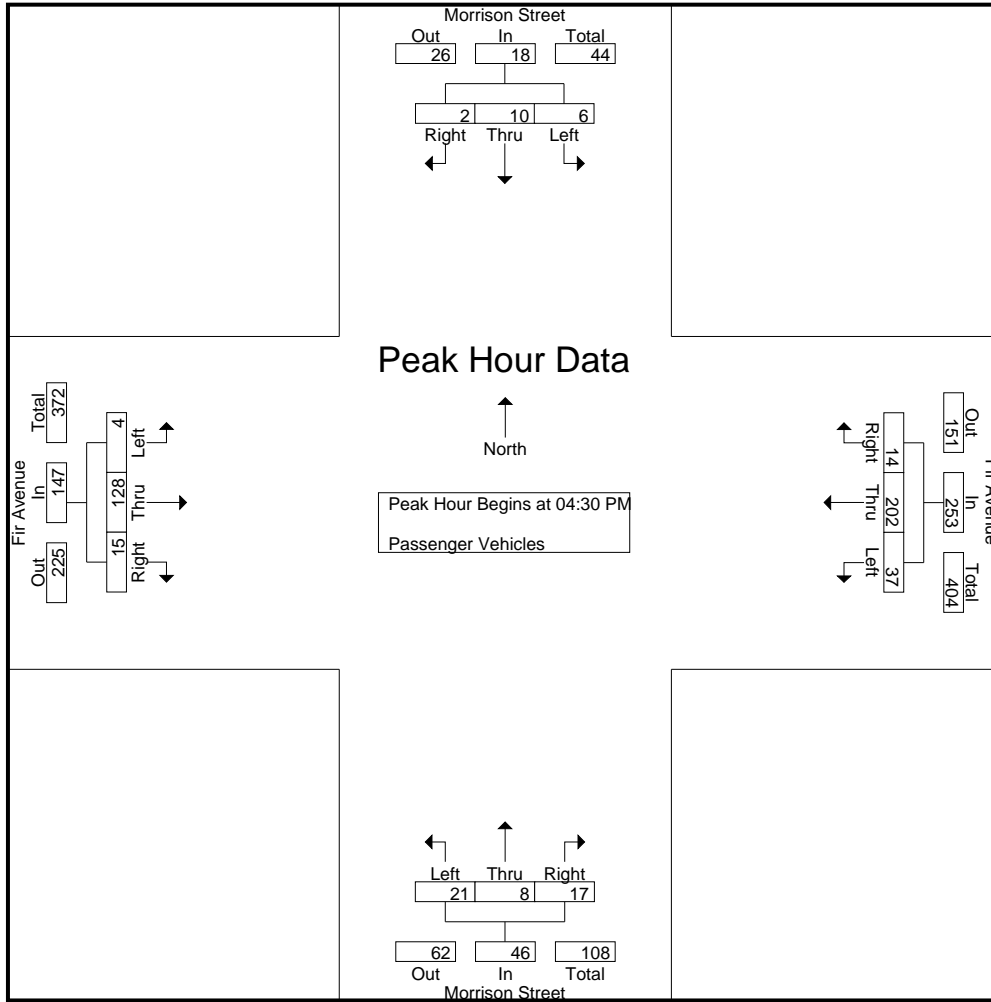
Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	2	0	2	12	47	4	63	4	2	8	14	1	32	4	37	116
04:45 PM	4	4	1	9	10	50	5	65	5	4	2	11	0	25	4	29	114
05:00 PM	2	1	0	3	5	56	1	62	8	1	3	12	2	31	1	34	111
05:15 PM	0	3	1	4	10	49	4	63	4	1	4	9	1	40	6	47	123
Total Volume	6	10	2	18	37	202	14	253	21	8	17	46	4	128	15	147	464
% App. Total	33.3	55.6	11.1		14.6	79.8	5.5		45.7	17.4	37		2.7	87.1	10.2		
PHF	.375	.625	.500	.500	.771	.902	.700	.973	.656	.500	.531	.821	.500	.800	.625	.782	.943

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

Peak Hour for Entire Intersection Begins at 04:30 PM

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir PM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 2



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

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	2	0	2	12	47	4	63	4	2	8	14	1	32	4	37
+15 mins.	4	4	1	9	10	50	5	65	5	4	2	11	0	25	4	29
+30 mins.	2	1	0	3	5	56	1	62	8	1	3	12	2	31	1	34
+45 mins.	0	3	1	4	10	49	4	63	4	1	4	9	1	40	6	47
Total Volume	6	10	2	18	37	202	14	253	21	8	17	46	4	128	15	147
% App. Total	33.3	55.6	11.1		14.6	79.8	5.5		45.7	17.4	37		2.7	87.1	10.2	
PHF	.375	.625	.500	.500	.771	.902	.700	.973	.656	.500	.531	.821	.500	.800	.625	.782

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir PM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

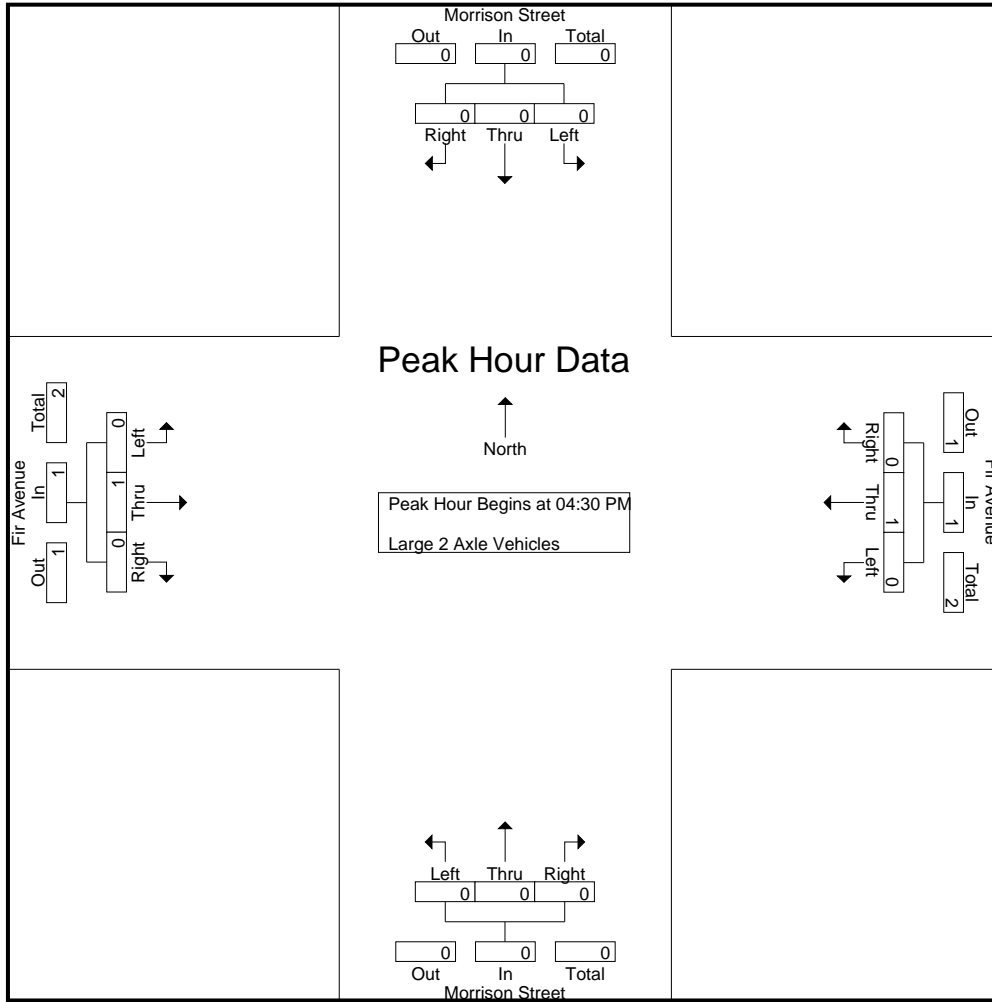
Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0		0	50	0	50	0	0	0		0	50	0	50	

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 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	1	0	1	0	0	0	0	0	1	0	1	2
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.250

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

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir PM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 2



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

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

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir PM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

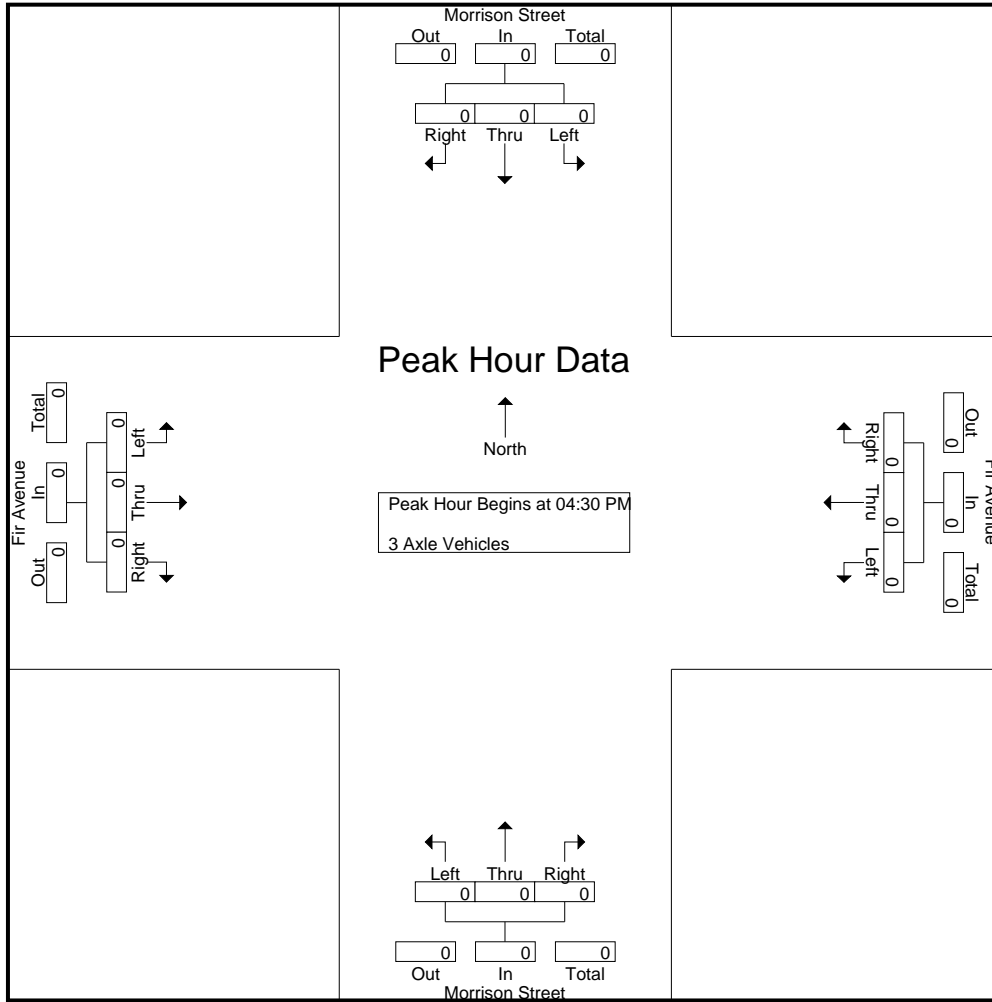
Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir PM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 2



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

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir PM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

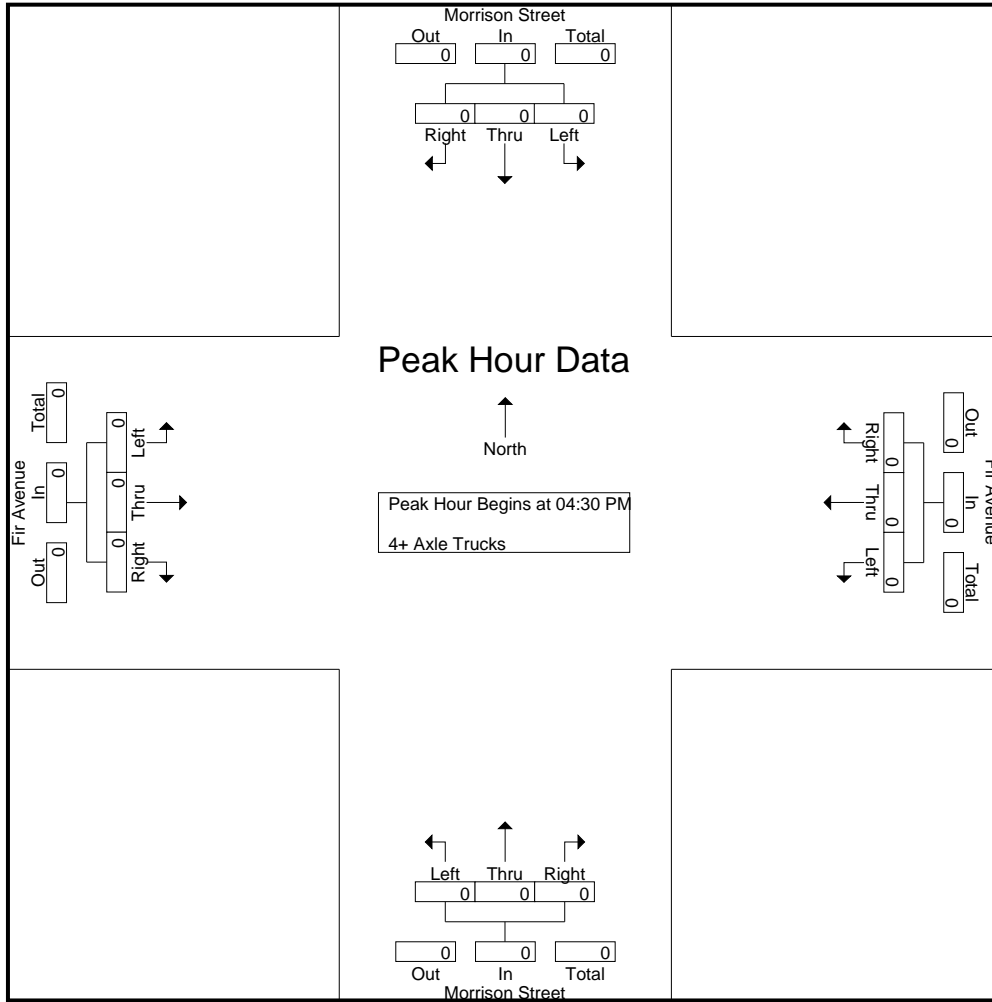
Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

Start Time	Morrison Street Southbound				Fir Avenue Westbound				Morrison Street Northbound				Fir Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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

City of Moreno Valley
 N/S: Morrison Street
 E/W: Fir Avenue
 Weather: Clear

File Name : 02_MRV_Morrison_Fir PM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 2



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

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Morrison Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 03_MRV_Morrison_Eucalyptus AM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Morrison Street Southbound				Eucalyptus Avenue Westbound				Morrison Street Northbound				Eucalyptus Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	1	3	1	5	5	11	0	16	1	0	3	4	2	20	1	23	48
07:15 AM	0	7	2	9	3	12	0	15	2	5	3	10	0	14	2	16	50
07:30 AM	1	3	1	5	3	16	0	19	5	4	5	14	0	23	2	25	63
07:45 AM	0	7	2	9	2	13	1	16	1	5	6	12	1	19	3	23	60
Total	2	20	6	28	13	52	1	66	9	14	17	40	3	76	8	87	221
08:00 AM	0	6	4	10	1	9	0	10	2	2	8	12	2	17	1	20	52
08:15 AM	0	2	3	5	2	10	0	12	2	7	6	15	1	16	4	21	53
08:30 AM	0	5	5	10	2	14	0	16	4	3	4	11	1	27	2	30	67
08:45 AM	1	3	1	5	3	21	0	24	4	2	4	10	2	20	4	26	65
Total	1	16	13	30	8	54	0	62	12	14	22	48	6	80	11	97	237
Grand Total	3	36	19	58	21	106	1	128	21	28	39	88	9	156	19	184	458
Apprch %	5.2	62.1	32.8		16.4	82.8	0.8		23.9	31.8	44.3		4.9	84.8	10.3		
Total %	0.7	7.9	4.1	12.7	4.6	23.1	0.2	27.9	4.6	6.1	8.5	19.2	2	34.1	4.1	40.2	

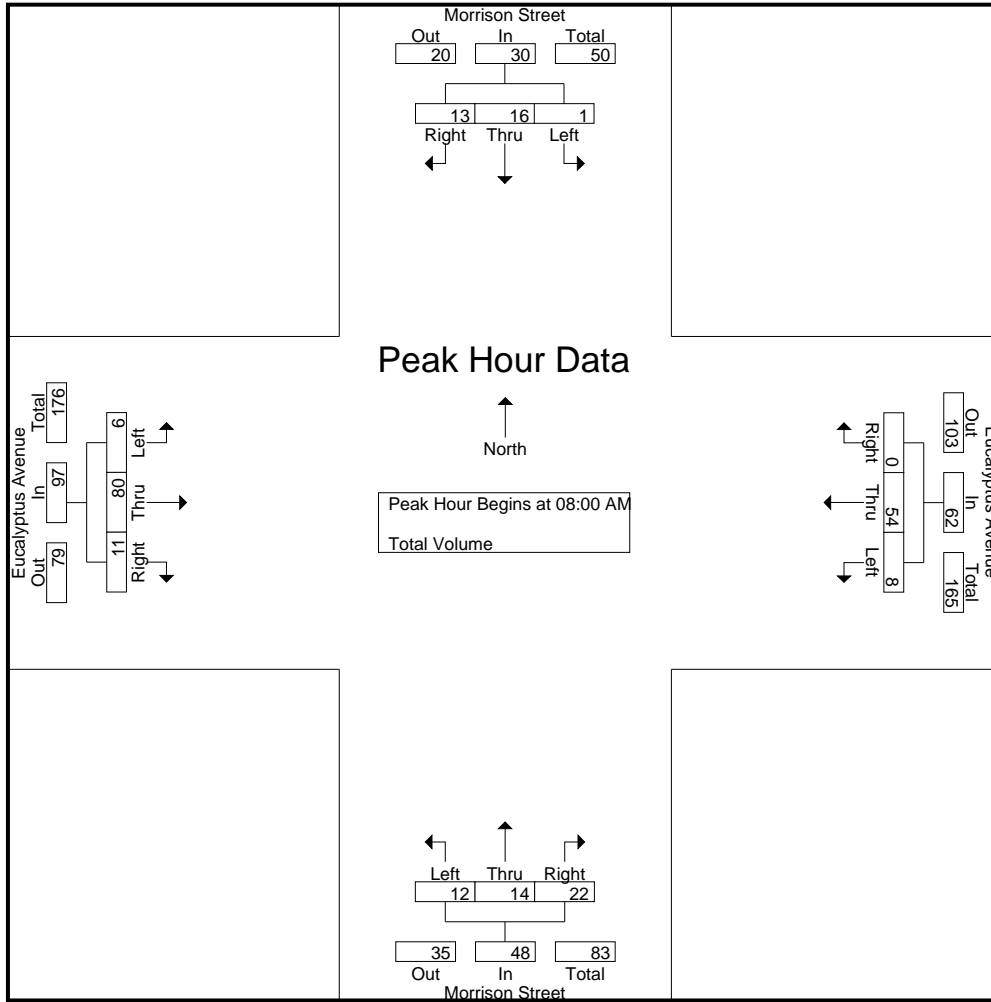
Start Time	Morrison Street Southbound				Eucalyptus Avenue Westbound				Morrison Street Northbound				Eucalyptus Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
08:00 AM	0	6	4	10	1	9	0	10	2	2	8	12	2	17	1	20	52
08:15 AM	0	2	3	5	2	10	0	12	2	7	6	15	1	16	4	21	53
08:30 AM	0	5	5	10	2	14	0	16	4	3	4	11	1	27	2	30	67
08:45 AM	1	3	1	5	3	21	0	24	4	2	4	10	2	20	4	26	65
Total Volume	1	16	13	30	8	54	0	62	12	14	22	48	6	80	11	97	237
% App. Total	3.3	53.3	43.3		12.9	87.1	0		25	29.2	45.8		6.2	82.5	11.3		
PHF	.250	.667	.650	.750	.667	.643	.000	.646	.750	.500	.688	.800	.750	.741	.688	.808	.884

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Morrison Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 03_MRV_Morrison_Eucalyptus AM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 2



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

	07:45 AM				07:00 AM				07:30 AM				08:00 AM			
+0 mins.	0	7	2	9	5	11	0	16	5	4	5	14	2	17	1	20
+15 mins.	0	6	4	10	3	12	0	15	1	5	6	12	1	16	4	21
+30 mins.	0	2	3	5	3	16	0	19	2	2	8	12	1	27	2	30
+45 mins.	0	5	5	10	2	13	1	16	2	7	6	15	2	20	4	26
Total Volume	0	20	14	34	13	52	1	66	10	18	25	53	6	80	11	97
% App. Total	0	58.8	41.2		19.7	78.8	1.5		18.9	34	47.2		6.2	82.5	11.3	
PHF	.000	.714	.700	.850	.650	.813	.250	.868	.500	.643	.781	.883	.750	.741	.688	.808

City of Moreno Valley
 N/S: Morrison Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 03_MRV_Morrison_Eucalyptus PM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Morrison Street Southbound				Eucalyptus Avenue Westbound				Morrison Street Northbound				Eucalyptus Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	2	7	1	10	7	47	1	55	5	14	7	26	2	33	2	37	128
04:15 PM	3	13	5	21	7	37	0	44	5	9	10	24	2	36	3	41	130
04:30 PM	3	8	5	16	12	34	0	46	2	11	10	23	5	44	4	53	138
04:45 PM	3	9	7	19	14	34	3	51	0	10	10	20	3	40	8	51	141
Total	11	37	18	66	40	152	4	196	12	44	37	93	12	153	17	182	537
05:00 PM	0	3	4	7	9	49	3	61	3	8	15	26	3	41	6	50	144
05:15 PM	1	12	7	20	11	35	0	46	4	8	11	23	0	45	6	51	140
05:30 PM	0	13	5	18	11	45	0	56	4	5	9	18	1	41	1	43	135
05:45 PM	0	12	10	22	10	52	3	65	2	7	11	20	3	38	1	42	149
Total	1	40	26	67	41	181	6	228	13	28	46	87	7	165	14	186	568
Grand Total	12	77	44	133	81	333	10	424	25	72	83	180	19	318	31	368	1105
Apprch %	9	57.9	33.1		19.1	78.5	2.4		13.9	40	46.1		5.2	86.4	8.4		
Total %	1.1	7	4	12	7.3	30.1	0.9	38.4	2.3	6.5	7.5	16.3	1.7	28.8	2.8	33.3	

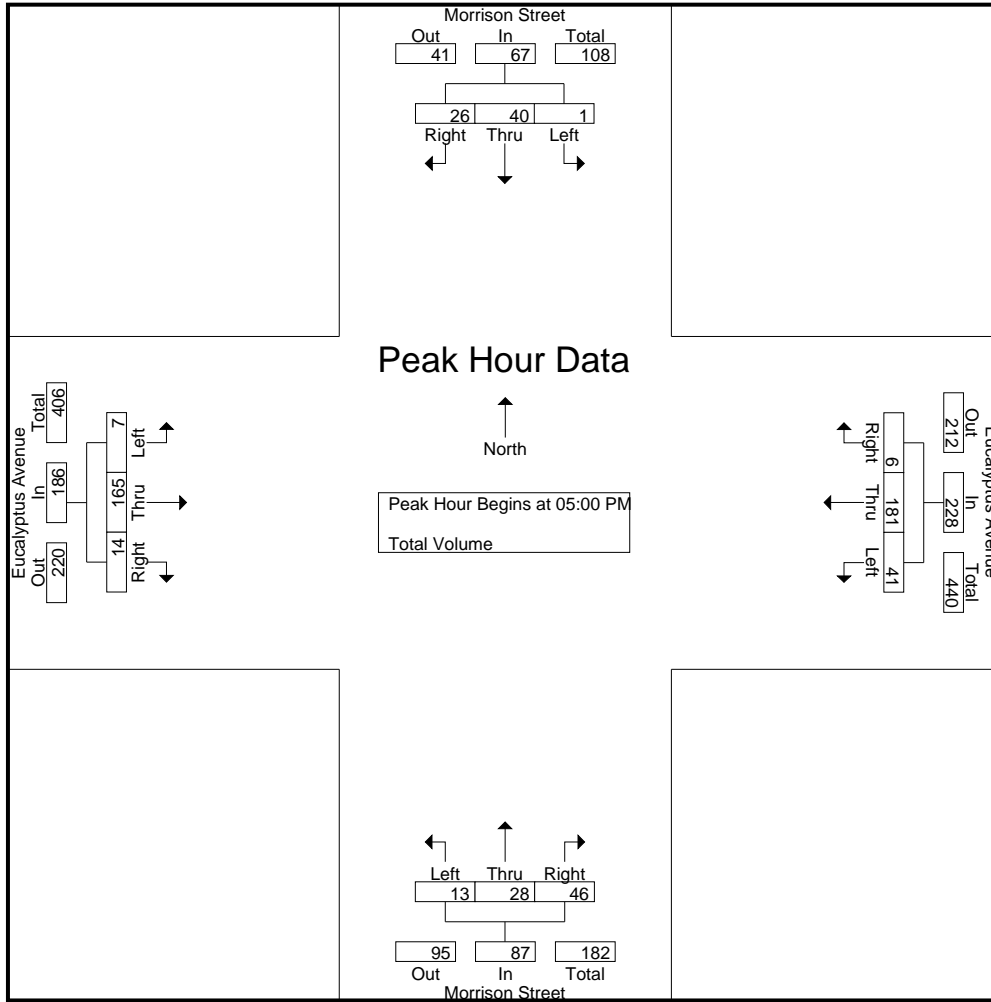
Start Time	Morrison Street Southbound				Eucalyptus Avenue Westbound				Morrison Street Northbound				Eucalyptus Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
05:00 PM	0	3	4	7	9	49	3	61	3	8	15	26	3	41	6	50	144
05:15 PM	1	12	7	20	11	35	0	46	4	8	11	23	0	45	6	51	140
05:30 PM	0	13	5	18	11	45	0	56	4	5	9	18	1	41	1	43	135
05:45 PM	0	12	10	22	10	52	3	65	2	7	11	20	3	38	1	42	149
Total Volume	1	40	26	67	41	181	6	228	13	28	46	87	7	165	14	186	568
% App. Total	1.5	59.7	38.8		18	79.4	2.6		14.9	32.2	52.9		3.8	88.7	7.5		
PHF	.250	.769	.650	.761	.932	.870	.500	.877	.813	.875	.767	.837	.583	.917	.583	.912	.953

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

City of Moreno Valley
 N/S: Morrison Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 03_MR_V_Morrison_Eucalyptus PM
 Site Code : 00321093
 Start Date : 3/9/2021
 Page No : 2



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

	05:00 PM				05:00 PM				04:00 PM				04:30 PM			
+0 mins.	0	3	4	7	9	49	3	61	5	14	7	26	5	44	4	53
+15 mins.	1	12	7	20	11	35	0	46	5	9	10	24	3	40	8	51
+30 mins.	0	13	5	18	11	45	0	56	2	11	10	23	3	41	6	50
+45 mins.	0	12	10	22	10	52	3	65	0	10	10	20	0	45	6	51
Total Volume	1	40	26	67	41	181	6	228	12	44	37	93	11	170	24	205
% App. Total	1.5	59.7	38.8		18	79.4	2.6		12.9	47.3	39.8		5.4	82.9	11.7	
PHF	.250	.769	.650	.761	.932	.870	.500	.877	.600	.786	.925	.894	.550	.944	.750	.967

APPENDIX B-3:

SIGNAL TIMING SHEETS

Location: SR 60 W/B @ NASON STREET	Designed By:
System: ISOLATED	Installed By: SAFWAN SAYED
Master At:	Service Info:
District: 08	
I/C:	

Timing Change:	Date Start:	Date End:	Designed:	Installed:
5/23/2017	4/4/2012			4/4/2012

Intersection Layout	
	FLASH
1) S/B NASON ST-LEFT TO WB 60	[]
P 2) N/B NASON STREET	[]
H 3) W/B SR 60 OFF RAMP LEFT TURN	[]
A 4) E/B ELDER AVENUE	[]
S 5) N/B NASON ST-LEFT TURN	[]
E 6) S/B NASON STREET	[]
7) E/B ELDER AVE-LEFT TO NASON ST	[]
8) W/B SR 60 OFF RAMP	[]
O A)	[]
V B)	[]
E C) E/B ELDER AVE RIGHT TURN	[]
R D) W/B 60 OFF RAMP RIGHT TURN	[]
L E) N/B NASON ST RIGHT TURN	[]
A F)	[]
P	

Comments and Notes:

RAM Checksum	
Page 2: E15C	Page 7: D2FD
Page 3: F542	Page 8: D364
Page 4: 3C9A	Page 9: F68A
Page 5: 296F	Page 10: 1611
Page 6: 85AF	Page 11: C381

CONFIGURATION PHASE FLAGS

Phases (2-1-1-1)	
Permitted	1 2 3 4 5 6 7 8
Restricted	.....

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

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

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

Startup (2-1-1-5) *	
First Green Phases	..... 8
Yellow Start Phases	. 2 . . . 6 . .
Yellow Start Overlaps	.....
Startup All-Red	5.0
Vehicle Calls	1 2 3 4 5 6 7 8
Pedestrian Calls	. 2 . . . 6 . 8

Call To Phase (2-1-2-1)		Omit On Green	
1	.....	1	.....
2	.....	2	.....
3	.....	3	.....
4	.....	4	.....
5	.....	5	.....
6	.....	6	.....
7	.....	7	.....
8	.....	8	.....

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	.....
Yellow Flash Overlap	.....
Flash In Red Phases	.....
Flash In Red Overlap	.....

Special Operation (2-1-2-3)	
Single Exit Phase	.....
Driveway Signal Phases	.....
Driveway Signal Overlaps	.....
Leading Ped Phases	.....

Protected Permissive (2-1-2-4)	
Protected Permissive	.....

Pedestrian (2-1-3) *	
P1	.....
P2	. 2
P3	.....
P4	.....
P5	.....
P6	..... 6 . .
P7	.....
P8	..... 8

Overlap (2-1-4) *				
Overlap	Parent	Omit	No Start	Not
A	.....	.....	.....	.....
B	.....	.....	.....	.....
C	. . . . 5 . .	.....	.....	. . 3 . . 6 . .
D	1 . . . . .	.....	.....	. 2 7 8
E	. . 3 . . . .	.....	.....	1 2 . 4
F	.....	.....	.....	.....

PHASE TIMING

Phase (2-2)	-1- *	-2- *	-3- *	-4- *	-5- *	-6- *	-7- *	-8- *
--- Walk 1 ---	0	7	0	0	0	7	0	7
Flash Don't Walk	0	26	0	0	0	20	0	20
Minimum Green	5	5	5	5	5	5	5	5
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	20	55	20	30	20	55	20	30
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Maximum Gap	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
All-Red	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C *	D *	E *	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	4.0	4.0	4.0	5.0
Red	0.0	0.0	1.0	1.0	1.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
Red To Sec (2-6)	
Red To Sec	OFF

COORDINATION

Local Plan (7-1...9) TIMING DATA [Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Perm	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor														
Plan 2	Green Factor														
Plan 3	Green Factor														
Plan 4	Green Factor														
Plan 5	Green Factor														
Plan 6	Green Factor														
Plan 7	Green Factor														
Plan 8	Green Factor														
Plan 9	Green Factor														

Master Timer Sync (7-A)	
Enable in Plans	
.....	

Master Sub Master	
Input	
Output	

FREE PLAN PHASE FLAGS

(7-E) Free	
Lag	Omit
. 2 . 4 . 6 . 8	.....
Veh Min	Veh Max
. 2 ... 6 ..	.....
Ped	Bike
.....
Cond	Cond Grn
.....	10

Local Plan (7-1...9) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1
Plan 2
Plan 3
Plan 4
Plan 5
Plan 6
Plan 7
Plan 8
Plan 9

MANUAL COMMANDS

Manual Plan (4-1)		<i>Plan: 1-9</i>
Plan	OffSet	<i>15 or 254 = Flash</i>
	A	<i>14 or 255 = Free</i>
		<i>Offset A, B, or C</i>

Special Function Override (4-2)

#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

DETECTORS

Detector Attributes (5-1) *				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	COUNT+CALL+EXTEND	.2	NO	I2U	1			10	1.1
2	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2U	2			10	1.2
3	COUNT+CALL+EXTEND	. . . 4	NO	I6U	3			10	1.3
4	COUNT+CALL+EXTEND	. . . . . 8	NO	J6U	4			10	1.4
5	COUNT+CALL+EXTEND	. 2	NO	I2L	5			10	1.5
6	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2L	6			10	1.6
7	COUNT+CALL+EXTEND	. . . 4	NO	I6L	7			10	1.7
8	COUNT+CALL+EXTEND	. . . . . 8	NO	J6L	8			10	1.8
9	COUNT+CALL+EXTEND	. 2	NO	I4	9			10	2.1
10	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4	10			10	2.2
11	COUNT+CALL+EXTEND	. . . 4	NO	I8	11			10	2.3
12	COUNT+CALL+EXTEND	. . . . . 8	NO	J8	12			10	2.4
13	COUNT+CALL+EXTEND	. . . . . 5 . .	NO	J1	13			10	3.1
14	COUNT+CALL+EXTEND	1	NO	I1	14			10	3.2
15	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J5	15			10	3.3
16	COUNT+CALL+EXTEND	. . 3	NO	I5	16			10	3.4
17	COUNT+CALL+EXTEND	. . . . . 5 . .	NO	J9U	17			10	3.5
18	COUNT+CALL+EXTEND	1	NO	I9U	18			10	3.6
19	COUNT+CALL+EXTEND	. . . . . 7 .	NO	J9L	19			10	3.7
20	COUNT+CALL+EXTEND	. . 3	NO	I9L	20			10	3.8
21	COUNT+CALL+EXTEND	. 2	NO	I3L	21			10	6.2
22	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3L	22			10	6.3
23	COUNT+CALL+EXTEND	. . . 4	NO	I7L	23			10	6.4
24	COUNT+CALL+EXTEND	. . . . . 8	NO	J7L	24			10	6.5
25	COUNT+CALL+EXTEND	. 2	NO	I3U	25			10	4.5
26	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3U	26			10	4.6
27	COUNT+CALL+EXTEND	. . . 4	NO	I7U	27			10	4.7
28	COUNT+CALL+EXTEND	. . . . . 8	NO	J7U	28			10	4.8
29	PEDESTRIAN	. 2	NO	I 12U	29			10	5.1
30	PEDESTRIAN	. . . . . 6 . .	NO	I 13U	30			10	5.2
31	PEDESTRIAN	. . . 4	NO	I 12L	31			10	5.3
32	PEDESTRIAN	. . . . . 8	NO	I 13L	32			10	5.4

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

Failure Override (5-4)	
Detectors 1-8	. . . . .
Detectors 9-16	. . . . .
Detectors 17-24	. . . . .
Detectors 25-32	. . . . .

System Detector Assignment (5-5)								
Sys Det	1	2	3	4	5	6	7	8
Det Num								
Sys Det	9	10	11	12	13	14	15	16
Det Num								

CIC Operation (5-6-1)	
Enable in Plans	. . . . .

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)								
Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6		6.6	5.1	5.2	6.7
		1.5	6.2			1.7	6.4		3.8		2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5		2.8	5.5	5.6	2.5
		1.6	6.3			1.8	6.5		3.7		6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)			Table 2 (8-2-2)			Table 3 (8-2-3)			Table 4 (8-2-4)			Table 5 (8-2-5)			Table 6 (8-2-6)		
Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A

WEEKDAY ASSIGNMENT

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

HOLIDAY TABLES

Floating Holiday Table (8-2-8)				
#	Mnth	Week	DOW	Table
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Fixed Holiday Table (8-2-9)				
#	Mnth	Day	DOW	Table
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Solar Clock Data (8-4)	
North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)	
Hebrew	Ped Recall
Sabbath	.....
Holiday	.....

Daylight Saving (8-6)	
Enabled	YES

TOD FUNCTIONS

TOD Functions (8-3)					
#	Start	End	DOW	Action	Phases
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		

- Action Codes:**
- 0. None
 - 1. Permitted
 - 2. Restricted
 - 4. Veh Min Recall
 - 5. Veh Max Recall
 - 6. Ped Recall
 - 7. Bike Recall
 - 8. Red Lock
 - 9. Yellow Lock
 - 10. Force/Max Lock
 - 11. Double Entry
 - 12. Y-Coord C
 - 13. Y-Coord D
 - 14. Free
 - 15. Flashing
 - 16. Walk 2
 - 17. Max Green 2

- 18. Max Green 3
- 19. Rest in Walk
- 20. Rest in Red
- 21. Free Lag Phases
- 22. Special Functions
- 23. Truck Preempt
- 24. Conditional Service
- 25. Conditional Service
- 26. Leading Ped
- 41. Protected Permissive
- 42. Protected Permissive

Action Code = Phases added to normal setting
 100+Action Code = Phases removed
 200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	
Protocol	AB3418
Limit Access	
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

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

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

Limit Access:

- 0-None
- 1-Status Only
- 2-Status, Set Pattern, Time
- 3-Status, Set Pattern, Time, Manual Plan

SOFT LOGIC

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

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

CALLBACK NUMBERS

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

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

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

RAILROAD PREEMPTION

RR 1	(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
	Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear1	10	. 2 . . 5 . . .	.....	.....	.....	.....	. 2 . 4 . 6 . 8	.....	.....	.....
	Clear 2		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clear 3		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hold		.....	.....	1 2 3 4 5 6 7 8	.....	.....	.....	.....	.....	A B C D E F
	Exit	5	Exit Parameters (3-1-5)				Configuration (3-1-6)				
Min Grn		Phase Green	Overlap Green	Vehicle Recall	Ped Call	Port	Latching	Power-Up			
Ped Clr		.....	.....	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8	2.5	YES	FLASHING			

RR 2	(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
	Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear1	10	. . . 4 . . 7 .	.....	.....	.....	.....	. 2 . 4 . 6 . 8	.....	.....	.....
	Clear 2		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clear 3		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hold		1 2 3 . . 6 . .	.....	.....	. 2 . . . 6 . .	.....	. . . 4 . . . 8	.....	.....	.....
	Exit		Exit Parameters (3-2-5)				Configuration (3-2-6)				
Min Grn		Phase Green	Overlap Green	Vehicle Recall	Ped Recall	Port	Latching	Power-up			
Ped Clr		.....	.....	. . . 4 . . 7 .	.....	2.6	YES	DARK			

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
*		10	30	. 2 . . 5 . . .	.....
	Port	Latching	Phase Termination		
	5.5	NO	ADVANCE		

EVB (3-B)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
*		10	30	. . . 4 . . 7 .	.....
	Port	Latching	Phase Termination		
	5.6	NO	ADVANCE		

EVC (3-C)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
*		10	30	1 6 . .	.....
	Port	Latching	Phase Termination		
	5.7	NO	ADVANCE		

EVD (3-D)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
*		10	30	. . 3 8	.....
	Port	Latching	Phase Termination		
	5.8	NO	ADVANCE		

INPUTS

7 Wire I/C (2-1-5-1)					
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	6.6
Advance Enable	6.6

Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Battery Backup (2-1-5-5) *	
Port	Operation
2.7	NORMAL

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

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

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)								+
A	1	2	22	3	4	24	9	
B	5	6	26	7	8	28	10	
X	13	14	0	11	12	0	0	

Loadswitch Codes:

0 Unused (no output)

1-8 Vehicle 1-8

9-14 Overlap A-F

21-28 Ped 1-8

41-47 Special Functions

41 Protected Permissive Flashing Phase 1

43 Protected Permissive Flashing Phase 3

45 Protected Permissive Flashing Phase 5

47 Protected Permissive Flashing Phase 7

51-57 Special Functions

71-72 Seven Wire I/C

+ middle output of loadswitches 3 and 6 Channel 9 and 10

YELLOW YIELD COORDINATION

Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	Force-Offs								Coord	Lag	Min Recall	Restricted
					-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-				
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....

TRANSIT PRIORITY

Local Plans (3-E1...9)		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											

Enable Priority (3-E-A)	
Enable in Plan	.....

Free Plans (3-E-E)	
Max Green Hold	Hold Phase

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

TRUCK PREEMPTION

Truck Preemption (3-F)	Passage	CarryOver	Clearance	Next Preempt	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output

Location: SR 60 E/B @ NASON STREET

Designed By:

System: ISOLATED

District: 08

Installed By: SAFWAN SAYED

Master At:

I/C:

Service Info:

Timing Change:
5/23/2017

Date Start:
4/4/2012

Date End:

Designed:

Installed:
4/4/2012

Intersection Layout

FLASH

- 1) S/B NASON ST-LEFT TO EB 60 []
- P 2) N/B NASON STREET []
- H 3) []
- A 4) SR 60 E/B OFF RAMP []
- S 5) []
- E 6) S/B NASON STREET []
- 7) []
- 8) []

- O A) []
- V B) []
- E C) []
- R D) []
- L E) []
- A F) []
- P

Comments and Notes:

RAM Checksum

Page 2: 45E1	Page 7: D2FD
Page 3: BAE6	Page 8: D364
Page 4: 3C9A	Page 9: F68A
Page 5: 296F	Page 10: 1611
Page 6: 85AF	Page 11: C381

CONFIGURATION PHASE FLAGS

Phases (2-1-1-1) *	
Permitted	1 2 . 4 . 6 ..
Restricted	.....

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

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

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

Startup (2-1-1-5) *	
First Green Phases	... 4 ...
Yellow Start Phases	. 2 ... 6 ..
Yellow Start Overlaps	.....
Startup All-Red	5.0
Vehicle Calls	1 2 . 4 5 ...
Pedestrian Calls	. 2 ... 6 ..

Call To Phase (2-1-2-1)		Omit On Green	
1	.....	1	.....
2	.....	2	.....
3	.....	3	.....
4	.....	4	.....
5	.....	5	.....
6	.....	6	.....
7	.....	7	.....
8	.....	8	.....

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	.....
Yellow Flash Overlap	.....
Flash In Red Phases	.....
Flash In Red Overlap	.....

Special Operation (2-1-2-3)	
Single Exit Phase	.....
Driveway Signal Phases	.....
Driveway Signal Overlaps	.....
Leading Ped Phases	.....

Protected Permissive (2-1-2-4)	
Protected Permissive	.....

Pedestrian (2-1-3) *	
P1	.....
P2	. 2
P3	.....
P4	.....
P5	.....
P6	..... 6 ..
P7	.....
P8	.....

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

PHASE TIMING

Phase (2-2)	-1- *	-2- *	-3- *	-4- *	-5- *	-6- *	-7- *	-8- *
--- Walk 1 ---	0	7	0	0	0	7	0	0
Flash Don't Walk	0	12	0	0	0	18	0	0
Minimum Green	5	5	0	5	0	5	0	0
Det Limit	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	20	55	0	40	0	55	0	0
Max Green 2	0	0	0	0	0	0	0	0
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0
Maximum Gap	2.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0
Minimum Gap	2.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	5.0	3.0	5.0	3.0	5.0	3.0	3.0
All-Red	1.0	1.0	0.0	1.0	0.0	1.0	0.0	0.0
Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	0	0	0	0	0	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A	B	C	D	E	F
Green	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0
Red	0.0	0.0	0.0	0.0	0.0	0.0

Red Revert

Red Revert (2-5)	
Time	5.0
Red To Sec (2-6)	
Red To Sec	OFF

COORDINATION

Local Plan (7-1...9) TIMING DATA [Offsets] Green Factors or Press [F] to Select Force-Off

		Cycle	Multi	Perm	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor														
Plan 2	Green Factor														
Plan 3	Green Factor														
Plan 4	Green Factor														
Plan 5	Green Factor														
Plan 6	Green Factor														
Plan 7	Green Factor														
Plan 8	Green Factor														
Plan 9	Green Factor														

Master Timer Sync (7-A)	
Enable in Plans	
.....	

Master Sub Master	
Input	
Output	

FREE PLAN PHASE FLAGS

(7-E) Free	
Lag	Omit
. 2 . 4 . 6 . 8	.....
Veh Min	Veh Max
. 2 ... 6 ..	.....
Ped	Bike
.....
Cond	Cond Grn
.....	10

Local Plan (7-1...9) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1
Plan 2
Plan 3
Plan 4
Plan 5
Plan 6
Plan 7
Plan 8
Plan 9

MANUAL COMMANDS

Manual Plan (4-1)		<i>Plan: 1-9</i>
Plan	OffSet	<i>15 or 254 = Flash</i>
	A	<i>14 or 255 = Free</i>
		<i>Offset A, B, or C</i>

Special Function Override (4-2)

#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset	(4-3)
Local Manual (4-4)	OFF

DETECTORS

Detector Attributes (5-1) *				Slot	Detector Configuration (5-2)				
Det	Type	Phases	Lock		Det	Delay	Extend	Recall	Port
1	COUNT+CALL+EXTEND	.2	NO	I2U	1			10	1.1
2	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2U	2			10	1.2
3	COUNT+CALL+EXTEND	. . . 4	NO	I6U	3			10	1.3
4	COUNT+CALL+EXTEND	. . . . . 8	NO	J6U	4			10	1.4
5	COUNT+CALL+EXTEND	. 2	NO	I2L	5			10	1.5
6	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J2L	6			10	1.6
7	COUNT+CALL+EXTEND	. . . 4	NO	I6L	7			10	1.7
8	COUNT+CALL+EXTEND	. . . . . 8	NO	J6L	8			10	1.8
9	COUNT+CALL+EXTEND	. 2	NO	I4	9			10	2.1
10	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J4	10			10	2.2
11	COUNT+CALL+EXTEND	. . . 4	NO	I8	11			10	2.3
12	COUNT+CALL+EXTEND	. . . . . 8	NO	J8	12			10	2.4
13	COUNT+CALL+EXTEND	. . . . . 5 . .	NO	J1	13			10	3.1
14	COUNT+CALL+EXTEND	1	NO	I1	14			10	3.2
15	COUNT+CALL+EXTEND	. . . . . 7 . .	NO	J5	15			10	3.3
16	COUNT+CALL+EXTEND	. . 3	NO	I5	16			10	3.4
17	COUNT+CALL+EXTEND	. . . . . 5 . .	NO	J9U	17			10	3.5
18	COUNT+CALL+EXTEND	1	NO	I9U	18			10	3.6
19	COUNT+CALL+EXTEND	. . . . . 7 . .	NO	J9L	19			10	3.7
20	COUNT+CALL+EXTEND	. . 3	NO	I9L	20			10	3.8
21	COUNT+CALL+EXTEND	. 2	NO	I3L	21			10	6.2
22	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3L	22			10	6.3
23	COUNT+CALL+EXTEND	. . . 4	NO	I7L	23			10	6.4
24	COUNT+CALL+EXTEND	. . . . . 8	NO	J7L	24			10	6.5
25	COUNT+CALL+EXTEND	. 2	NO	I3U	25			10	4.5
26	COUNT+CALL+EXTEND	. . . . . 6 . .	NO	J3U	26			10	4.6
27	COUNT+CALL+EXTEND	. . . 4	NO	I7U	27			10	4.7
28	COUNT+CALL+EXTEND	. . . . . 8	NO	J7U	28			10	4.8
29	PEDESTRIAN	. 2	NO	I 12U	29			10	5.1
30	PEDESTRIAN	. . . . . 6 . .	NO	I 13U	30			10	5.2
31	PEDESTRIAN	. . . 4	NO	I 12L	31			10	5.3
32	PEDESTRIAN	. . . . . 8	NO	I 13L	32			10	5.4

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

Failure Override (5-4)	
Detectors 1-8	. . . . .
Detectors 9-16	. . . . .
Detectors 17-24	. . . . .
Detectors 25-32	. . . . .

System Detector Assignment (5-5)								
Sys Det	1	2	3	4	5	6	7	8
Det Num								
Sys Det	9	10	11	12	13	14	15	16
Det Num								

CIC Operation (5-6-1)	
Enable in Plans	. . . . .

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.00	

Detector-to-Phase Assignment (5-6-3)								
Sys Det	1	2	3	4	5	6	7	8
Phase								
Sys Det	9	10	11	12	13	14	15	16
Phase								

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6		6.6	5.1	5.2	6.7
		1.5	6.2			1.7	6.4		3.8		2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5		2.8	5.5	5.6	2.5
		1.6	6.3			1.8	6.5		3.7		6.1	5.7	5.8	2.6

TOD SCHEDULE

Table 1 (8-2-1)			Table 2 (8-2-2)			Table 3 (8-2-3)			Table 4 (8-2-4)			Table 5 (8-2-5)			Table 6 (8-2-6)		
Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS	Time	Plan	OS
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A
		A			A			A			A			A			A

WEEKDAY ASSIGNMENT

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

HOLIDAY TABLES

Floating Holiday Table (8-2-8)				
#	Mnth	Week	DOW	Table
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Fixed Holiday Table (8-2-9)				
#	Mnth	Day	DOW	Table
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Solar Clock Data (8-4)	
North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)	
Hebrew	Ped Recall
Sabbath	.....
Holiday	.....

Daylight Saving (8-6)	
Enabled	YES

TOD FUNCTIONS

TOD Functions (8-3)					
#	Start	End	DOW	Action	Phases
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		

- Action Codes:**
- 0. None
 - 1. Permitted
 - 2. Restricted
 - 4. Veh Min Recall
 - 5. Veh Max Recall
 - 6. Ped Recall
 - 7. Bike Recall
 - 8. Red Lock
 - 9. Yellow Lock
 - 10. Force/Max Lock
 - 11. Double Entry
 - 12. Y-Coord C
 - 13. Y-Coord D
 - 14. Free
 - 15. Flashing
 - 16. Walk 2
 - 17. Max Green 2

- 18. Max Green 3
- 19. Rest in Walk
- 20. Rest in Red
- 21. Free Lag Phases
- 22. Special Functions
- 23. Truck Preempt
- 24. Conditional Service
- 25. Conditional Service
- 26. Leading Ped
- 41. Protected Permissive
- 42. Protected Permissive

Action Code = Phases added to normal setting
 100+Action Code = Phases removed
 200+Action Code = Phases replaced

COMMUNICATIONS

C2 (6-1-1)	
Address	
Protocol	AB3418
Limit Access	
Baud	1200
Parity	NONE
Data Bits	8
Stop Bits	1
RTS On Time	20
RTS Off Time	20
Handshaking	NORMAL

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

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

Limit Access:

0-None

1-Status Only

2-Status, Set Pattern, Time

3-Status, Set Pattern, Time, Manual Plan

SOFT LOGIC

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

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

CALLBACK NUMBERS

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

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

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

RAILROAD PREEMPTION

RR 1	(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
	Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear1	10	. 2 . . 5 . . .	.....	.....	.....	.....	. 2 . 4 . 6 . 8	.....	.....	.....
	Clear 2		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clear 3		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hold		.....	.....	1 2 3 4 5 6 7 8	.....	.....	.....	.....	.....	A B C D E F
	Exit	5	Exit Parameters (3-1-5)				Configuration (3-1-6)				
Min Grn		Phase Green	Overlap Green	Vehicle Recall	Ped Call	Port	Latching	Power-Up			
Ped Clr		.....	.....	1 2 3 4 5 6 7 8	. 2 . 4 . 6 . 8	2.5	YES	FLASHING			

RR 2	(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
	Delay		Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear1	10	. . . 4 . . 7 .	.....	.....	.....	.....	. 2 . 4 . 6 . 8	.....	.....	.....
	Clear 2		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Clear 3		.....	.....	.....	.....	.....	.....	.....	.....	.....
	Hold		1 2 3 . . 6 . .	.....	.....	. 2 . . . 6 . .	.....	. . . 4 . . . 8	.....	.....	.....
	Exit		Exit Parameters (3-2-5)				Configuration (3-2-6)				
Min Grn		Phase Green	Overlap Green	Vehicle Recall	Ped Recall	Port	Latching	Power-up			
Ped Clr		.....	.....	. . . 4 . . 7 .	.....	2.6	YES	DARK			

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
*		10	30	. 2 . . 5 . . .	.....
	Port	Latching	Phase Termination		
	5.5	NO	ADVANCE		

EVB (3-B)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
*		10	30	. . . 4 . . 7 .	.....
	Port	Latching	Phase Termination		
	5.6	NO	ADVANCE		

EVC (3-C)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
*		10	30	1 6 . .	.....
	Port	Latching	Phase Termination		
	5.7	NO	ADVANCE		

EVD (3-D)	Preempt Timers			Phase Green	Overlap Green
	Delay	Clear	Max		
*		10	30	. . 3 8	.....
	Port	Latching	Phase Termination		
	5.8	NO	ADVANCE		

INPUTS

7 Wire I/C (2-1-5-1)					
		Input	Port	Input	Port
Enable	NO	R1	3.8	Free	3.6
Max ON		R2	3.5	D2	2.8
Max OFF		R3	3.7	D3	6.1

Manual Control (2-1-5-2)	
Input	Port
Manual Advance	6.6
Advance Enable	6.6

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

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

Battery Backup (2-1-5-5) *	
Port	Operation
2.7	NORMAL

Y-Coordination (2-1-5-6)	
Port C	Port D
6.1	2.8

OUTPUTS

Loadswitch Assignments (2-1-6)								+
A	1	2	22	3	4	24	9	
B	5	6	26	7	8	28	10	
X	13	14	0	11	12	0	0	

Loadswitch Codes:

- 0 Unused (no output)
- 1-8 Vehicle 1-8
- 9-14 Overlap A-F
- 21-28 Ped 1-8
- 41-47 Special Functions
- 41 Protected Permissive Flashing Phase 1
- 43 Protected Permissive Flashing Phase 3
- 45 Protected Permissive Flashing Phase 5
- 47 Protected Permissive Flashing Phase 7

51-57 Special Functions

71-72 Seven Wire I/C

+ middle output of loadswitches 3 and 6 Channel 9 and 10

YELLOW YIELD COORDINATION

Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	Force-Offs								Coord	Lag	Min Recall	Restricted
					-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-				
Plan C													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....
Plan D													. 2 . . . 6 . .	. 2 . 4 . 6 . 8	.....	.....

TRANSIT PRIORITY

Local Plans (3-E1...9)		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor											
Plan 2	Green Factor											
Plan 3	Green Factor											
Plan 4	Green Factor											
Plan 5	Green Factor											
Plan 6	Green Factor											
Plan 7	Green Factor											
Plan 8	Green Factor											
Plan 9	Green Factor											

Enable Priority (3-E-A)	
Enable in Plan	.....

Free Plans (3-E-E)	
Max Green Hold	Hold Phase

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

TRUCK PREEMPTION

Truck Preemption (3-F)	Passage	CarryOver	Clearance	Next Preempt	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output

APPENDIX C:

VOLUME DEVELOPMENT WORKSHEETS



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
1 Lasselle Street/Iris Avenue								
NBL	364	29	393	393	221	18	239	239
NBT	589	47	636	636	611	49	660	660
NBR	410	33	443	443	472	38	510	510
SBL	118	9	127	127	209	17	226	226
SBT	468	37	505	505	714	57	771	771
SBR	97	8	105	105	94	8	102	102
EBL	138	11	149	149	182	15	197	197
EBT	466	37	503	503	421	34	455	455
EBR	288	23	311	311	288	23	311	311
WBL	539	43	582	582	600	48	648	648
WBT	566	45	611	611	624	50	674	674
WBR	103	8	111	111	86	7	93	93
North Leg								
Approach	683	54	737	737	1,017	82	1,099	1,099
Departure	830	66	896	896	879	71	950	950
Total	1,513	120	1,633	1,633	1,896	153	2,049	2,049
South Leg								
Approach	1,363	109	1,472	1,472	1,304	105	1,409	1,409
Departure	1,295	103	1,398	1,398	1,602	128	1,730	1,730
Total	2,658	212	2,870	2,870	2,906	233	3,139	3,139
East Leg								
Approach	1,208	96	1,304	1,304	1,310	105	1,415	1,415
Departure	994	79	1,073	1,073	1,102	89	1,191	1,191
Total	2,202	175	2,377	2,377	2,412	194	2,606	2,606
West Leg								
Approach	892	71	963	963	891	72	963	963
Departure	1,027	82	1,109	1,109	939	76	1,015	1,015
Total	1,919	153	2,072	2,072	1,830	148	1,978	1,978
Total Approaches								
Approach	4,146	330	4,476	4,476	4,522	364	4,886	4,886
Departure	4,146	330	4,476	4,476	4,522	364	4,886	4,886
Total	8,292	660	8,952	8,952	9,044	728	9,772	9,772



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
2 Morrison Street/Fir Avenue								
NBL	115	7	122	122	33	2	35	35
NBT	23	1	24	24	20	1	21	21
NBR	56	3	59	59	23	1	24	24
SBL	17	1	18	18	12	1	13	13
SBT	53	3	56	56	12	1	13	13
SBR	6	0	6	6	3	0	3	3
EBL	4	0	4	4	2	0	2	2
EBT	156	9	165	165	125	8	133	133
EBR	189	11	200	200	34	2	36	36
WBL	96	6	102	102	54	3	57	57
WBT	181	11	192	192	184	11	195	195
WBR	9	1	10	10	10	1	11	11
North Leg								
Approach	76	4	80	80	27	2	29	29
Departure	36	2	38	38	32	2	34	34
Total	112	6	118	118	59	4	63	63
South Leg								
Approach	194	11	205	205	76	4	80	80
Departure	338	20	358	358	100	6	106	106
Total	532	31	563	563	176	10	186	186
East Leg								
Approach	286	18	304	304	248	15	263	263
Departure	229	13	242	242	160	10	170	170
Total	515	31	546	546	408	25	433	433
West Leg								
Approach	349	20	369	369	161	10	171	171
Departure	302	18	320	320	220	13	233	233
Total	651	38	689	689	381	23	404	404
Total Approaches								
Approach	905	53	958	958	512	31	543	543
Departure	905	53	958	958	512	31	543	543
Total	1,810	106	1,916	1,916	1,024	62	1,086	1,086



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
3 Morrison Street/Eucalyptus Avenue								
NBL	12	40	52	52	13	1	14	14
NBT	14	47	61	61	28	3	31	31
NBR	22	74	96	96	46	4	50	50
SBL	1	3	4	4	1	0	1	1
SBT	16	54	70	70	40	4	44	44
SBR	13	44	57	57	26	2	28	28
EBL	6	20	26	26	7	1	8	8
EBT	80	270	350	350	165	16	181	181
EBR	11	37	48	48	14	1	15	15
WBL	8	27	35	35	41	4	45	45
WBT	54	182	236	236	181	17	198	198
WBR	0	0	0	0	6	1	7	7
North Leg								
Approach	30	101	131	131	67	6	73	73
Departure	20	67	87	87	41	5	46	46
Total	50	168	218	218	108	11	119	119
South Leg								
Approach	48	161	209	209	87	8	95	95
Departure	35	118	153	153	95	9	104	104
Total	83	279	362	362	182	17	199	199
East Leg								
Approach	62	209	271	271	228	22	250	250
Departure	103	347	450	450	212	20	232	232
Total	165	556	721	721	440	42	482	482
West Leg								
Approach	97	327	424	424	186	18	204	204
Departure	79	266	345	345	220	20	240	240
Total	176	593	769	769	406	38	444	444
Total Approaches								
Approach	237	798	1,035	1,035	568	54	622	622
Departure	237	798	1,035	1,035	568	54	622	622
Total	474	1,596	2,070	2,070	1,136	108	1,244	1,244



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
4 Nason Street/Elder Avenue - State Route 60 Westbound Ramps								
NBL	128	8	136	135	165	10	175	175
NBT	293	18	311	309	268	16	284	284
NBR	410	25	435	432	553	33	586	586
SBL	30	2	32	32	26	2	28	28
SBT	383	23	406	415	283	17	300	300
SBR	11	1	12	12	9	1	10	10
EBL	6	0	6	6	8	0	8	8
EBT	37	2	39	39	24	1	25	25
EBR	209	13	222	227	117	7	124	124
WBL	91	5	96	98	134	8	142	142
WBT	21	1	22	22	30	2	32	32
WBR	31	2	33	33	22	1	23	23
North Leg								
Approach	424	26	450	459	318	20	338	338
Departure	330	20	350	348	298	17	315	315
Total	754	46	800	807	616	37	653	653
South Leg								
Approach	831	51	882	876	986	59	1,045	1,045
Departure	683	41	724	740	534	32	566	566
Total	1,514	92	1,606	1,616	1,520	91	1,611	1,611
East Leg								
Approach	143	8	151	153	186	11	197	197
Departure	477	29	506	503	603	36	639	639
Total	620	37	657	656	789	47	836	836
West Leg								
Approach	252	15	267	272	149	8	157	157
Departure	160	10	170	169	204	13	217	217
Total	412	25	437	441	353	21	374	374
Total Approaches								
Approach	1,650	100	1,750	1,760	1,639	98	1,737	1,737
Departure	1,650	100	1,750	1,760	1,639	98	1,737	1,737
Total	3,300	200	3,500	3,520	3,278	196	3,474	3,474



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
5 Nason Street/State Route 60 Eastbound Ramps								
NBL	0	0	0	0	0	0	0	0
NBT	793	48	841	841	874	52	926	926
NBR	135	8	143	143	147	9	156	156
SBL	48	3	51	51	54	3	57	57
SBT	650	39	689	689	485	29	514	514
SBR	0	0	0	0	0	0	0	0
EBL	32	2	34	34	107	6	113	113
EBT	6	0	6	6	7	0	7	7
EBR	674	40	714	714	654	39	693	693
WBL	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0
North Leg								
Approach	698	42	740	740	539	32	571	571
Departure	825	50	875	875	981	58	1,039	1,039
Total	1,523	92	1,615	1,615	1,520	90	1,610	1,610
South Leg								
Approach	928	56	984	984	1,021	61	1,082	1,082
Departure	1,324	79	1,403	1,403	1,139	68	1,207	1,207
Total	2,252	135	2,387	2,387	2,160	129	2,289	2,289
East Leg								
Approach	0	0	0	0	0	0	0	0
Departure	189	11	200	200	208	12	220	220
Total	189	11	200	200	208	12	220	220
West Leg								
Approach	712	42	754	754	768	45	813	813
Departure	0	0	0	0	0	0	0	0
Total	712	42	754	754	768	45	813	813
Total Approaches								
Approach	2,338	140	2,478	2,478	2,328	138	2,466	2,466
Departure	2,338	140	2,478	2,478	2,328	138	2,466	2,466
Total	4,676	280	4,956	4,956	4,656	276	4,932	4,932



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
6 Nason Street/Fir Avenue								
NBL	41	2	43	43	21	1	22	22
NBT	696	42	738	738	718	43	761	761
NBR	67	4	71	71	118	7	125	125
SBL	153	9	162	165	264	16	280	280
SBT	984	59	1,043	1,060	690	41	731	731
SBR	165	10	175	178	183	11	194	194
EBL	113	7	120	120	75	5	80	80
EBT	89	5	94	94	91	5	96	96
EBR	29	2	31	31	15	1	16	16
WBL	61	4	65	65	147	9	156	156
WBT	77	5	82	82	128	8	136	136
WBR	61	4	65	65	130	8	138	138
North Leg								
Approach	1,302	78	1,380	1,403	1,137	68	1,205	1,205
Departure	870	53	923	923	923	56	979	979
Total	2,172	131	2,303	2,326	2,060	124	2,184	2,184
South Leg								
Approach	804	48	852	852	857	51	908	908
Departure	1,074	65	1,139	1,156	852	51	903	903
Total	1,878	113	1,991	2,008	1,709	102	1,811	1,811
East Leg								
Approach	199	13	212	212	405	25	430	430
Departure	309	18	327	330	473	28	501	501
Total	508	31	539	542	878	53	931	931
West Leg								
Approach	231	14	245	245	181	11	192	192
Departure	283	17	300	303	332	20	352	352
Total	514	31	545	548	513	31	544	544
Total Approaches								
Approach	2,536	153	2,689	2,712	2,580	155	2,735	2,735
Departure	2,536	153	2,689	2,712	2,580	155	2,735	2,735
Total	5,072	306	5,378	5,424	5,160	310	5,470	5,470



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
7 Nason Street/Eucalyptus Avenue								
NBL	56	3	59	59	30	2	32	32
NBT	583	35	618	611	768	46	814	819
NBR	113	7	120	120	190	11	201	201
SBL	17	1	18	19	12	1	13	13
SBT	969	58	1,027	1,057	742	45	787	791
SBR	74	4	78	80	93	6	99	99
EBL	204	12	216	213	65	4	69	69
EBT	163	10	173	173	128	8	136	136
EBR	208	12	220	220	59	4	63	63
WBL	98	6	104	104	145	9	154	154
WBT	102	6	108	108	127	8	135	135
WBR	26	2	28	28	18	1	19	19
North Leg								
Approach	1,060	63	1,123	1,156	847	52	899	903
Departure	813	49	862	852	851	51	902	907
Total	1,873	112	1,985	2,008	1,698	103	1,801	1,810
South Leg								
Approach	752	45	797	790	988	59	1,047	1,052
Departure	1,275	76	1,351	1,381	946	58	1,004	1,008
Total	2,027	121	2,148	2,171	1,934	117	2,051	2,060
East Leg								
Approach	226	14	240	240	290	18	308	308
Departure	293	18	311	312	330	20	350	350
Total	519	32	551	552	620	38	658	658
West Leg								
Approach	575	34	609	606	252	16	268	268
Departure	232	13	245	247	250	16	266	266
Total	807	47	854	853	502	32	534	534
Total Approaches								
Approach	2,613	156	2,769	2,792	2,377	145	2,522	2,531
Departure	2,613	156	2,769	2,792	2,377	145	2,522	2,531
Total	5,226	312	5,538	5,584	4,754	290	5,044	5,062



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
8 Nason Street/Dracea Avenue								
NBL	195	12	207	207	44	3	47	47
NBT	802	48	850	850	966	58	1,024	1,024
NBR	11	1	12	12	15	1	16	16
SBL	10	1	11	11	12	1	13	13
SBT	951	57	1,008	1,008	808	48	856	856
SBR	225	14	239	239	108	6	114	114
EBL	125	8	133	133	104	6	110	110
EBT	9	1	10	10	3	0	3	3
EBR	78	5	83	83	40	2	42	42
WBL	27	2	29	29	11	1	12	12
WBT	22	1	23	23	5	0	5	5
WBR	9	1	10	10	7	0	7	7
North Leg								
Approach	1,186	72	1,258	1,258	928	55	983	983
Departure	936	57	993	993	1,077	64	1,141	1,141
Total	2,122	129	2,251	2,251	2,005	119	2,124	2,124
South Leg								
Approach	1,008	61	1,069	1,069	1,025	62	1,087	1,087
Departure	1,056	64	1,120	1,120	859	51	910	910
Total	2,064	125	2,189	2,189	1,884	113	1,997	1,997
East Leg								
Approach	58	4	62	62	23	1	24	24
Departure	30	3	33	33	30	2	32	32
Total	88	7	95	95	53	3	56	56
West Leg								
Approach	212	14	226	226	147	8	155	155
Departure	442	27	469	469	157	9	166	166
Total	654	41	695	695	304	17	321	321
Total Approaches								
Approach	2,464	151	2,615	2,615	2,123	126	2,249	2,249
Departure	2,464	151	2,615	2,615	2,123	126	2,249	2,249
Total	4,928	302	5,230	5,230	4,246	252	4,498	4,498

Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
9 Nason Street/Cottonwood Avenue								
NBL	23	2	25	25	30	2	32	32
NBT	601	48	649	649	835	67	902	902
NBR	5	0	5	5	7	1	8	8
SBL	21	2	23	23	25	2	27	27
SBT	818	65	883	883	640	51	691	691
SBR	113	9	122	122	98	8	106	106
EBL	96	8	104	104	77	6	83	83
EBT	39	3	42	42	24	2	26	26
EBR	22	2	24	24	39	3	42	42
WBL	5	0	5	5	2	0	2	2
WBT	52	4	56	56	37	3	40	40
WBR	87	7	94	94	22	2	24	24
North Leg								
Approach	952	76	1,028	1,028	763	61	824	824
Departure	784	63	847	847	934	75	1,009	1,009
Total	1,736	139	1,875	1,875	1,697	136	1,833	1,833
South Leg								
Approach	629	50	679	679	872	70	942	942
Departure	845	67	912	912	681	54	735	735
Total	1,474	117	1,591	1,591	1,553	124	1,677	1,677
East Leg								
Approach	144	11	155	155	61	5	66	66
Departure	65	5	70	70	56	5	61	61
Total	209	16	225	225	117	10	127	127
West Leg								
Approach	157	13	170	170	140	11	151	151
Departure	188	15	203	203	165	13	178	178
Total	345	28	373	373	305	24	329	329
Total Approaches								
Approach	1,882	150	2,032	2,032	1,836	147	1,983	1,983
Departure	1,882	150	2,032	2,032	1,836	147	1,983	1,983
Total	3,764	300	4,064	4,064	3,672	294	3,966	3,966



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
10 Nason Street/Alessandro Boulevard								
NBL	81	6	87	87	75	6	81	81
NBT	450	36	486	486	680	54	734	734
NBR	29	2	31	31	89	7	96	96
SBL	47	4	51	51	47	4	51	51
SBT	708	57	765	765	556	44	600	600
SBR	97	8	105	105	70	6	76	76
EBL	52	4	56	56	120	10	130	130
EBT	122	10	132	132	294	24	318	318
EBR	96	8	104	104	76	6	82	82
WBL	127	10	137	137	25	2	27	27
WBT	302	24	326	326	189	15	204	204
WBR	119	10	129	129	61	5	66	66
North Leg								
Approach	852	69	921	921	673	54	727	727
Departure	621	50	671	671	861	69	930	930
Total	1,473	119	1,592	1,592	1,534	123	1,657	1,657
South Leg								
Approach	560	44	604	604	844	67	911	911
Departure	931	75	1,006	1,006	657	52	709	709
Total	1,491	119	1,610	1,610	1,501	119	1,620	1,620
East Leg								
Approach	548	44	592	592	275	22	297	297
Departure	198	16	214	214	430	35	465	465
Total	746	60	806	806	705	57	762	762
West Leg								
Approach	270	22	292	292	490	40	530	530
Departure	480	38	518	518	334	27	361	361
Total	750	60	810	810	824	67	891	891
Total Approaches								
Approach	2,230	179	2,409	2,409	2,282	183	2,465	2,465
Departure	2,230	179	2,409	2,409	2,282	183	2,465	2,465
Total	4,460	358	4,818	4,818	4,564	366	4,930	4,930



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
11 Nason Street/Cactus Avenue								
NBL	108	9	117	117	35	3	38	38
NBT	368	29	397	397	310	25	335	335
NBR	9	1	10	10	20	2	22	22
SBL	55	4	59	59	88	7	95	95
SBT	306	24	330	330	433	35	468	468
SBR	182	15	197	197	119	10	129	129
EBL	90	7	97	97	128	10	138	138
EBT	277	22	299	299	386	31	417	417
EBR	69	6	75	75	82	7	89	89
WBL	11	1	12	12	23	2	25	25
WBT	367	29	396	396	277	22	299	299
WBR	56	4	60	60	42	3	45	45
North Leg								
Approach	543	43	586	586	640	52	692	692
Departure	514	40	554	554	480	38	518	518
Total	1,057	83	1,140	1,140	1,120	90	1,210	1,210
South Leg								
Approach	485	39	524	524	365	30	395	395
Departure	386	31	417	417	538	44	582	582
Total	871	70	941	941	903	74	977	977
East Leg								
Approach	434	34	468	468	342	27	369	369
Departure	341	27	368	368	494	40	534	534
Total	775	61	836	836	836	67	903	903
West Leg								
Approach	436	35	471	471	596	48	644	644
Departure	657	53	710	710	431	35	466	466
Total	1,093	88	1,181	1,181	1,027	83	1,110	1,110
Total Approaches								
Approach	1,898	151	2,049	2,049	1,943	157	2,100	2,100
Departure	1,898	151	2,049	2,049	1,943	157	2,100	2,100
Total	3,796	302	4,098	4,098	3,886	314	4,200	4,200



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
12 Nason Street - Hillrose Lane/Iris Avenue								
NBL	13	1	14	14	11	1	12	12
NBT	39	3	42	42	34	3	37	37
NBR	7	1	8	8	13	1	14	14
SBL	109	9	118	118	107	9	116	116
SBT	9	1	10	10	44	4	48	48
SBR	228	18	246	246	352	28	380	380
EBL	280	22	302	302	211	17	228	228
EBT	709	57	766	766	642	51	693	693
EBR	22	2	24	24	17	1	18	18
WBL	7	1	8	8	20	2	22	22
WBT	565	45	610	610	771	62	833	833
WBR	81	6	87	87	122	10	132	132
North Leg								
Approach	346	28	374	374	503	41	544	544
Departure	400	31	431	431	367	30	397	397
Total	746	59	805	805	870	71	941	941
South Leg								
Approach	59	5	64	64	58	5	63	63
Departure	38	4	42	42	81	7	88	88
Total	97	9	106	106	139	12	151	151
East Leg								
Approach	653	52	705	705	913	74	987	987
Departure	825	67	892	892	762	61	823	823
Total	1,478	119	1,597	1,597	1,675	135	1,810	1,810
West Leg								
Approach	1,011	81	1,092	1,092	870	69	939	939
Departure	806	64	870	870	1,134	91	1,225	1,225
Total	1,817	145	1,962	1,962	2,004	160	2,164	2,164
Total Approaches								
Approach	2,069	166	2,235	2,235	2,344	189	2,533	2,533
Departure	2,069	166	2,235	2,235	2,344	189	2,533	2,533
Total	4,138	332	4,470	4,470	4,688	378	5,066	5,066



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
13 Project Driveway 1/Fir Avenue								
NBL	0		0	0	0		0	0
NBT	0		0	0	0		0	0
NBR	0		0	0	0		0	0
SBL	0		0	0	0		0	0
SBT	0		0	0	0		0	0
SBR	0		0	0	0		0	0
EBL	0		0	0	0		0	0
EBT	231	14	245	245	181	11	192	192
EBR	0		0	0	0		0	0
WBL	0		0	0	0		0	0
WBT	283	17	300	303	332	20	352	352
WBR	0		0	0	0		0	0
North Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
South Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
East Leg								
Approach	283	17	300	303	332	20	352	352
Departure	231	14	245	245	181	11	192	192
Total	514	31	545	548	513	31	544	544
West Leg								
Approach	231	14	245	245	181	11	192	192
Departure	283	17	300	303	332	20	352	352
Total	514	31	545	548	513	31	544	544
Total Approaches								
Approach	514	31	545	548	513	31	544	544
Departure	514	31	545	548	513	31	544	544
Total	1,028	62	1,090	1,096	1,026	62	1,088	1,088



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
14 Project Driveway 2/Fir Avenue								
NBL	0		0	0	0		0	0
NBT	0		0	0	0		0	0
NBR	0		0	0	0		0	0
SBL	0		0	0	0		0	0
SBT	0		0	0	0		0	0
SBR	0		0	0	0		0	0
EBL	0		0	0	0		0	0
EBT	231	14	245	245	181	11	192	192
EBR	0		0	0	0		0	0
WBL	0		0	0	0		0	0
WBT	283	17	300	303	332	20	352	352
WBR	0		0	0	0		0	0
North Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
South Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
East Leg								
Approach	283	17	300	303	332	20	352	352
Departure	231	14	245	245	181	11	192	192
Total	514	31	545	548	513	31	544	544
West Leg								
Approach	231	14	245	245	181	11	192	192
Departure	283	17	300	303	332	20	352	352
Total	514	31	545	548	513	31	544	544
Total Approaches								
Approach	514	31	545	548	513	31	544	544
Departure	514	31	545	548	513	31	544	544
Total	1,028	62	1,090	1,096	1,026	62	1,088	1,088



Table C-1 - Existing Peak Hour PCE Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes	Historical Counts	Growth Historical Yr to 2021	Adjusted 2021 Volumes	Balanced 2021 Volumes
15 Nason Street/Project Driveway 3								
NBL	0		0	0	0		0	0
NBT	870	53	923	923	923	56	979	979
NBR	0		0	0	0		0	0
SBL	0		0	0	0		0	0
SBT	1,302	78	1,380	1,403	1,137	68	1,205	1,205
SBR	0		0	0	0		0	0
EBL	0		0	0	0		0	0
EBT	0		0	0	0		0	0
EBR	0		0	0	0		0	0
WBL	0		0	0	0		0	0
WBT	0		0	0	0		0	0
WBR	0		0	0	0		0	0
North Leg								
Approach	1,302	78	1,380	1,403	1,137	68	1,205	1,205
Departure	870	53	923	923	923	56	979	979
Total	2,172	131	2,303	2,326	2,060	124	2,184	2,184
South Leg								
Approach	870	53	923	923	923	56	979	979
Departure	1,302	78	1,380	1,403	1,137	68	1,205	1,205
Total	2,172	131	2,303	2,326	2,060	124	2,184	2,184
East Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
West Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Total Approaches								
Approach	2,172	131	2,303	2,326	2,060	124	2,184	2,184
Departure	2,172	131	2,303	2,326	2,060	124	2,184	2,184
Total	4,344	262	4,606	4,652	4,120	248	4,368	4,368



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
1 Lasselle Street/Iris Avenue												
NBL	393	16	409	0	0	409	239	10	249	0	0	249
NBT	636	25	661	0	0	661	660	26	686	0	0	686
NBR	443	18	461	16	0	477	510	20	530	10	0	540
SBL	127	5	132	0	0	132	226	9	235	0	0	235
SBT	505	20	525	0	0	525	771	31	802	0	0	802
SBR	105	4	109	0	0	109	102	4	106	0	0	106
EBL	149	6	155	0	0	155	197	8	205	0	0	205
EBT	503	20	523	16	0	539	455	18	473	10	0	483
EBR	311	12	323	0	0	323	311	12	323	0	0	323
WBL	582	23	605	13	0	618	648	26	674	9	0	683
WBT	611	24	635	13	0	648	674	27	701	9	0	710
WBR	111	4	115	0	0	115	93	4	97	0	0	97
North Leg												
Approach	737	29	766	0	0	766	1,099	44	1,143	0	0	1,143
Departure	896	35	931	0	0	931	950	38	988	0	0	988
Total	1,633	64	1,697	0	0	1,697	2,049	82	2,131	0	0	2,131
South Leg												
Approach	1,472	59	1,531	16	0	1,547	1,409	56	1,465	10	0	1,475
Departure	1,398	55	1,453	13	0	1,466	1,730	69	1,799	9	0	1,808
Total	2,870	114	2,984	29	0	3,013	3,139	125	3,264	19	0	3,283
East Leg												
Approach	1,304	51	1,355	26	0	1,381	1,415	57	1,472	18	0	1,490
Departure	1,073	43	1,116	32	0	1,148	1,191	47	1,238	20	0	1,258
Total	2,377	94	2,471	58	0	2,529	2,606	104	2,710	38	0	2,748
West Leg												
Approach	963	38	1,001	16	0	1,017	963	38	1,001	10	0	1,011
Departure	1,109	44	1,153	13	0	1,166	1,015	41	1,056	9	0	1,065
Total	2,072	82	2,154	29	0	2,183	1,978	79	2,057	19	0	2,076
Total Approaches												
Approach	4,476	177	4,653	58	0	4,711	4,886	195	5,081	38	0	5,119
Departure	4,476	177	4,653	58	0	4,711	4,886	195	5,081	38	0	5,119
Total	8,952	354	9,306	116	0	9,422	9,772	390	10,162	76	0	10,238



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
2 Morrison Street/Fir Avenue												
NBL	122	5	127	0	0	127	35	1	36	0	0	36
NBT	24	1	25	0	0	25	21	1	22	0	0	22
NBR	59	2	61	36	0	97	24	1	25	22	0	47
SBL	18	1	19	6	0	25	13	1	14	4	0	18
SBT	56	2	58	0	0	58	13	1	14	0	0	14
SBR	6	0	6	0	0	6	3	0	3	0	0	3
EBL	4	0	4	0	0	4	2	0	2	0	0	2
EBT	165	7	172	23	0	195	133	5	138	14	0	152
EBR	200	8	208	0	0	208	36	1	37	0	0	37
WBL	102	4	106	18	0	124	57	2	59	13	0	72
WBT	192	8	200	18	0	218	195	8	203	13	0	216
WBR	10	0	10	5	0	15	11	0	11	4	0	15
North Leg												
Approach	80	3	83	6	0	89	29	2	31	4	0	35
Departure	38	1	39	5	0	44	34	1	35	4	0	39
Total	118	4	122	11	0	133	63	3	66	8	0	74
South Leg												
Approach	205	8	213	36	0	249	80	3	83	22	0	105
Departure	358	14	372	18	0	390	106	4	110	13	0	123
Total	563	22	585	54	0	639	186	7	193	35	0	228
East Leg												
Approach	304	12	316	41	0	357	263	10	273	30	0	303
Departure	242	10	252	65	0	317	170	7	177	40	0	217
Total	546	22	568	106	0	674	433	17	450	70	0	520
West Leg												
Approach	369	15	384	23	0	407	171	6	177	14	0	191
Departure	320	13	333	18	0	351	233	9	242	13	0	255
Total	689	28	717	41	0	758	404	15	419	27	0	446
Total Approaches												
Approach	958	38	996	106	0	1,102	543	21	564	70	0	634
Departure	958	38	996	106	0	1,102	543	21	564	70	0	634
Total	1,916	76	1,992	212	0	2,204	1,086	42	1,128	140	0	1,268



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
3 Morrison Street/Eucalyptus Avenue												
NBL	52	2	54	0	0	54	14	1	15	0	0	15
NBT	61	2	63	10	0	73	31	1	32	6	0	38
NBR	96	4	100	0	0	100	50	2	52	0	0	52
SBL	4	0	4	0	0	4	1	0	1	0	0	1
SBT	70	3	73	5	0	78	44	2	46	4	0	50
SBR	57	2	59	13	0	72	28	1	29	9	0	38
EBL	26	1	27	26	0	53	8	0	8	16	0	24
EBT	350	14	364	0	0	364	181	7	188	0	0	188
EBR	48	2	50	0	0	50	15	1	16	0	0	16
WBL	35	1	36	0	0	36	45	2	47	0	0	47
WBT	236	9	245	8	0	253	198	8	206	6	0	212
WBR	0	0	0	0	0	0	7	0	7	0	0	7
North Leg												
Approach	131	5	136	18	0	154	73	3	76	13	0	89
Departure	87	3	90	36	0	126	46	1	47	22	0	69
Total	218	8	226	54	0	280	119	4	123	35	0	158
South Leg												
Approach	209	8	217	10	0	227	95	4	99	6	0	105
Departure	153	6	159	5	0	164	104	5	109	4	0	113
Total	362	14	376	15	0	391	199	9	208	10	0	218
East Leg												
Approach	271	10	281	8	0	289	250	10	260	6	0	266
Departure	450	18	468	0	0	468	232	9	241	0	0	241
Total	721	28	749	8	0	757	482	19	501	6	0	507
West Leg												
Approach	424	17	441	26	0	467	204	8	212	16	0	228
Departure	345	13	358	21	0	379	240	10	250	15	0	265
Total	769	30	799	47	0	846	444	18	462	31	0	493
Total Approaches												
Approach	1,035	40	1,075	62	0	1,137	622	25	647	41	0	688
Departure	1,035	40	1,075	62	0	1,137	622	25	647	41	0	688
Total	2,070	80	2,150	124	0	2,274	1,244	50	1,294	82	0	1,376



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
4 Nason Street/Elder Avenue - State Route 60 Westbound Ramps												
NBL	135	5	140	10	0	150	175	7	182	7	0	189
NBT	309	12	321	23	0	344	284	11	295	17	0	312
NBR	432	17	449	50	0	499	586	23	609	37	0	646
SBL	32	1	33	0	0	33	28	1	29	0	0	29
SBT	415	17	432	29	0	461	300	12	312	18	0	330
SBR	12	0	12	0	0	12	10	0	10	0	0	10
EBL	6	0	6	0	0	6	8	0	8	0	0	8
EBT	39	2	41	0	0	41	25	1	26	0	0	26
EBR	227	9	236	13	0	249	124	5	129	8	0	137
WBL	98	4	102	19	0	121	142	6	148	12	0	160
WBT	22	1	23	0	0	23	32	1	33	0	0	33
WBR	33	1	34	0	0	34	23	1	24	0	0	24
North Leg												
Approach	459	18	477	29	0	506	338	13	351	18	0	369
Departure	348	13	361	23	0	384	315	12	327	17	0	344
Total	807	31	838	52	0	890	653	25	678	35	0	713
South Leg												
Approach	876	34	910	83	0	993	1,045	41	1,086	61	0	1,147
Departure	740	30	770	61	0	831	566	23	589	38	0	627
Total	1,616	64	1,680	144	0	1,824	1,611	64	1,675	99	0	1,774
East Leg												
Approach	153	6	159	19	0	178	197	8	205	12	0	217
Departure	503	20	523	50	0	573	639	25	664	37	0	701
Total	656	26	682	69	0	751	836	33	869	49	0	918
West Leg												
Approach	272	11	283	13	0	296	157	6	163	8	0	171
Departure	169	6	175	10	0	185	217	8	225	7	0	232
Total	441	17	458	23	0	481	374	14	388	15	0	403
Total Approaches												
Approach	1,760	69	1,829	144	0	1,973	1,737	68	1,805	99	0	1,904
Departure	1,760	69	1,829	144	0	1,973	1,737	68	1,805	99	0	1,904
Total	3,520	138	3,658	288	0	3,946	3,474	136	3,610	198	0	3,808



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
5 Nason Street/State Route 60 Eastbound Ramps												
NBL	0	0	0	0	0	0	0	0	0	0	0	0
NBT	841	34	875	83	0	958	926	37	963	61	0	1,024
NBR	143	6	149	15	0	164	156	6	162	11	0	173
SBL	51	2	53	0	0	53	57	2	59	0	0	59
SBT	689	28	717	62	0	779	514	21	535	37	0	572
SBR	0	0	0	0	0	0	0	0	0	0	0	0
EBL	34	1	35	0	0	35	113	5	118	0	0	118
EBT	6	0	6	0	0	6	7	0	7	0	0	7
EBR	714	29	743	65	0	808	693	28	721	39	0	760
WBL	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0
North Leg												
Approach	740	30	770	62	0	832	571	23	594	37	0	631
Departure	875	35	910	83	0	993	1,039	42	1,081	61	0	1,142
Total	1,615	65	1,680	145	0	1,825	1,610	65	1,675	98	0	1,773
South Leg												
Approach	984	40	1,024	98	0	1,122	1,082	43	1,125	72	0	1,197
Departure	1,403	57	1,460	127	0	1,587	1,207	49	1,256	76	0	1,332
Total	2,387	97	2,484	225	0	2,709	2,289	92	2,381	148	0	2,529
East Leg												
Approach	0	0	0	0	0	0	0	0	0	0	0	0
Departure	200	8	208	15	0	223	220	8	228	11	0	239
Total	200	8	208	15	0	223	220	8	228	11	0	239
West Leg												
Approach	754	30	784	65	0	849	813	33	846	39	0	885
Departure	0	0	0	0	0	0	0	0	0	0	0	0
Total	754	30	784	65	0	849	813	33	846	39	0	885
Total Approaches												
Approach	2,478	100	2,578	225	0	2,803	2,466	99	2,565	148	0	2,713
Departure	2,478	100	2,578	225	0	2,803	2,466	99	2,565	148	0	2,713
Total	4,956	200	5,156	450	0	5,606	4,932	198	5,130	296	0	5,426



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
6 Nason Street/Fir Avenue												
NBL	43	2	45	117	55	217	22	1	23	71	56	150
NBT	738	30	768	0	-51	717	761	30	791	0	-48	743
NBR	71	3	74	0	-5	69	125	5	130	0	-8	122
SBL	165	7	172	0	-11	161	280	11	291	0	-18	273
SBT	1,060	42	1,102	55	-34	1,123	731	29	760	40	-18	782
SBR	178	7	185	0	-12	173	194	8	202	0	-12	190
EBL	120	5	125	98	48	271	80	3	83	72	52	207
EBT	94	4	98	8	14	120	96	4	100	6	23	129
EBR	31	1	32	45	30	107	16	1	17	33	22	72
WBL	65	3	68	0	-4	64	156	6	162	0	-10	152
WBT	82	3	85	10	9	104	136	5	141	6	19	166
WBR	65	3	68	0	-4	64	138	6	144	0	-9	135
North Leg												
Approach	1,403	56	1,459	55	-57	1,457	1,205	48	1,253	40	-48	1,245
Departure	923	38	961	98	-7	1,052	979	39	1,018	72	-5	1,085
Total	2,326	94	2,420	153	-64	2,509	2,184	87	2,271	112	-53	2,330
South Leg												
Approach	852	35	887	117	-1	1,003	908	36	944	71	0	1,015
Departure	1,156	46	1,202	100	-8	1,294	903	36	939	73	-6	1,006
Total	2,008	81	2,089	217	-9	2,297	1,811	72	1,883	144	-6	2,021
East Leg												
Approach	212	9	221	10	1	232	430	17	447	6	0	453
Departure	330	14	344	8	-2	350	501	20	521	6	-3	524
Total	542	23	565	18	-1	582	931	37	968	12	-3	977
West Leg												
Approach	245	10	255	151	92	498	192	8	200	111	97	408
Departure	303	12	315	127	52	494	352	14	366	77	63	506
Total	548	22	570	278	144	992	544	22	566	188	160	914
Total Approaches												
Approach	2,712	110	2,822	333	35	3,190	2,735	109	2,844	228	49	3,121
Departure	2,712	110	2,822	333	35	3,190	2,735	109	2,844	228	49	3,121
Total	5,424	220	5,644	666	70	6,380	5,470	218	5,688	456	98	6,242



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
7 Nason Street/Eucalyptus Avenue												
NBL	59	2	61	0	0	61	32	1	33	0	0	33
NBT	611	24	635	104	0	739	819	33	852	63	0	915
NBR	120	5	125	0	0	125	201	8	209	0	0	209
SBL	19	1	20	10	0	30	13	1	14	7	0	21
SBT	1,057	42	1,099	83	0	1,182	791	32	823	61	0	884
SBR	80	3	83	8	0	91	99	4	103	6	0	109
EBL	213	9	222	0	0	222	69	3	72	0	0	72
EBT	173	7	180	0	0	180	136	5	141	0	0	141
EBR	220	9	229	0	0	229	63	3	66	0	0	66
WBL	104	4	108	0	0	108	154	6	160	0	0	160
WBT	108	4	112	0	0	112	135	5	140	0	0	140
WBR	28	1	29	13	0	42	19	1	20	8	0	28
North Leg												
Approach	1,156	46	1,202	101	0	1,303	903	37	940	74	0	1,014
Departure	852	34	886	117	0	1,003	907	37	944	71	0	1,015
Total	2,008	80	2,088	218	0	2,306	1,810	74	1,884	145	0	2,029
South Leg												
Approach	790	31	821	104	0	925	1,052	42	1,094	63	0	1,157
Departure	1,381	55	1,436	83	0	1,519	1,008	41	1,049	61	0	1,110
Total	2,171	86	2,257	187	0	2,444	2,060	83	2,143	124	0	2,267
East Leg												
Approach	240	9	249	13	0	262	308	12	320	8	0	328
Departure	312	13	325	10	0	335	350	14	364	7	0	371
Total	552	22	574	23	0	597	658	26	684	15	0	699
West Leg												
Approach	606	25	631	0	0	631	268	11	279	0	0	279
Departure	247	9	256	8	0	264	266	10	276	6	0	282
Total	853	34	887	8	0	895	534	21	555	6	0	561
Total Approaches												
Approach	2,792	111	2,903	218	0	3,121	2,531	102	2,633	145	0	2,778
Departure	2,792	111	2,903	218	0	3,121	2,531	102	2,633	145	0	2,778
Total	5,584	222	5,806	436	0	6,242	5,062	204	5,266	290	0	5,556



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
8 Nason Street/Dracea Avenue												
NBL	207	8	215	0	0	215	47	2	49	0	0	49
NBT	850	34	884	104	0	988	1,024	41	1,065	63	0	1,128
NBR	12	0	12	0	0	12	16	1	17	0	0	17
SBL	11	0	11	0	0	11	13	1	14	0	0	14
SBT	1,008	40	1,048	80	0	1,128	856	34	890	59	0	949
SBR	239	10	249	3	0	252	114	5	119	2	0	121
EBL	133	5	138	0	0	138	110	4	114	0	0	114
EBT	10	0	10	0	0	10	3	0	3	0	0	3
EBR	83	3	86	0	0	86	42	2	44	0	0	44
WBL	29	1	30	0	0	30	12	0	12	0	0	12
WBT	23	1	24	0	0	24	5	0	5	0	0	5
WBR	10	0	10	0	0	10	7	0	7	0	0	7
North Leg												
Approach	1,258	50	1,308	83	0	1,391	983	40	1,023	61	0	1,084
Departure	993	39	1,032	104	0	1,136	1,141	45	1,186	63	0	1,249
Total	2,251	89	2,340	187	0	2,527	2,124	85	2,209	124	0	2,333
South Leg												
Approach	1,069	42	1,111	104	0	1,215	1,087	44	1,131	63	0	1,194
Departure	1,120	44	1,164	80	0	1,244	910	36	946	59	0	1,005
Total	2,189	86	2,275	184	0	2,459	1,997	80	2,077	122	0	2,199
East Leg												
Approach	62	2	64	0	0	64	24	0	24	0	0	24
Departure	33	0	33	0	0	33	32	2	34	0	0	34
Total	95	2	97	0	0	97	56	2	58	0	0	58
West Leg												
Approach	226	8	234	0	0	234	155	6	161	0	0	161
Departure	469	19	488	3	0	491	166	7	173	2	0	175
Total	695	27	722	3	0	725	321	13	334	2	0	336
Total Approaches												
Approach	2,615	102	2,717	187	0	2,904	2,249	90	2,339	124	0	2,463
Departure	2,615	102	2,717	187	0	2,904	2,249	90	2,339	124	0	2,463
Total	5,230	204	5,434	374	0	5,808	4,498	180	4,678	248	0	4,926



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
9 Nason Street/Cottonwood Avenue												
NBL	25	1	26	0	0	26	32	1	33	0	0	33
NBT	649	26	675	97	0	772	902	36	938	59	0	997
NBR	5	0	5	0	0	5	8	0	8	0	0	8
SBL	23	1	24	3	0	27	27	1	28	2	0	30
SBT	883	35	918	75	0	993	691	28	719	55	0	774
SBR	122	5	127	3	0	130	106	4	110	2	0	112
EBL	104	4	108	3	0	111	83	3	86	2	0	88
EBT	42	2	44	0	0	44	26	1	27	0	0	27
EBR	24	1	25	0	0	25	42	2	44	0	0	44
WBL	5	0	5	0	0	5	2	0	2	0	0	2
WBT	56	2	58	0	0	58	40	2	42	0	0	42
WBR	94	4	98	3	0	101	24	1	25	2	0	27
North Leg												
Approach	1,028	41	1,069	81	0	1,150	824	33	857	59	0	916
Departure	847	34	881	103	0	984	1,009	40	1,049	63	0	1,112
Total	1,875	75	1,950	184	0	2,134	1,833	73	1,906	122	0	2,028
South Leg												
Approach	679	27	706	97	0	803	942	37	979	59	0	1,038
Departure	912	36	948	75	0	1,023	735	30	765	55	0	820
Total	1,591	63	1,654	172	0	1,826	1,677	67	1,744	114	0	1,858
East Leg												
Approach	155	6	161	3	0	164	66	3	69	2	0	71
Departure	70	3	73	3	0	76	61	2	63	2	0	65
Total	225	9	234	6	0	240	127	5	132	4	0	136
West Leg												
Approach	170	7	177	3	0	180	151	6	157	2	0	159
Departure	203	8	211	3	0	214	178	7	185	2	0	187
Total	373	15	388	6	0	394	329	13	342	4	0	346
Total Approaches												
Approach	2,032	81	2,113	184	0	2,297	1,983	79	2,062	122	0	2,184
Departure	2,032	81	2,113	184	0	2,297	1,983	79	2,062	122	0	2,184
Total	4,064	162	4,226	368	0	4,594	3,966	158	4,124	244	0	4,368



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
10 Nason Street/Alessandro Boulevard												
NBL	87	3	90	0	0	90	81	3	84	0	0	84
NBT	486	19	505	68	0	573	734	29	763	41	0	804
NBR	31	1	32	0	0	32	96	4	100	0	0	100
SBL	51	2	53	5	0	58	51	2	53	4	0	57
SBT	765	31	796	53	0	849	600	24	624	39	0	663
SBR	105	4	109	18	0	127	76	3	79	13	0	92
EBL	56	2	58	23	0	81	130	5	135	14	0	149
EBT	132	5	137	0	0	137	318	13	331	0	0	331
EBR	104	4	108	0	0	108	82	3	85	0	0	85
WBL	137	5	142	0	0	142	27	1	28	0	0	28
WBT	326	13	339	0	0	339	204	8	212	0	0	212
WBR	129	5	134	6	0	140	66	3	69	4	0	73
North Leg												
Approach	921	37	958	76	0	1,034	727	29	756	56	0	812
Departure	671	26	697	97	0	794	930	37	967	59	0	1,026
Total	1,592	63	1,655	173	0	1,828	1,657	66	1,723	115	0	1,838
South Leg												
Approach	604	23	627	68	0	695	911	36	947	41	0	988
Departure	1,006	40	1,046	53	0	1,099	709	28	737	39	0	776
Total	1,610	63	1,673	121	0	1,794	1,620	64	1,684	80	0	1,764
East Leg												
Approach	592	23	615	6	0	621	297	12	309	4	0	313
Departure	214	8	222	5	0	227	465	19	484	4	0	488
Total	806	31	837	11	0	848	762	31	793	8	0	801
West Leg												
Approach	292	11	303	23	0	326	530	21	551	14	0	565
Departure	518	20	538	18	0	556	361	14	375	13	0	388
Total	810	31	841	41	0	882	891	35	926	27	0	953
Total Approaches												
Approach	2,409	94	2,503	173	0	2,676	2,465	98	2,563	115	0	2,678
Departure	2,409	94	2,503	173	0	2,676	2,465	98	2,563	115	0	2,678
Total	4,818	188	5,006	346	0	5,352	4,930	196	5,126	230	0	5,356



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
11 Nason Street/Cactus Avenue												
NBL	117	5	122	0	0	122	38	2	40	0	0	40
NBT	397	16	413	42	0	455	335	13	348	26	0	374
NBR	10	0	10	0	0	10	22	1	23	0	0	23
SBL	59	2	61	10	0	71	95	4	99	7	0	106
SBT	330	13	343	33	0	376	468	19	487	24	0	511
SBR	197	8	205	10	0	215	129	5	134	7	0	141
EBL	97	4	101	13	0	114	138	6	144	8	0	152
EBT	299	12	311	0	0	311	417	17	434	0	0	434
EBR	75	3	78	0	0	78	89	4	93	0	0	93
WBL	12	0	12	0	0	12	25	1	26	0	0	26
WBT	396	16	412	0	0	412	299	12	311	0	0	311
WBR	60	2	62	13	0	75	45	2	47	8	0	55
North Leg												
Approach	586	23	609	53	0	662	692	28	720	38	0	758
Departure	554	22	576	68	0	644	518	21	539	42	0	581
Total	1,140	45	1,185	121	0	1,306	1,210	49	1,259	80	0	1,339
South Leg												
Approach	524	21	545	42	0	587	395	16	411	26	0	437
Departure	417	16	433	33	0	466	582	24	606	24	0	630
Total	941	37	978	75	0	1,053	977	40	1,017	50	0	1,067
East Leg												
Approach	468	18	486	13	0	499	369	15	384	8	0	392
Departure	368	14	382	10	0	392	534	22	556	7	0	563
Total	836	32	868	23	0	891	903	37	940	15	0	955
West Leg												
Approach	471	19	490	13	0	503	644	27	671	8	0	679
Departure	710	29	739	10	0	749	466	19	485	7	0	492
Total	1,181	48	1,229	23	0	1,252	1,110	46	1,156	15	0	1,171
Total Approaches												
Approach	2,049	81	2,130	121	0	2,251	2,100	86	2,186	80	0	2,266
Departure	2,049	81	2,130	121	0	2,251	2,100	86	2,186	80	0	2,266
Total	4,098	162	4,260	242	0	4,502	4,200	172	4,372	160	0	4,532



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
12 Nason Street - Hillrose Lane/Iris Avenue												
NBL	14	1	15	0	0	15	12	0	12	0	0	12
NBT	42	2	44	3	0	47	37	1	38	2	0	40
NBR	8	0	8	0	0	8	14	1	15	0	0	15
SBL	118	5	123	0	0	123	116	5	121	0	0	121
SBT	10	0	10	3	0	13	48	2	50	2	0	52
SBR	246	10	256	30	0	286	380	15	395	22	0	417
EBL	302	12	314	39	0	353	228	9	237	24	0	261
EBT	766	31	797	0	0	797	693	28	721	0	0	721
EBR	24	1	25	0	0	25	18	1	19	0	0	19
WBL	8	0	8	0	0	8	22	1	23	0	0	23
WBT	610	24	634	0	0	634	833	33	866	0	0	866
WBR	87	3	90	0	0	90	132	5	137	0	0	137
North Leg												
Approach	374	15	389	33	0	422	544	22	566	24	0	590
Departure	431	17	448	42	0	490	397	15	412	26	0	438
Total	805	32	837	75	0	912	941	37	978	50	0	1,028
South Leg												
Approach	64	3	67	3	0	70	63	2	65	2	0	67
Departure	42	1	43	3	0	46	88	4	92	2	0	94
Total	106	4	110	6	0	116	151	6	157	4	0	161
East Leg												
Approach	705	27	732	0	0	732	987	39	1,026	0	0	1,026
Departure	892	36	928	0	0	928	823	34	857	0	0	857
Total	1,597	63	1,660	0	0	1,660	1,810	73	1,883	0	0	1,883
West Leg												
Approach	1,092	44	1,136	39	0	1,175	939	38	977	24	0	1,001
Departure	870	35	905	30	0	935	1,225	48	1,273	22	0	1,295
Total	1,962	79	2,041	69	0	2,110	2,164	86	2,250	46	0	2,296
Total Approaches												
Approach	2,235	89	2,324	75	0	2,399	2,533	101	2,634	50	0	2,684
Departure	2,235	89	2,324	75	0	2,399	2,533	101	2,634	50	0	2,684
Total	4,470	178	4,648	150	0	4,798	5,066	202	5,268	100	0	5,368



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
13 Project Driveway 1/Fir Avenue												
NBL	0	0	0	0	0	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	150	110	260	0	0	0	110	110	220
SBT	0	0	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	23	9	32	0	0	0	17	11	28
EBL	0	0	0	71	17	88	0	0	0	43	12	55
EBT	245	10	255	0	-17	238	192	8	200	0	-12	188
EBR	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0	0	0
WBT	303	12	315	23	-12	326	352	14	366	17	-11	372
WBR	0	0	0	62	35	97	0	0	0	37	41	78
North Leg												
Approach	0	0	0	173	119	292	0	0	0	127	121	248
Departure	0	0	0	133	52	185	0	0	0	80	53	133
Total	0	0	0	306	171	477	0	0	0	207	174	381
South Leg												
Approach	0	0	0	0	0	0	0	0	0	0	0	0
Departure	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
East Leg												
Approach	303	12	315	85	23	423	352	14	366	54	30	450
Departure	245	10	255	150	93	498	192	8	200	110	98	408
Total	548	22	570	235	116	921	544	22	566	164	128	858
West Leg												
Approach	245	10	255	71	0	326	192	8	200	43	0	243
Departure	303	12	315	46	-3	358	352	14	366	34	0	400
Total	548	22	570	117	-3	684	544	22	566	77	0	643
Total Approaches												
Approach	548	22	570	329	142	1,041	544	22	566	224	151	941
Departure	548	22	570	329	142	1,041	544	22	566	224	151	941
Total	1,096	44	1,140	658	284	2,082	1,088	44	1,132	448	302	1,882



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
14 Project Driveway 2/Fir Avenue												
NBL	0	0	0	0	0	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	23	9	32	0	0	0	17	11	28
EBL	0	0	0	0	0	0	0	0	0	0	0	0
EBT	245	10	255	150	93	498	192	8	200	110	98	408
EBR	0	0	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0	0	0
WBT	303	12	315	62	15	392	352	14	366	37	20	423
WBR	0	0	0	65	37	102	0	0	0	39	44	83
North Leg												
Approach	0	0	0	23	9	32	0	0	0	17	11	28
Departure	0	0	0	65	37	102	0	0	0	39	44	83
Total	0	0	0	88	46	134	0	0	0	56	55	111
South Leg												
Approach	0	0	0	0	0	0	0	0	0	0	0	0
Departure	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
East Leg												
Approach	303	12	315	127	52	494	352	14	366	76	64	506
Departure	245	10	255	150	93	498	192	8	200	110	98	408
Total	548	22	570	277	145	992	544	22	566	186	162	914
West Leg												
Approach	245	10	255	150	93	498	192	8	200	110	98	408
Departure	303	12	315	85	24	424	352	14	366	54	31	451
Total	548	22	570	235	117	922	544	22	566	164	129	859
Total Approaches												
Approach	548	22	570	300	154	1,024	544	22	566	203	173	942
Departure	548	22	570	300	154	1,024	544	22	566	203	173	942
Total	1,096	44	1,140	600	308	2,048	1,088	44	1,132	406	346	1,884



Table C-2 - Project Completion (2023) Peak Hour PCE Volume Summary

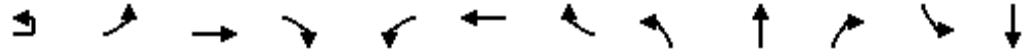
	AM Peak Hour						PM Peak Hour					
	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project	Existing without Project	Growth Existing to 2023	Project Completion without Project	Net Project Trips	Pass-By Trips	Project Completion Plus Project
15 Nason Street/Project Driveway 3												
NBL	0	0	0	0	0	0	0	0	0	0	0	0
NBT	923	38	961	98	0	1,059	979	39	1,018	72	0	1,090
NBR	0	0	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0	0	0
SBT	1,403	57	1,460	0	-96	1,364	1,207	49	1,256	0	-77	1,179
SBR	0	0	0	126	96	222	0	0	0	77	77	154
EBL	0	0	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	55	39	94	0	0	0	40	29	69
WBL	0	0	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0	0	0
North Leg												
Approach	1,403	57	1,460	126	0	1,586	1,207	49	1,256	77	0	1,333
Departure	923	38	961	98	0	1,059	979	39	1,018	72	0	1,090
Total	2,326	95	2,421	224	0	2,645	2,186	88	2,274	149	0	2,423
South Leg												
Approach	923	38	961	98	0	1,059	979	39	1,018	72	0	1,090
Departure	1,403	57	1,460	55	-57	1,458	1,207	49	1,256	40	-48	1,248
Total	2,326	95	2,421	153	-57	2,517	2,186	88	2,274	112	-48	2,338
East Leg												
Approach	0	0	0	0	0	0	0	0	0	0	0	0
Departure	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
West Leg												
Approach	0	0	0	55	39	94	0	0	0	40	29	69
Departure	0	0	0	126	96	222	0	0	0	77	77	154
Total	0	0	0	181	135	316	0	0	0	117	106	223
Total Approaches												
Approach	2,326	95	2,421	279	39	2,739	2,186	88	2,274	189	29	2,492
Departure	2,326	95	2,421	279	39	2,739	2,186	88	2,274	189	29	2,492
Total	4,652	190	4,842	558	78	5,478	4,372	176	4,548	378	58	4,984

APPENDIX D:

INTERSECTION LEVEL OF SERVICE WORKSHEETS

HCM 6th Signalized Intersection Summary
 1: Lasselle Street & Iris Avenue

Village at Moreno Valley
 Existing NP - AM Peak Hour



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔↔	↔↔↔		↔↔	↔↔↔		↔↔	↔↔	↔	↔↔	↔↔
Traffic Volume (veh/h)	8	141	503	311	582	611	111	393	636	443	127	505
Future Volume (veh/h)	8	141	503	311	582	611	111	393	636	443	127	505
Initial Q (Qb), veh		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	
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No		No			No				No
Adj Sat Flow, veh/h/ln		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h		150	535	331	619	650	118	418	677	471	135	537
Peak Hour Factor		0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %		0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h		752	780	363	713	948	170	426	1069	804	264	744
Arrive On Green		0.21	0.23	0.23	0.20	0.21	0.21	0.12	0.30	0.30	0.08	0.25
Sat Flow, veh/h		3510	3458	1610	3510	4423	792	3510	3610	1610	3510	2976
Grp Volume(v), veh/h		150	535	331	619	506	262	418	677	471	135	325
Grp Sat Flow(s),veh/h/ln		1755	1729	1610	1755	1729	1757	1755	1805	1610	1755	1805
Q Serve(g_s), s		3.2	12.8	18.0	15.4	12.1	12.4	10.7	14.6	18.6	3.3	14.8
Cycle Q Clear(g_c), s		3.2	12.8	18.0	15.4	12.1	12.4	10.7	14.6	18.6	3.3	14.8
Prop In Lane		1.00		1.00	1.00		0.45	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		752	780	363	713	742	377	426	1069	804	264	451
V/C Ratio(X)		0.20	0.69	0.91	0.87	0.68	0.69	0.98	0.63	0.59	0.51	0.72
Avail Cap(c_a), veh/h		752	788	367	819	1268	644	426	1069	804	273	451
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
Upstream Filter(I)		1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		29.0	31.9	34.0	34.7	32.5	32.6	39.4	27.4	16.0	40.0	30.9
Incr Delay (d2), s/veh		0.1	2.5	26.0	7.5	0.9	1.9	38.6	2.9	3.1	1.5	9.5
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.3	5.5	9.5	7.1	5.1	5.4	6.8	6.6	7.1	1.5	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		29.2	34.4	60.0	42.2	33.5	34.5	78.1	30.3	19.1	41.6	40.4
LnGrp LOS		C	C	E	D	C	C	E	C	B	D	D
Approach Vol, veh/h			1016			1387			1566			784
Approach Delay, s/veh			42.0			37.6			39.7			40.7
Approach LOS			D			D			D			D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.3	31.2	22.8	24.8	15.4	27.0	23.8	23.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.0	23.5	21.0	20.5	8.0	22.5	8.5	33.0				
Max Q Clear Time (g_c+I1), s	5.3	20.6	17.4	20.0	12.7	16.9	5.2	14.4				
Green Ext Time (p_c), s	0.1	1.7	0.9	0.3	0.0	1.9	0.1	4.9				

Intersection Summary

HCM 6th Ctrl Delay	39.7
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 1: Lasselle Street & Iris Avenue

Village at Moreno Valley
 Existing NP - AM Peak Hour

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	105
Future Volume (veh/h)	105
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	112
Peak Hour Factor	0.94
Percent Heavy Veh, %	0
Cap, veh/h	155
Arrive On Green	0.25
Sat Flow, veh/h	618
Grp Volume(v), veh/h	324
Grp Sat Flow(s),veh/h/ln	1789
Q Serve(g_s), s	14.9
Cycle Q Clear(g_c), s	14.9
Prop In Lane	0.35
Lane Grp Cap(c), veh/h	447
V/C Ratio(X)	0.72
Avail Cap(c_a), veh/h	447
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	30.9
Incr Delay (d2), s/veh	9.8
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	7.5
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	40.7
LnGrp LOS	D
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Intersection												
Intersection Delay, s/veh	19.2											
Intersection LOS	C											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕		↕	↕	↕	↕		↕	↕	
Traffic Vol, veh/h	4	165	200	102	192	10	122	24	59	18	56	6
Future Vol, veh/h	4	165	200	102	192	10	122	24	59	18	56	6
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	229	278	142	267	14	169	33	82	25	78	8
Number of Lanes	0	1	1	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	14.4	30.3	14	12.3
HCM LOS	B	D	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	2%	0%	35%	0%	100%	0%
Vol Thru, %	0%	29%	98%	0%	65%	0%	0%	90%
Vol Right, %	0%	71%	0%	100%	0%	100%	0%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	122	83	169	200	294	10	18	62
LT Vol	122	0	4	0	102	0	18	0
Through Vol	0	24	165	0	192	0	0	56
RT Vol	0	59	0	200	0	10	0	6
Lane Flow Rate	169	115	235	278	408	14	25	86
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.376	0.223	0.441	0.466	0.789	0.023	0.059	0.188
Departure Headway (Hd)	7.981	6.957	6.769	6.041	6.953	6.062	8.465	7.879
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	451	516	533	597	523	590	423	455
Service Time	5.724	4.7	4.509	3.781	4.691	3.8	6.219	5.633
HCM Lane V/C Ratio	0.375	0.223	0.441	0.466	0.78	0.024	0.059	0.189
HCM Control Delay	15.5	11.7	14.8	14	31	8.9	11.8	12.5
HCM Lane LOS	C	B	B	B	D	A	B	B
HCM 95th-tile Q	1.7	0.8	2.2	2.5	7.3	0.1	0.2	0.7

HCM 6th Signalized Intersection Summary

3: Morrison Street & Eucalyptus Avenue

Village at Moreno Valley
Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗	↗	↖	↗	
Traffic Volume (veh/h)	26	350	48	35	236	0	52	61	96	4	70	57
Future Volume (veh/h)	26	350	48	35	236	0	52	61	96	4	70	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	36	486	67	49	328	0	72	85	133	6	97	79
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	91	1035	142	111	1212	0	136	657	656	20	555	413
Arrive On Green	0.05	0.32	0.32	0.06	0.34	0.00	0.08	0.35	0.35	0.01	0.28	0.28
Sat Flow, veh/h	1810	3189	438	1810	3705	0	1810	1900	1610	1810	1972	1469
Grp Volume(v), veh/h	36	274	279	49	328	0	72	85	133	6	88	88
Grp Sat Flow(s),veh/h/ln	1810	1805	1821	1810	1805	0	1810	1900	1610	1810	1805	1636
Q Serve(g_s), s	1.3	8.5	8.5	1.8	4.6	0.0	2.7	2.1	3.7	0.2	2.6	2.9
Cycle Q Clear(g_c), s	1.3	8.5	8.5	1.8	4.6	0.0	2.7	2.1	3.7	0.2	2.6	2.9
Prop In Lane	1.00		0.24	1.00		0.00	1.00		1.00	1.00		0.90
Lane Grp Cap(c), veh/h	91	586	591	111	1212	0	136	657	656	20	508	460
V/C Ratio(X)	0.40	0.47	0.47	0.44	0.27	0.00	0.53	0.13	0.20	0.30	0.17	0.19
Avail Cap(c_a), veh/h	184	586	591	184	1212	0	184	657	656	181	508	460
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	18.8	18.8	31.7	17.0	0.0	31.2	15.7	13.4	34.3	19.0	19.1
Incr Delay (d2), s/veh	2.8	2.7	2.7	2.6	0.5	0.0	3.1	0.4	0.7	8.2	0.7	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.7	3.7	0.8	1.8	0.0	1.2	0.9	1.3	0.1	1.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	21.5	21.5	34.3	17.5	0.0	34.3	16.1	14.1	42.5	19.7	20.0
LnGrp LOS	C	C	C	C	B	A	C	B	B	D	B	C
Approach Vol, veh/h		589			377			290			182	
Approach Delay, s/veh		22.3			19.7			19.7			20.6	
Approach LOS		C			B			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.8	27.2	9.8	24.2	8.0	28.0	5.3	28.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	18.1	7.1	19.7	7.1	18.1	7.0	19.8					
Max Q Clear Time (g_c+1), s	10.5	4.7	4.9	3.3	6.6	2.2	5.7					
Green Ext Time (p_c), s	0.0	1.9	0.0	0.7	0.0	1.4	0.0	0.7				
Intersection Summary												
HCM 6th Ctrl Delay											20.9	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary
 4: Nason Street & Elder Avenue/SR-60 Westbound Ramp

Village at Moreno Valley
 Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	39	227	98	22	33	135	309	432	32	415	12
Future Volume (veh/h)	6	39	227	98	22	33	135	309	432	32	415	12
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		0.98
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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	7	48	280	121	27	41	167	381	533	40	512	15
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	16	323	444	147	462	439	191	1958	1004	54	1670	49
Arrive On Green	0.01	0.17	0.17	0.08	0.24	0.24	0.18	0.91	0.91	0.03	0.47	0.47
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	3579	105
Grp Volume(v), veh/h	7	48	280	121	27	41	167	381	533	40	258	269
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1805	1879
Q Serve(g_s), s	0.5	2.7	19.1	8.2	1.4	2.4	11.2	1.5	7.2	2.7	11.1	11.1
Cycle Q Clear(g_c), s	0.5	2.7	19.1	8.2	1.4	2.4	11.2	1.5	7.2	2.7	11.1	11.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	16	323	444	147	462	439	191	1958	1004	54	842	877
V/C Ratio(X)	0.45	0.15	0.63	0.82	0.06	0.09	0.87	0.19	0.53	0.74	0.31	0.31
Avail Cap(c_a), veh/h	290	365	480	290	462	439	217	1958	1004	217	842	877
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.76	0.76	0.76	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.7	44.2	39.7	56.5	36.3	33.9	50.6	2.8	2.1	60.1	20.7	20.8
Incr Delay (d2), s/veh	7.3	0.1	1.6	4.3	0.0	0.0	20.6	0.2	1.5	7.0	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.3	7.7	3.9	0.6	0.9	5.7	0.5	1.6	1.3	4.8	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.0	44.2	41.3	60.8	36.4	33.9	71.3	2.9	3.6	67.1	21.7	21.7
LnGrp LOS	E	D	D	E	D	C	E	A	A	E	C	C
Approach Vol, veh/h		335			189			1081			567	
Approach Delay, s/veh		42.3			51.5			13.8			24.9	
Approach LOS		D			D			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.8	73.8	15.2	27.3	18.2	64.3	6.1	36.4				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	15.0	44.0	20.0	24.0	15.0	44.0	20.0	24.0				
Max Q Clear Time (g_c+1), s	11.5	9.2	10.2	21.1	13.2	13.1	2.5	4.4				
Green Ext Time (p_c), s	0.0	2.5	0.1	0.2	0.0	1.8	0.0	0.1				

Intersection Summary

HCM 6th Ctrl Delay	24.4
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary

5: Nason Street & SR-60 Eastbound Ramp

Village at Moreno Valley
Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	6	714	0	0	0	0	841	143	51	689	0
Future Volume (veh/h)	34	6	714	0	0	0	0	841	143	51	689	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	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	42	0	897				0	1051	179	64	861	0
Peak Hour Factor	0.80	0.80	0.80				0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	534	0	951				0	1613	274	83	2197	0
Arrive On Green	0.30	0.00	0.30				0.00	0.52	0.52	0.02	0.20	0.00
Sat Flow, veh/h	1810	0	3220				0	3181	525	1810	3705	0
Grp Volume(v), veh/h	42	0	897				0	614	616	64	861	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1805	1806	1810	1805	0
Q Serve(g_s), s	2.1	0.0	34.0				0.0	30.7	30.9	4.4	25.9	0.0
Cycle Q Clear(g_c), s	2.1	0.0	34.0				0.0	30.7	30.9	4.4	25.9	0.0
Prop In Lane	1.00		1.00				0.00		0.29	1.00		0.00
Lane Grp Cap(c), veh/h	534	0	951				0	944	944	83	2197	0
V/C Ratio(X)	0.08	0.00	0.94				0.00	0.65	0.65	0.77	0.39	0.00
Avail Cap(c_a), veh/h	565	0	1005				0	944	944	217	2197	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	0.86	0.86	0.93	0.93	0.00
Uniform Delay (d), s/veh	31.8	0.0	43.0				0.0	21.6	21.6	60.9	29.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	15.7				0.0	3.0	3.0	5.2	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	15.3				0.0	13.1	13.2	2.2	12.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.8	0.0	58.7				0.0	24.6	24.6	66.1	30.4	0.0
LnGrp LOS	C	A	E				A	C	C	E	C	A
Approach Vol, veh/h		939						1230			925	
Approach Delay, s/veh		57.5						24.6			32.8	
Approach LOS		E						C			C	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	10.7	71.4	42.9	82.1								
Change Period (Y+Rc), s	5.0	6.0	6.0	6.0								
Max Green Setting (Gmax), s	15.0	54.0	39.0	74.0								
Max Q Clear Time (g_c+1), s	10.4	32.9	36.0	27.9								
Green Ext Time (p_c), s	0.0	5.2	0.9	4.1								

Intersection Summary

HCM 6th Ctrl Delay	37.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

6: Nason Street & Fir Avenue

Village at Moreno Valley
Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	94	31	65	82	65	43	738	71	165	1060	178
Future Volume (veh/h)	120	94	31	65	82	65	43	738	71	165	1060	178
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	143	112	37	77	98	77	51	879	85	196	1262	212
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	176	163	54	104	151	668	91	1073	104	610	2200	954
Arrive On Green	0.10	0.12	0.12	0.06	0.08	0.08	0.02	0.11	0.11	0.34	0.61	0.61
Sat Flow, veh/h	1810	1366	451	1810	1900	1586	1810	3325	321	1810	3610	1566
Grp Volume(v), veh/h	143	0	149	77	98	77	51	477	487	196	1262	212
Grp Sat Flow(s),veh/h/ln	1810	0	1817	1810	1900	1586	1810	1805	1841	1810	1805	1566
Q Serve(g_s), s	8.5	0.0	8.7	4.6	5.5	0.8	3.1	28.5	28.5	8.9	23.1	6.7
Cycle Q Clear(g_c), s	8.5	0.0	8.7	4.6	5.5	0.8	3.1	28.5	28.5	8.9	23.1	6.7
Prop In Lane	1.00		0.25	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	176	0	217	104	151	668	91	583	594	610	2200	954
V/C Ratio(X)	0.81	0.00	0.69	0.74	0.65	0.12	0.56	0.82	0.82	0.32	0.57	0.22
Avail Cap(c_a), veh/h	494	0	438	354	311	802	206	583	594	610	2200	954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83	0.82	0.82	0.82
Uniform Delay (d), s/veh	48.7	0.0	46.5	51.0	49.1	8.7	52.9	46.0	46.0	27.1	12.9	9.7
Incr Delay (d2), s/veh	8.6	0.0	3.8	9.8	4.6	0.1	4.4	10.3	10.1	0.2	0.9	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	0.0	4.1	2.3	2.8	0.7	1.5	15.4	15.6	3.8	8.6	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.3	0.0	50.3	60.8	53.8	8.8	57.3	56.3	56.1	27.4	13.8	10.2
LnGrp LOS	E	A	D	E	D	A	E	E	E	C	B	B
Approach Vol, veh/h		292			252			1015			1670	
Approach Delay, s/veh		53.7			42.2			56.3			14.9	
Approach LOS		D			D			E			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	41.6	40.0	10.8	17.6	10.0	71.5	15.2	13.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	35.5	35.5	21.5	26.5	12.5	31.5	30.0	18.0				
Max Q Clear Time (g_c+10), s	30.5	30.5	6.6	10.7	5.1	25.1	10.5	7.5				
Green Ext Time (p_c), s	0.0	2.5	0.1	0.6	0.0	4.4	0.3	0.5				

Intersection Summary

HCM 6th Ctrl Delay	33.6
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary
7: Nason Street & Eucalyptus Avenue

Village at Moreno Valley
Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	173	220	104	108	28	59	611	120	19	1057	80
Future Volume (veh/h)	213	173	220	104	108	28	59	611	120	19	1057	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.99	1.00		0.99	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	277	225	286	135	140	36	77	794	156	25	1373	104
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	305	764	313	164	482	212	171	1806	794	62	1588	676
Arrive On Green	0.17	0.21	0.21	0.09	0.13	0.13	0.19	1.00	1.00	0.05	0.59	0.59
Sat Flow, veh/h	1810	3610	1480	1810	3610	1588	1810	3610	1587	1810	3610	1537
Grp Volume(v), veh/h	277	225	286	135	140	36	77	794	156	25	1373	104
Grp Sat Flow(s),veh/h/ln	1810	1805	1480	1810	1805	1588	1810	1805	1587	1810	1805	1537
Q Serve(g_s), s	16.5	5.8	20.8	8.1	3.8	2.2	4.2	0.0	0.0	1.5	35.1	1.9
Cycle Q Clear(g_c), s	16.5	5.8	20.8	8.1	3.8	2.2	4.2	0.0	0.0	1.5	35.1	1.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	764	313	164	482	212	171	1806	794	62	1588	676
V/C Ratio(X)	0.91	0.29	0.91	0.82	0.29	0.17	0.45	0.44	0.20	0.41	0.86	0.15
Avail Cap(c_a), veh/h	306	811	332	196	591	260	171	1806	794	115	1588	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(l)	0.89	0.89	0.89	1.00	1.00	1.00	0.89	0.89	0.89	0.74	0.74	0.74
Uniform Delay (d), s/veh	44.9	36.5	42.4	49.2	42.9	42.2	42.1	0.0	0.0	51.4	20.1	4.1
Incr Delay (d2), s/veh	26.9	0.2	25.4	20.9	0.3	0.4	1.7	0.7	0.5	3.2	4.9	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	9.5	2.5	9.6	4.6	1.7	0.9	1.8	0.2	0.1	0.7	12.5	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.8	36.6	67.8	70.1	43.3	42.6	43.8	0.7	0.5	54.6	25.0	4.5
LnGrp LOS	E	D	E	E	D	D	D	A	A	D	C	A
Approach Vol, veh/h		788			311			1027			1502	
Approach Delay, s/veh		60.3			54.8			3.9			24.1	
Approach LOS		E			D			A			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.2	59.5	14.5	27.8	14.9	52.9	23.0	19.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	48.4	11.9	24.7	7.0	48.4	18.6	18.0					
Max Q Clear Time (g_c+1), s	2.0	10.1	22.8	6.2	37.1	18.5	5.8					
Green Ext Time (p_c), s	0.0	6.7	0.1	0.5	0.0	7.0	0.0	0.6				
Intersection Summary												
HCM 6th Ctrl Delay											28.9	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary

8: Nason Street & Dracea Avenue

Village at Moreno Valley
Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↑↑	↗	↖	↑↑	↗
Traffic Volume (veh/h)	133	10	83	29	23	10	207	850	12	11	1008	239
Future Volume (veh/h)	133	10	83	29	23	10	207	850	12	11	1008	239
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.98		0.98	1.00		0.98	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		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	162	12	101	35	28	12	252	1037	15	13	1229	291
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	256	27	228	188	199	85	281	2264	987	164	2033	900
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.31	1.00	1.00	0.18	1.00	1.00
Sat Flow, veh/h	1361	170	1433	1280	1252	537	1810	3610	1574	1810	3610	1599
Grp Volume(v), veh/h	162	0	113	35	0	40	252	1037	15	13	1229	291
Grp Sat Flow(s),veh/h/ln	1361	0	1603	1280	0	1789	1810	1805	1574	1810	1805	1599
Q Serve(g_s), s	12.8	0.0	7.0	2.8	0.0	2.1	14.7	0.0	0.0	0.7	0.0	0.0
Cycle Q Clear(g_c), s	14.9	0.0	7.0	9.8	0.0	2.1	14.7	0.0	0.0	0.7	0.0	0.0
Prop In Lane	1.00		0.89	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	0	255	188	0	285	281	2264	987	164	2033	900
V/C Ratio(X)	0.63	0.00	0.44	0.19	0.00	0.14	0.90	0.46	0.02	0.08	0.60	0.32
Avail Cap(c_a), veh/h	293	0	299	222	0	333	387	2264	987	164	2033	900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	0.91	0.91	0.91	0.60	0.60	0.60
Uniform Delay (d), s/veh	46.2	0.0	41.8	46.3	0.0	39.8	37.1	0.0	0.0	41.2	0.0	0.0
Incr Delay (d2), s/veh	3.6	0.0	1.2	0.5	0.0	0.2	17.1	0.6	0.0	0.1	0.8	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	4.6	0.0	2.9	0.9	0.0	0.9	6.7	0.2	0.0	0.3	0.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.7	0.0	43.0	46.7	0.0	40.0	54.2	0.6	0.0	41.3	0.8	0.6
LnGrp LOS	D	A	D	D	A	D	D	A	A	D	A	A
Approach Vol, veh/h		275			75			1304			1533	
Approach Delay, s/veh		47.0			43.1			11.0			1.1	
Approach LOS		D			D			B			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.5	73.5		22.0	21.6	66.4		22.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	69.0			20.5	23.5	52.5		20.5				
Max Q Clear Time (g_c+1), s	2.0			16.9	16.7	2.0		11.8				
Green Ext Time (p_c), s	0.0	10.2		0.4	0.4	15.0		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				10.1								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary

9: Nason Street & Cottonwood Avenue

Village at Moreno Valley
Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	42	24	5	56	94	25	649	5	23	883	122
Future Volume (veh/h)	104	42	24	5	56	94	25	649	5	23	883	122
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	139	56	32	7	75	125	33	865	7	31	1177	163
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	169	344	291	22	180	160	325	2181	973	70	1674	747
Arrive On Green	0.09	0.18	0.18	0.01	0.10	0.10	0.18	0.60	0.60	0.03	0.31	0.31
Sat Flow, veh/h	1810	1900	1610	1810	1805	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	139	56	32	7	75	125	33	865	7	31	1177	163
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1805	1610	1810	3610	1610	1810	3610	1610
Q Serve(g_s), s	8.3	2.7	1.2	0.4	4.3	8.3	1.7	13.7	0.2	1.9	31.6	5.5
Cycle Q Clear(g_c), s	8.3	2.7	1.2	0.4	4.3	8.3	1.7	13.7	0.2	1.9	31.6	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	169	344	291	22	180	160	325	2181	973	70	1674	747
V/C Ratio(X)	0.82	0.16	0.11	0.32	0.42	0.78	0.10	0.40	0.01	0.44	0.70	0.22
Avail Cap(c_a), veh/h	255	458	388	115	295	263	325	2181	973	115	1674	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.75	0.75
Uniform Delay (d), s/veh	49.0	38.0	17.5	53.9	46.5	48.3	37.7	11.3	8.6	52.4	31.2	10.5
Incr Delay (d2), s/veh	12.2	0.2	0.2	7.9	1.5	7.9	0.1	0.5	0.0	3.2	1.9	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	4.3	1.3	0.7	0.2	2.0	3.7	0.8	5.4	0.1	0.9	14.8	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.1	38.2	17.6	61.8	48.1	56.3	37.8	11.9	8.7	55.6	33.1	11.0
LnGrp LOS	E	D	B	E	D	E	D	B	A	E	C	B
Approach Vol, veh/h		227			207			905			1371	
Approach Delay, s/veh		49.3			53.5			12.8			31.0	
Approach LOS		D			D			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.8	71.0	5.8	24.4	24.3	55.5	14.8	15.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	51.5	7.0	26.5	7.5	51.0	15.5	18.0					
Max Q Clear Time (g_c+1), s	15.7	2.4	4.7	3.7	33.6	10.3	10.3					
Green Ext Time (p_c), s	0.0	7.3	0.0	0.3	0.0	8.7	0.1	0.6				
Intersection Summary												
HCM 6th Ctrl Delay											28.2	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary
 10: Nason Street & Alessandro Boulevard

Village at Moreno Valley
 Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↑↑↑	↖
Traffic Volume (veh/h)	56	132	104	137	326	129	87	486	31	51	765	105
Future Volume (veh/h)	56	132	104	137	326	129	87	486	31	51	765	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	68	161	127	167	398	157	106	593	38	62	933	128
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	195	852	380	227	465	394	132	919	410	509	2400	745
Arrive On Green	0.06	0.24	0.24	0.06	0.24	0.24	0.07	0.25	0.25	0.28	0.46	0.46
Sat Flow, veh/h	3510	3610	1610	3510	1900	1610	1810	3610	1610	1810	5187	1610
Grp Volume(v), veh/h	68	161	127	167	398	157	106	593	38	62	933	128
Grp Sat Flow(s),veh/h/ln	1755	1805	1610	1755	1900	1610	1810	1805	1610	1810	1729	1610
Q Serve(g_s), s	2.1	3.9	7.2	5.1	22.0	9.0	6.3	16.1	1.6	2.8	13.0	3.8
Cycle Q Clear(g_c), s	2.1	3.9	7.2	5.1	22.0	9.0	6.3	16.1	1.6	2.8	13.0	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	195	852	380	227	465	394	132	919	410	509	2400	745
V/C Ratio(X)	0.35	0.19	0.33	0.74	0.86	0.40	0.80	0.65	0.09	0.12	0.39	0.17
Avail Cap(c_a), veh/h	223	1444	644	239	769	651	156	919	410	509	2400	745
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	50.0	33.6	34.9	50.5	39.7	34.7	50.2	36.6	20.2	29.4	19.4	9.6
Incr Delay (d2), s/veh	1.1	0.1	0.5	10.6	5.2	0.7	21.9	3.5	0.4	0.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.7	2.9	2.6	10.8	3.6	3.7	7.5	0.8	1.2	5.2	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.1	33.7	35.4	61.2	44.8	35.4	72.1	40.1	20.7	29.5	19.8	10.1
LnGrp LOS	D	C	D	E	D	D	E	D	C	C	B	B
Approach Vol, veh/h		356			722			737			1123	
Approach Delay, s/veh		37.6			46.6			43.7			19.3	
Approach LOS		D			D			D			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.4	32.5	11.6	30.5	12.5	55.4	10.6	31.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	12.5	28.0	7.5	44.0	9.5	31.0	7.0	44.5				
Max Q Clear Time (g_c+1), s	14.8	18.1	7.1	9.2	8.3	15.0	4.1	24.0				
Green Ext Time (p_c), s	0.1	2.9	0.0	1.5	0.0	6.4	0.0	2.9				

Intersection Summary

HCM 6th Ctrl Delay	34.3
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary
 11: Nason Street & Cactus Avenue

Village at Moreno Valley
 Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	299	75	12	396	60	117	397	10	59	330	197
Future Volume (veh/h)	97	299	75	12	396	60	117	397	10	59	330	197
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	118	365	91	15	483	73	143	484	12	72	402	240
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	146	740	627	42	535	81	221	752	335	390	1303	581
Arrive On Green	0.08	0.39	0.39	0.02	0.33	0.33	0.06	0.21	0.21	0.22	0.36	0.36
Sat Flow, veh/h	1810	1900	1610	1810	1612	244	3510	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	118	365	91	15	0	556	143	484	12	72	402	240
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	0	1856	1755	1805	1610	1810	1805	1610
Q Serve(g_s), s	7.1	16.0	4.0	0.9	0.0	31.4	4.4	13.5	0.6	3.6	8.8	9.2
Cycle Q Clear(g_c), s	7.1	16.0	4.0	0.9	0.0	31.4	4.4	13.5	0.6	3.6	8.8	9.2
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	740	627	42	0	616	221	752	335	390	1303	581
V/C Ratio(X)	0.81	0.49	0.15	0.35	0.00	0.90	0.65	0.64	0.04	0.18	0.31	0.41
Avail Cap(c_a), veh/h	222	915	776	115	0	785	227	752	335	390	1303	581
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	0.00	1.00	0.85	0.85	0.85	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	25.4	21.7	52.9	0.0	35.1	50.4	39.8	26.1	35.3	25.3	14.7
Incr Delay (d2), s/veh	11.9	0.5	0.1	5.0	0.0	11.7	5.2	3.6	0.2	0.2	0.6	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	7.2	1.5	0.5	0.0	15.9	2.1	6.3	0.3	1.6	3.9	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	25.9	21.8	57.9	0.0	46.7	55.6	43.4	26.3	35.5	25.9	16.8
LnGrp LOS	E	C	C	E	A	D	E	D	C	D	C	B
Approach Vol, veh/h	574			571			639			714		
Approach Delay, s/veh	32.6			47.0			45.8			23.8		
Approach LOS	C			D			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	28.2	27.4	7.1	47.3	11.4	44.2	13.4	41.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	22.9	7.0	53.0	7.1	24.9	13.5	46.5					
Max Q Clear Time (g_c+1), s	15.5	2.9	18.0	6.4	11.2	9.1	33.4					
Green Ext Time (p_c), s	0.0	1.9	0.0	2.7	0.0	3.0	0.1	3.1				

Intersection Summary

HCM 6th Ctrl Delay	36.8
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary
 12: Hillrose Lane/Nason Street & Iris Avenue

Village at Moreno Valley
 Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑ ↑	↘		↖ ↗	↑ ↑	↘	↖ ↗	↑	↘	↖ ↗	↑	↘
Traffic Volume (veh/h)	302	766	24	2	6	610	87	14	42	8	118	10	246
Future Volume (veh/h)	302	766	24	2	6	610	87	14	42	8	118	10	246
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		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	387	982	31		8	782	112	18	54	10	151	13	315
Peak Hour Factor	0.78	0.78	0.78		0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	0	0	0		0	0	0	0	0	0	0	0	0
Cap, veh/h	880	1831	58		230	1199	372	51	335	62	187	551	871
Arrive On Green	0.25	0.35	0.35		0.13	0.23	0.23	0.03	0.21	0.21	0.10	0.29	0.29
Sat Flow, veh/h	3510	5166	163		1810	5187	1610	1810	1559	289	1810	1900	1610
Grp Volume(v), veh/h	387	657	356		8	782	112	18	0	64	151	13	315
Grp Sat Flow(s),veh/h/ln	1755	1729	1871		1810	1729	1610	1810	0	1848	1810	1900	1610
Q Serve(g_s), s	8.4	13.6	13.7		0.3	12.3	3.8	0.9	0.0	2.5	7.3	0.4	0.0
Cycle Q Clear(g_c), s	8.4	13.6	13.7		0.3	12.3	3.8	0.9	0.0	2.5	7.3	0.4	0.0
Prop In Lane	1.00		0.09		1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	880	1226	663		230	1199	372	51	0	397	187	551	871
V/C Ratio(X)	0.44	0.54	0.54		0.03	0.65	0.30	0.35	0.00	0.16	0.81	0.02	0.36
Avail Cap(c_a), veh/h	880	1226	663		230	1199	372	141	0	397	304	551	871
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.72	0.72		1.00	1.00	1.00	1.00	0.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	28.4	23.2	23.2		34.4	31.3	15.5	42.9	0.0	28.7	39.5	22.8	11.8
Incr Delay (d2), s/veh	0.2	1.2	2.2		0.1	2.8	2.1	4.1	0.0	0.9	7.7	0.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	5.6	6.2		0.2	5.3	2.1	0.4	0.0	1.2	3.6	0.2	3.6
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	28.6	24.4	25.4		34.5	34.1	17.5	47.0	0.0	29.6	47.1	22.9	12.9
LnGrp LOS	C	C	C		C	C	B	D	A	C	D	C	B
Approach Vol, veh/h		1400				902			82			479	
Approach Delay, s/veh		25.8				32.0			33.4			24.0	
Approach LOS		C				C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	6.0	36.4	7.0	30.6	27.1	25.3	13.8	23.8					
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gmax), s	31.9	7.0	26.1	18.1	20.8	15.1	18.0						
Max Q Clear Time (g_c+1), s	15.7	2.9	2.4	10.4	14.3	9.3	4.5						
Green Ext Time (p_c), s	0.0	6.2	0.0	1.1	0.9	3.0	0.2	0.2					

Intersection Summary

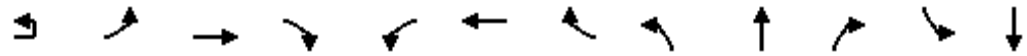
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
1: Lasselle Street & Iris Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔↔	↔↔↔		↔↔	↔↔↔		↔↔	↔↔	↔	↔↔	↔↔
Traffic Volume (veh/h)	7	190	455	311	648	674	93	239	660	510	226	771
Future Volume (veh/h)	7	190	455	311	648	674	93	239	660	510	226	771
Initial Q (Qb), veh		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	
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No		No			No				No
Adj Sat Flow, veh/h/ln		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h		194	464	317	661	688	95	244	673	520	231	787
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
Percent Heavy Veh, %		0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h		767	764	356	756	1004	137	400	1033	807	273	801
Arrive On Green		0.22	0.22	0.22	0.22	0.22	0.22	0.11	0.29	0.29	0.08	0.25
Sat Flow, veh/h		3510	3458	1610	3510	4614	631	3510	3610	1610	3510	3205
Grp Volume(v), veh/h		194	464	317	661	514	269	244	673	520	231	443
Grp Sat Flow(s),veh/h/ln		1755	1729	1610	1755	1729	1786	1755	1805	1610	1755	1805
Q Serve(g_s), s		4.1	10.9	17.2	16.4	12.3	12.5	6.0	14.7	21.4	5.8	22.0
Cycle Q Clear(g_c), s		4.1	10.9	17.2	16.4	12.3	12.5	6.0	14.7	21.4	5.8	22.0
Prop In Lane		1.00		1.00	1.00		0.35	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		767	764	356	756	753	389	400	1033	807	273	451
V/C Ratio(X)		0.25	0.61	0.89	0.87	0.68	0.69	0.61	0.65	0.64	0.85	0.98
Avail Cap(c_a), veh/h		767	788	367	858	1306	675	400	1033	807	273	451
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
Upstream Filter(I)		1.00	1.00	1.00	0.77	0.77	0.77	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		29.1	31.6	34.0	34.1	32.4	32.4	38.0	28.2	16.5	41.0	33.5
Incr Delay (d2), s/veh		0.2	1.3	22.4	7.3	0.9	1.7	2.7	3.2	3.9	21.1	38.1
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
%ile BackOfQ(50%),veh/ln		1.7	4.6	8.8	7.6	5.1	5.5	2.7	6.6	8.2	3.3	14.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		29.3	32.8	56.5	41.4	33.2	34.1	40.7	31.4	20.5	62.0	71.7
LnGrp LOS		C	C	E	D	C	C	D	C	C	E	E
Approach Vol, veh/h			975			1444			1437			1122
Approach Delay, s/veh			39.8			37.1			29.0			69.6
Approach LOS			D			D			C			E
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.5	30.3	23.9	24.4	14.8	27.0	24.2	24.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.0	22.5	22.0	20.5	7.0	22.5	8.5	34.0				
Max Q Clear Time (g_c+I1), s	7.8	23.4	18.4	19.2	8.0	24.0	6.1	14.5				
Green Ext Time (p_c), s	0.0	0.0	1.0	0.7	0.0	0.0	0.1	5.1				

Intersection Summary

HCM 6th Ctrl Delay	42.6
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 1: Lasselle Street & Iris Avenue

Village at Moreno Valley
 Existing NP - PM Peak Hour

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	102
Future Volume (veh/h)	102
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	104
Peak Hour Factor	0.98
Percent Heavy Veh, %	0
Cap, veh/h	106
Arrive On Green	0.25
Sat Flow, veh/h	424
Grp Volume(v), veh/h	448
Grp Sat Flow(s),veh/h/ln	1824
Q Serve(g_s), s	22.0
Cycle Q Clear(g_c), s	22.0
Prop In Lane	0.23
Lane Grp Cap(c), veh/h	456
V/C Ratio(X)	0.98
Avail Cap(c_a), veh/h	456
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	33.6
Incr Delay (d2), s/veh	38.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	14.2
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	71.5
LnGrp LOS	E
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔		↔	↔	
Traffic Vol, veh/h	2	133	36	57	195	11	35	21	24	13	13	3
Future Vol, veh/h	2	133	36	57	195	11	35	21	24	13	13	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	143	39	61	210	12	38	23	26	14	14	3
Number of Lanes	0	1	1	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	8.7	10.8	8.9	8.8
HCM LOS	A	B	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	1%	0%	23%	0%	100%	0%
Vol Thru, %	0%	47%	99%	0%	77%	0%	0%	81%
Vol Right, %	0%	53%	0%	100%	0%	100%	0%	19%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	35	45	135	36	252	11	13	16
LT Vol	35	0	2	0	57	0	13	0
Through Vol	0	21	133	0	195	0	0	13
RT Vol	0	24	0	36	0	11	0	3
Lane Flow Rate	38	48	145	39	271	12	14	17
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.065	0.071	0.205	0.047	0.384	0.014	0.024	0.027
Departure Headway (Hd)	6.18	5.299	5.087	4.376	5.102	4.286	6.258	5.621
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	578	674	705	817	705	834	570	634
Service Time	3.929	3.048	2.822	2.111	2.834	2.017	4.015	3.377
HCM Lane V/C Ratio	0.066	0.071	0.206	0.048	0.384	0.014	0.025	0.027
HCM Control Delay	9.4	8.5	9.1	7.3	11	7.1	9.2	8.5
HCM Lane LOS	A	A	A	A	B	A	A	A
HCM 95th-tile Q	0.2	0.2	0.8	0.1	1.8	0	0.1	0.1

HCM 6th Signalized Intersection Summary

3: Morrison Street & Eucalyptus Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗	↖	↗	↖	↗
Traffic Volume (veh/h)	8	181	15	45	198	7	14	31	50	1	44	28
Future Volume (veh/h)	8	181	15	45	198	7	14	31	50	1	44	28
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		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	9	195	16	48	213	8	15	33	54	1	47	30
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	29	1269	103	110	1491	56	46	579	588	3	617	361
Arrive On Green	0.02	0.38	0.38	0.06	0.42	0.42	0.03	0.30	0.30	0.00	0.28	0.28
Sat Flow, veh/h	1810	3380	275	1810	3548	133	1810	1900	1610	1810	2193	1281
Grp Volume(v), veh/h	9	103	108	48	108	113	15	33	54	1	38	39
Grp Sat Flow(s),veh/h/ln	1810	1805	1850	1810	1805	1876	1810	1900	1610	1810	1805	1669
Q Serve(g_s), s	0.3	2.7	2.7	1.8	2.6	2.6	0.6	0.9	1.5	0.0	1.1	1.2
Cycle Q Clear(g_c), s	0.3	2.7	2.7	1.8	2.6	2.6	0.6	0.9	1.5	0.0	1.1	1.2
Prop In Lane	1.00		0.15	1.00		0.07	1.00		1.00	1.00		0.77
Lane Grp Cap(c), veh/h	29	678	695	110	758	788	46	579	588	3	508	470
V/C Ratio(X)	0.31	0.15	0.15	0.44	0.14	0.14	0.33	0.06	0.09	0.29	0.07	0.08
Avail Cap(c_a), veh/h	184	678	695	184	758	788	184	579	588	181	508	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	14.5	14.5	31.7	12.5	12.5	33.5	17.2	14.6	34.9	18.5	18.5
Incr Delay (d2), s/veh	5.9	0.5	0.5	2.7	0.4	0.4	4.1	0.2	0.3	39.9	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.1	1.1	0.8	1.0	1.0	0.3	0.4	0.6	0.1	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	15.0	15.0	34.4	12.9	12.9	37.6	17.4	14.9	74.8	18.7	18.9
LnGrp LOS	D	B	B	C	B	B	D	B	B	E	B	B
Approach Vol, veh/h		220		269		102		78				
Approach Delay, s/veh		16.0		16.7		19.0		19.5				
Approach LOS		B		B		B		B				
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.7	30.8	6.3	24.2	5.6	33.9	4.6	25.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	18.1	7.1	19.7	7.1	18.1	7.0	19.8					
Max Q Clear Time (g_c+1), s	4.7	2.6	3.2	2.3	4.6	2.0	3.5					
Green Ext Time (p_c), s	0.0	0.8	0.0	0.3	0.0	0.9	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
 4: Nason Street & Elder Avenue/SR-60 Westbound Ramp

Village at Moreno Valley
 Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	25	124	142	32	23	175	284	586	28	300	10
Future Volume (veh/h)	8	25	124	142	32	23	175	284	586	28	300	10
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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	26	127	145	33	23	179	290	598	29	306	10
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	18	164	320	172	326	314	203	2228	1147	46	1891	62
Arrive On Green	0.01	0.09	0.09	0.10	0.17	0.17	0.19	1.00	1.00	0.03	0.53	0.53
Sat Flow, veh/h	1810	1900	1610	1810	1900	1589	1810	3610	1610	1810	3565	116
Grp Volume(v), veh/h	8	26	127	145	33	23	179	290	598	29	154	162
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1589	1810	1805	1610	1810	1805	1876
Q Serve(g_s), s	0.5	1.6	8.6	9.9	1.8	1.5	12.0	0.0	0.0	2.0	5.5	5.5
Cycle Q Clear(g_c), s	0.5	1.6	8.6	9.9	1.8	1.5	12.0	0.0	0.0	2.0	5.5	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	18	164	320	172	326	314	203	2228	1147	46	957	995
V/C Ratio(X)	0.46	0.16	0.40	0.84	0.10	0.07	0.88	0.13	0.52	0.63	0.16	0.16
Avail Cap(c_a), veh/h	290	365	490	290	365	346	217	2228	1147	217	957	995
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.6	52.9	43.6	55.6	43.6	40.9	50.0	0.0	0.0	60.3	15.1	15.1
Incr Delay (d2), s/veh	6.7	0.2	0.3	4.3	0.0	0.0	26.0	0.1	1.5	5.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.8	3.5	4.7	0.9	0.6	6.4	0.0	0.5	1.0	2.3	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.3	53.1	43.9	60.0	43.7	40.9	76.0	0.1	1.5	65.6	15.4	15.4
LnGrp LOS	E	D	D	E	D	D	E	A	A	E	B	B
Approach Vol, veh/h		161			201			1067			345	
Approach Delay, s/veh		46.6			55.1			13.6			19.7	
Approach LOS		D			E			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.2	83.1	16.9	16.8	19.0	72.3	6.2	27.5				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	15.0	44.0	20.0	24.0	15.0	44.0	20.0	24.0				
Max Q Clear Time (g_c+1), s	11.0	2.0	11.9	10.6	14.0	7.5	2.5	3.8				
Green Ext Time (p_c), s	0.0	2.3	0.1	0.2	0.0	1.1	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay											22.5	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary

5: Nason Street & SR-60 Eastbound Ramp

Village at Moreno Valley
Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	7	693	0	0	0	0	926	156	57	514	0
Future Volume (veh/h)	113	7	693	0	0	0	0	926	156	57	514	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		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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	120	0	742				0	985	166	61	547	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	457	0	812				0	1751	295	79	2351	0
Arrive On Green	0.25	0.00	0.25				0.00	0.57	0.57	0.01	0.21	0.00
Sat Flow, veh/h	1810	0	3214				0	3180	519	1810	3705	0
Grp Volume(v), veh/h	120	0	742				0	576	575	61	547	0
Grp Sat Flow(s),veh/h/ln	1810	0	1607				0	1805	1799	1810	1805	0
Q Serve(g_s), s	6.6	0.0	28.0				0.0	25.3	25.4	4.2	15.7	0.0
Cycle Q Clear(g_c), s	6.6	0.0	28.0				0.0	25.3	25.4	4.2	15.7	0.0
Prop In Lane	1.00		1.00				0.00		0.29	1.00		0.00
Lane Grp Cap(c), veh/h	457	0	812				0	1024	1021	79	2351	0
V/C Ratio(X)	0.26	0.00	0.91				0.00	0.56	0.56	0.77	0.23	0.00
Avail Cap(c_a), veh/h	565	0	1003				0	1024	1021	217	2351	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	0.88	0.88	0.96	0.96	0.00
Uniform Delay (d), s/veh	37.4	0.0	45.4				0.0	17.2	17.2	61.0	23.2	0.0
Incr Delay (d2), s/veh	0.1	0.0	9.8				0.0	2.0	2.0	5.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.0	12.1				0.0	10.4	10.4	2.1	7.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.5	0.0	55.2				0.0	19.1	19.2	66.5	23.5	0.0
LnGrp LOS	D	A	E				A	B	B	E	C	A
Approach Vol, veh/h		862						1151			608	
Approach Delay, s/veh		52.7						19.1			27.8	
Approach LOS		D						B			C	
Timer - Assigned Phs	1	2		4			6					
Phs Duration (G+Y+Rc), s	10.5	76.9		37.6			87.4					
Change Period (Y+Rc), s	5.0	6.0		6.0			6.0					
Max Green Setting (Gmax), s	15.0	54.0		39.0			74.0					
Max Q Clear Time (g_c+1), s	10.2	27.4		30.0			17.7					
Green Ext Time (p_c), s	0.0	5.0		1.5			2.4					

Intersection Summary

HCM 6th Ctrl Delay	32.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

6: Nason Street & Fir Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	96	16	156	136	138	22	761	125	280	731	194
Future Volume (veh/h)	80	96	16	156	136	138	22	761	125	280	731	194
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		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	84	101	17	164	143	145	23	801	132	295	769	204
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	173	140	24	196	192	615	58	1113	183	508	2194	976
Arrive On Green	0.10	0.09	0.09	0.11	0.10	0.10	0.01	0.12	0.12	0.28	0.61	0.61
Sat Flow, veh/h	1810	1582	266	1810	1900	1610	1810	3098	511	1810	3610	1606
Grp Volume(v), veh/h	84	0	118	164	143	145	23	467	466	295	769	204
Grp Sat Flow(s),veh/h/ln	1810	0	1849	1810	1900	1610	1810	1805	1804	1810	1805	1606
Q Serve(g_s), s	4.8	0.0	6.8	9.8	8.0	0.0	1.4	27.4	27.4	15.4	11.7	3.4
Cycle Q Clear(g_c), s	4.8	0.0	6.8	9.8	8.0	0.0	1.4	27.4	27.4	15.4	11.7	3.4
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	173	0	163	196	192	615	58	648	648	508	2194	976
V/C Ratio(X)	0.49	0.00	0.72	0.84	0.75	0.24	0.40	0.72	0.72	0.58	0.35	0.21
Avail Cap(c_a), veh/h	444	0	445	304	311	715	255	648	648	508	2194	976
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	0.90	0.90	0.90
Uniform Delay (d), s/veh	47.2	0.0	48.8	48.1	48.1	23.1	53.4	43.2	43.2	34.0	10.8	2.9
Incr Delay (d2), s/veh	2.1	0.0	5.9	11.3	5.6	0.2	3.9	6.2	6.2	1.5	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	3.4	5.0	4.1	2.5	0.7	14.3	14.3	6.8	4.3	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.3	0.0	54.8	59.4	53.7	23.3	57.3	49.3	49.3	35.5	11.2	3.3
LnGrp LOS	D	A	D	E	D	C	E	D	D	D	B	A
Approach Vol, veh/h		202			452			956			1268	
Approach Delay, s/veh		52.5			46.0			49.5			15.6	
Approach LOS		D			D			D			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.4	44.0	16.4	14.2	8.0	71.3	15.0	15.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	39.5	18.5	26.5	15.5	31.5	27.0	18.0					
Max Q Clear Time (g_c+M), s	29.4	11.8	8.8	3.4	13.7	6.8	10.0					
Green Ext Time (p_c), s	0.0	4.0	0.2	0.5	0.0	5.4	0.2	0.7				

Intersection Summary

HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

7: Nason Street & Eucalyptus Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	136	63	154	135	19	32	819	201	13	791	99
Future Volume (veh/h)	69	136	63	154	135	19	32	819	201	13	791	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	77	151	70	171	150	21	36	910	223	14	879	110
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	104	309	134	196	491	215	367	2240	998	40	1588	702
Arrive On Green	0.06	0.09	0.09	0.11	0.14	0.14	0.41	1.00	1.00	0.01	0.15	0.15
Sat Flow, veh/h	1810	3610	1570	1810	3610	1578	1810	3610	1608	1810	3610	1596
Grp Volume(v), veh/h	77	151	70	171	150	21	36	910	223	14	879	110
Grp Sat Flow(s),veh/h/ln	1810	1805	1570	1810	1805	1578	1810	1805	1608	1810	1805	1596
Q Serve(g_s), s	4.6	4.4	4.7	10.2	4.1	1.3	1.4	0.0	0.0	0.8	24.9	5.0
Cycle Q Clear(g_c), s	4.6	4.4	4.7	10.2	4.1	1.3	1.4	0.0	0.0	0.8	24.9	5.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	104	309	134	196	491	215	367	2240	998	40	1588	702
V/C Ratio(X)	0.74	0.49	0.52	0.87	0.31	0.10	0.10	0.41	0.22	0.35	0.55	0.16
Avail Cap(c_a), veh/h	306	811	353	196	591	258	367	2240	998	115	1588	702
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.89	0.89	0.89	0.91	0.91	0.91
Uniform Delay (d), s/veh	51.0	48.0	48.1	48.3	42.8	41.6	26.5	0.0	0.0	53.8	37.0	16.5
Incr Delay (d2), s/veh	9.7	1.2	3.1	32.4	0.3	0.2	0.1	0.5	0.5	4.7	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.0	1.9	6.3	1.8	0.5	0.6	0.2	0.1	0.4	12.2	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.7	49.2	51.2	80.7	43.2	41.8	26.6	0.5	0.5	58.5	38.2	16.9
LnGrp LOS	E	D	D	F	D	D	C	A	A	E	D	B
Approach Vol, veh/h		298			342			1169			1003	
Approach Delay, s/veh		52.6			61.9			1.3			36.2	
Approach LOS		D			E			A			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.9	72.8	16.4	13.9	26.8	52.9	10.8	19.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	48.4	11.9	24.7	7.0	48.4	18.6	18.0					
Max Q Clear Time (g_c+1), s	2.0	12.2	6.7	3.4	26.9	6.6	6.1					
Green Ext Time (p_c), s	0.0	8.4	0.0	0.9	0.0	6.3	0.1	0.6				
Intersection Summary												
HCM 6th Ctrl Delay											26.5	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary

8: Nason Street & Dracea Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↑↑	↗	↖	↑↑	↗
Traffic Volume (veh/h)	110	3	42	12	5	7	47	1024	16	13	856	114
Future Volume (veh/h)	110	3	42	12	5	7	47	1024	16	13	856	114
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.96	0.97		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	124	3	47	13	6	8	53	1151	18	15	962	128
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	242	13	200	208	98	131	92	2264	1010	206	2492	1111
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.10	1.00	1.00	0.23	1.00	1.00
Sat Flow, veh/h	1368	94	1470	1331	720	960	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	124	0	50	13	0	14	53	1151	18	15	962	128
Grp Sat Flow(s),veh/h/ln	1368	0	1564	1331	0	1680	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	9.6	0.0	3.1	1.0	0.0	0.8	3.1	0.0	0.0	0.7	0.0	0.0
Cycle Q Clear(g_c), s	10.4	0.0	3.1	4.1	0.0	0.8	3.1	0.0	0.0	0.7	0.0	0.0
Prop In Lane	1.00		0.94	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	242	0	213	208	0	229	92	2264	1010	206	2492	1111
V/C Ratio(X)	0.51	0.00	0.24	0.06	0.00	0.06	0.57	0.51	0.02	0.07	0.39	0.12
Avail Cap(c_a), veh/h	310	0	291	275	0	313	387	2264	1010	206	2492	1111
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	0.92	0.92	0.92	0.90	0.90	0.90
Uniform Delay (d), s/veh	45.9	0.0	42.4	44.2	0.0	41.4	48.2	0.0	0.0	37.9	0.0	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.6	0.1	0.0	0.1	5.1	0.8	0.0	0.1	0.4	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	8.4	0.0	1.2	0.3	0.0	0.3	1.5	0.2	0.0	0.3	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.6	0.0	43.0	44.4	0.0	41.5	53.3	0.8	0.0	38.0	0.4	0.2
LnGrp LOS	D	A	D	D	A	D	D	A	A	D	A	A
Approach Vol, veh/h		174			27			1222			1105	
Approach Delay, s/veh		46.3			42.9			3.0			0.9	
Approach LOS		D			D			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	73.5		19.5	10.1	80.4		19.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	69.0			20.5	23.5	52.5		20.5				
Max Q Clear Time (g_c+1), s		2.0		12.4	5.1	2.0		6.1				
Green Ext Time (p_c), s	0.0	12.1		0.4	0.1	9.5		0.0				

Intersection Summary

HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

HCM 6th Signalized Intersection Summary
9: Nason Street & Cottonwood Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	26	42	2	40	24	32	902	8	27	691	106
Future Volume (veh/h)	83	26	42	2	40	24	32	902	8	27	691	106
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	88	28	45	2	43	26	34	960	9	29	735	113
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	113	231	196	7	141	78	448	2432	1085	68	1674	747
Arrive On Green	0.06	0.12	0.12	0.00	0.06	0.06	0.25	0.67	0.67	0.05	0.62	0.62
Sat Flow, veh/h	1810	1900	1610	1810	2239	1243	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	88	28	45	2	34	35	34	960	9	29	735	113
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1805	1676	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	5.3	1.4	1.7	0.1	2.0	2.2	1.6	13.0	0.2	1.7	11.8	2.4
Cycle Q Clear(g_c), s	5.3	1.4	1.7	0.1	2.0	2.2	1.6	13.0	0.2	1.7	11.8	2.4
Prop In Lane	1.00		1.00	1.00		0.74	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	113	231	196	7	113	105	448	2432	1085	68	1674	747
V/C Ratio(X)	0.78	0.12	0.23	0.29	0.30	0.33	0.08	0.39	0.01	0.43	0.44	0.15
Avail Cap(c_a), veh/h	255	458	388	115	295	274	448	2432	1085	115	1674	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	50.8	43.1	17.1	54.6	49.2	49.3	31.8	8.0	5.9	51.1	13.6	6.4
Incr Delay (d2), s/veh	10.9	0.2	0.6	22.1	1.5	1.8	0.1	0.5	0.0	3.9	0.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.7	1.1	0.1	0.9	1.0	0.7	4.8	0.1	0.8	4.3	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	43.3	17.7	76.7	50.7	51.2	31.8	8.5	5.9	55.1	14.3	6.8
LnGrp LOS	E	D	B	E	D	D	C	A	A	E	B	A
Approach Vol, veh/h	161			71			1003			877		
Approach Delay, s/veh	46.2			51.7			9.2			14.7		
Approach LOS	D			D			A			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.6	78.6	4.9	17.9	31.7	55.5	11.4	11.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	51.5	7.0	26.5	7.5	51.0	15.5	18.0					
Max Q Clear Time (g_c+1), s	15.0	2.1	3.7	3.6	13.8	7.3	4.2					
Green Ext Time (p_c), s	0.0	8.5	0.0	0.2	0.0	6.4	0.1	0.2				
Intersection Summary												
HCM 6th Ctrl Delay	15.8											
HCM 6th LOS	B											

HCM 6th Signalized Intersection Summary
 10: Nason Street & Alessandro Boulevard

Village at Moreno Valley
 Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↗	↔↔	↑	↗		↔	↑↑	↗	↗	↑↑↑	↗
Traffic Volume (veh/h)	130	318	82	27	204	66	1	80	734	96	51	600	76
Future Volume (veh/h)	130	318	82	27	204	66	1	80	734	96	51	600	76
Initial Q (Qb), veh	0	0	0	0	0	0		0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900		1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	141	346	89	29	222	72		87	798	104	55	652	83
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0		0	0	0	0	0	0
Cap, veh/h	220	617	275	131	276	234		111	919	410	676	2940	913
Arrive On Green	0.06	0.17	0.17	0.04	0.15	0.15		0.06	0.25	0.25	0.37	0.57	0.57
Sat Flow, veh/h	3510	3610	1610	3510	1900	1610		1810	3610	1610	1810	5187	1610
Grp Volume(v), veh/h	141	346	89	29	222	72		87	798	104	55	652	83
Grp Sat Flow(s),veh/h/ln	1755	1805	1610	1755	1900	1610		1810	1805	1610	1810	1729	1610
Q Serve(g_s), s	4.3	9.7	5.3	0.9	12.4	4.4		5.2	23.3	4.8	2.2	6.8	1.7
Cycle Q Clear(g_c), s	4.3	9.7	5.3	0.9	12.4	4.4		5.2	23.3	4.8	2.2	6.8	1.7
Prop In Lane	1.00		1.00	1.00		1.00		1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	617	275	131	276	234		111	919	410	676	2940	913
V/C Ratio(X)	0.64	0.56	0.32	0.22	0.80	0.31		0.78	0.87	0.25	0.08	0.22	0.09
Avail Cap(c_a), veh/h	223	1444	644	239	769	651		156	919	410	676	2940	913
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	50.3	41.8	40.0	51.4	45.5	42.0		50.9	39.2	23.1	22.3	11.8	4.8
Incr Delay (d2), s/veh	5.9	0.8	0.7	0.8	5.4	0.7		15.5	10.9	1.5	0.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.4	2.2	0.4	6.3	1.8		2.8	11.6	2.4	0.9	2.6	0.9
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	56.2	42.6	40.7	52.2	50.9	42.8		66.4	50.2	24.5	22.3	12.0	5.0
LnGrp LOS	E	D	D	D	D	D		E	D	C	C	B	A
Approach Vol, veh/h		576			323				989			790	
Approach Delay, s/veh		45.7			49.2				48.9			12.0	
Approach LOS		D			D				D			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	45.6	32.5	8.6	23.3	11.2	66.9	11.4	20.5					
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gmax), s	12.5	28.0	7.5	44.0	9.5	31.0	7.0	44.5					
Max Q Clear Time (g_c+1), s	14.2	25.3	2.9	11.7	7.2	8.8	6.3	14.4					
Green Ext Time (p_c), s	0.1	1.5	0.0	2.7	0.0	4.9	0.0	1.6					

Intersection Summary

HCM 6th Ctrl Delay	37.3
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 11: Nason Street & Cactus Avenue

Village at Moreno Valley
 Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	138	417	89	25	299	45	1	37	335	22	95	468	129
Future Volume (veh/h)	138	417	89	25	299	45	1	37	335	22	95	468	129
Initial Q (Qb), veh	0	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		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	1.00
Work Zone On Approach		No			No			No		No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	139	421	90	25	302	45	1	37	338	22	96	473	130
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	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	169	526	446	62	352	52	151	752	335	574	1742	777	777
Arrive On Green	0.09	0.28	0.28	0.03	0.22	0.22	0.04	0.21	0.21	0.32	0.48	0.48	0.48
Sat Flow, veh/h	1810	1900	1610	1810	1616	241	3510	3610	1610	1810	3610	1610	1610
Grp Volume(v), veh/h	139	421	90	25	0	347	37	338	22	96	473	130	130
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	0	1857	1755	1805	1610	1810	1805	1610	1610
Q Serve(g_s), s	8.3	22.6	4.7	1.5	0.0	19.8	1.1	9.0	1.0	4.2	8.6	3.3	3.3
Cycle Q Clear(g_c), s	8.3	22.6	4.7	1.5	0.0	19.8	1.1	9.0	1.0	4.2	8.6	3.3	3.3
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	169	526	446	62	0	404	151	752	335	574	1742	777	777
V/C Ratio(X)	0.82	0.80	0.20	0.41	0.00	0.86	0.24	0.45	0.07	0.17	0.27	0.17	0.17
Avail Cap(c_a), veh/h	222	915	776	115	0	785	227	752	335	574	1742	777	777
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	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.0	36.9	30.5	52.0	0.0	41.4	50.9	38.0	25.5	27.1	17.0	7.0	7.0
Incr Delay (d2), s/veh	17.1	2.9	0.2	4.3	0.0	5.4	0.8	1.8	0.4	0.1	0.4	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	10.8	1.9	0.7	0.0	9.6	0.5	4.2	0.5	1.8	3.6	1.9	1.9
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	66.1	39.8	30.7	56.3	0.0	46.8	51.7	39.9	25.8	27.2	17.3	7.5	7.5
LnGrp LOS	E	D	C	E	A	D	D	D	C	C	B	A	A
Approach Vol, veh/h		650			372			397			699		
Approach Delay, s/veh		44.2			47.4			40.2			16.9		
Approach LOS		D			D			D			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	39.4	27.4	8.2	35.0	9.2	57.6	14.7	28.4					
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gmax), s	22.9	7.0	53.0	7.1	24.9	13.5	46.5	46.5					
Max Q Clear Time (g_c+1), s	11.0	3.5	24.6	3.1	10.6	10.3	21.8	21.8					
Green Ext Time (p_c), s	0.0	1.7	0.0	3.1	0.0	3.1	0.1	2.2					

Intersection Summary

HCM 6th Ctrl Delay	35.0
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 12: Hillrose Lane/Nason Street & Iris Avenue

Village at Moreno Valley
 Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↖ ↗ ↘				↖ ↗ ↘			↖	↗	↘		↖	↗	↘
Traffic Volume (veh/h)	228	693	18	7	15	833	132	12	37	14	116	48	380	
Future Volume (veh/h)	228	693	18	7	15	833	132	12	37	14	116	48	380	
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach	No				No				No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900		1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adj Flow Rate, veh/h	238	722	19		16	868	138	12	39	15	121	50	396	
Peak Hour Factor	0.96	0.96	0.96		0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	
Percent Heavy Veh, %	0	0	0		0	0	0	0	0	0	0	0	0	
Cap, veh/h	908	1842	48		245	1199	372	36	294	113	154	551	884	
Arrive On Green	0.26	0.35	0.35		0.14	0.23	0.23	0.02	0.23	0.23	0.09	0.29	0.29	
Sat Flow, veh/h	3510	5197	136		1810	5187	1610	1810	1307	503	1810	1900	1610	
Grp Volume(v), veh/h	238	480	261		16	868	138	12	0	54	121	50	396	
Grp Sat Flow(s),veh/h/ln	1755	1729	1875		1810	1729	1610	1810	0	1810	1810	1900	1610	
Q Serve(g_s), s	4.9	9.4	9.4		0.7	13.9	4.9	0.6	0.0	2.1	5.9	1.7	0.0	
Cycle Q Clear(g_c), s	4.9	9.4	9.4		0.7	13.9	4.9	0.6	0.0	2.1	5.9	1.7	0.0	
Prop In Lane	1.00		0.07		1.00		1.00	1.00		0.28	1.00		1.00	
Lane Grp Cap(c), veh/h	908	1226	665		245	1199	372	36	0	407	154	551	884	
V/C Ratio(X)	0.26	0.39	0.39		0.07	0.72	0.37	0.33	0.00	0.13	0.79	0.09	0.45	
Avail Cap(c_a), veh/h	908	1226	665		245	1199	372	141	0	407	304	551	884	
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	0.72	0.72	0.72		1.00	1.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	
Uniform Delay (d), s/veh	26.5	21.8	21.8		33.9	32.0	16.8	43.5	0.0	27.9	40.4	23.3	12.2	
Incr Delay (d2), s/veh	0.1	0.7	1.3		0.1	3.8	2.8	5.1	0.0	0.7	8.3	0.3	1.6	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	2.0	3.8	4.2		0.3	6.1	2.7	0.3	0.0	1.0	2.9	0.8	4.8	
Unsig. Movement Delay, s/veh														
LnGrp Delay(d),s/veh	26.6	22.5	23.0		34.1	35.8	19.6	48.6	0.0	28.5	48.6	23.6	13.7	
LnGrp LOS	C	C	C		C	D	B	D	A	C	D	C	B	
Approach Vol, veh/h	979				1022				66			567		
Approach Delay, s/veh	23.6				33.6				32.2			22.1		
Approach LOS	C				C				C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8						
Phs Duration (G+Y+Rc), s	6.7	36.4	6.3	30.6	27.8	25.3	12.2	24.8						
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5						
Max Green Setting (Gmax), s	31.9	7.0	26.1	18.1	20.8	15.1	18.0							
Max Q Clear Time (g_c+1), s	11.4	2.6	3.7	6.9	15.9	7.9	4.1							
Green Ext Time (p_c), s	0.0	4.8	0.0	1.7	0.6	2.7	0.2	0.1						

Intersection Summary

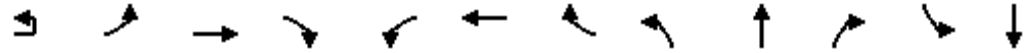
HCM 6th Ctrl Delay	27.4
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
1: Lasselle Street & Iris Avenue

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔↔	↔↔↔		↔↔	↔↔↔		↔↔	↔↔	↔	↔↔	↔↔
Traffic Volume (veh/h)	8	147	523	323	605	635	115	409	661	461	132	525
Future Volume (veh/h)	8	147	523	323	605	635	115	409	661	461	132	525
Initial Q (Qb), veh		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	
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No		No			No				No
Adj Sat Flow, veh/h/ln		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h		156	556	344	644	676	122	435	703	490	140	559
Peak Hour Factor		0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %		0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h		757	788	367	734	979	175	397	1039	800	265	745
Arrive On Green		0.22	0.23	0.23	0.21	0.22	0.22	0.11	0.29	0.29	0.08	0.25
Sat Flow, veh/h		3510	3458	1610	3510	4427	789	3510	3610	1610	3510	2978
Grp Volume(v), veh/h		156	556	344	644	526	272	435	703	490	140	338
Grp Sat Flow(s),veh/h/ln		1755	1729	1610	1755	1729	1758	1755	1805	1610	1755	1805
Q Serve(g_s), s		3.3	13.3	18.9	16.0	12.6	12.8	10.2	15.5	19.8	3.5	15.6
Cycle Q Clear(g_c), s		3.3	13.3	18.9	16.0	12.6	12.8	10.2	15.5	19.8	3.5	15.6
Prop In Lane		1.00		1.00	1.00		0.45	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		757	788	367	734	765	389	397	1039	800	265	451
V/C Ratio(X)		0.21	0.71	0.94	0.88	0.69	0.70	1.10	0.68	0.61	0.53	0.75
Avail Cap(c_a), veh/h		757	788	367	819	1268	645	397	1039	800	273	451
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
Upstream Filter(I)		1.00	1.00	1.00	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		29.0	32.0	34.1	34.5	32.2	32.3	39.9	28.4	16.4	40.1	31.1
Incr Delay (d2), s/veh		0.1	2.9	31.5	8.1	0.9	1.8	73.3	3.5	3.5	1.8	10.9
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.4	5.8	10.4	7.5	5.2	5.5	8.4	7.0	7.6	1.5	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		29.1	34.9	65.6	42.6	33.1	34.1	113.2	31.9	19.9	41.9	42.0
LnGrp LOS		C	C	E	D	C	C	F	C	B	D	D
Approach Vol, veh/h			1056			1442			1628			815
Approach Delay, s/veh			44.0			37.5			50.0			42.1
Approach LOS			D			D			D			D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.3	30.4	23.3	25.0	14.7	27.0	23.9	24.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.0	23.5	21.0	20.5	8.0	22.5	8.5	33.0				
Max Q Clear Time (g_c+I1), s	5.5	21.8	18.0	20.9	12.2	17.7	5.3	14.8				
Green Ext Time (p_c), s	0.1	1.1	0.8	0.0	0.0	1.8	0.1	5.1				

Intersection Summary

HCM 6th Ctrl Delay	43.8
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 1: Lasselle Street & Iris Avenue

Village at Moreno Valley
 Project Completion (2023) NP - AM Peak Hour

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	109
Future Volume (veh/h)	109
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	116
Peak Hour Factor	0.94
Percent Heavy Veh, %	0
Cap, veh/h	154
Arrive On Green	0.25
Sat Flow, veh/h	616
Grp Volume(v), veh/h	337
Grp Sat Flow(s),veh/h/ln	1789
Q Serve(g_s), s	15.7
Cycle Q Clear(g_c), s	15.7
Prop In Lane	0.34
Lane Grp Cap(c), veh/h	447
V/C Ratio(X)	0.75
Avail Cap(c_a), veh/h	447
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	31.2
Incr Delay (d2), s/veh	11.2
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	8.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	42.4
LnGrp LOS	D
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Intersection												
Intersection Delay, s/veh	21.3											
Intersection LOS	C											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔		↔	↔	
Traffic Vol, veh/h	4	172	208	106	200	10	127	25	61	19	58	6
Future Vol, veh/h	4	172	208	106	200	10	127	25	61	19	58	6
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	239	289	147	278	14	176	35	85	26	81	8
Number of Lanes	0	1	1	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	15.2	35.6	14.5	12.6
HCM LOS	C	E	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	2%	0%	35%	0%	100%	0%
Vol Thru, %	0%	29%	98%	0%	65%	0%	0%	91%
Vol Right, %	0%	71%	0%	100%	0%	100%	0%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	127	86	176	208	306	10	19	64
LT Vol	127	0	4	0	106	0	19	0
Through Vol	0	25	172	0	200	0	0	58
RT Vol	0	61	0	208	0	10	0	6
Lane Flow Rate	176	119	244	289	425	14	26	89
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.398	0.236	0.469	0.496	0.836	0.024	0.063	0.199
Departure Headway (Hd)	8.13	7.106	6.908	6.18	7.085	6.193	8.653	8.068
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	443	505	521	584	510	578	414	444
Service Time	5.879	4.854	4.653	3.925	4.829	3.936	6.413	5.827
HCM Lane V/C Ratio	0.397	0.236	0.468	0.495	0.833	0.024	0.063	0.2
HCM Control Delay	16.2	12	15.6	14.9	36.5	9.1	12	12.8
HCM Lane LOS	C	B	C	B	E	A	B	B
HCM 95th-tile Q	1.9	0.9	2.5	2.7	8.4	0.1	0.2	0.7

HCM 6th Signalized Intersection Summary

3: Morrison Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗	↖	↗	↖	↗
Traffic Volume (veh/h)	27	364	50	36	245	0	54	63	100	4	73	59
Future Volume (veh/h)	27	364	50	36	245	0	54	63	100	4	73	59
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		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	38	506	69	50	340	0	75	88	139	6	101	82
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	95	1030	140	113	1200	0	139	660	659	20	555	413
Arrive On Green	0.05	0.32	0.32	0.06	0.33	0.00	0.08	0.35	0.35	0.01	0.28	0.28
Sat Flow, veh/h	1810	3193	434	1810	3705	0	1810	1900	1610	1810	1973	1468
Grp Volume(v), veh/h	38	285	290	50	340	0	75	88	139	6	92	91
Grp Sat Flow(s),veh/h/ln	1810	1805	1822	1810	1805	0	1810	1900	1610	1810	1805	1636
Q Serve(g_s), s	1.4	8.9	9.0	1.9	4.9	0.0	2.8	2.2	3.9	0.2	2.7	3.0
Cycle Q Clear(g_c), s	1.4	8.9	9.0	1.9	4.9	0.0	2.8	2.2	3.9	0.2	2.7	3.0
Prop In Lane	1.00		0.24	1.00		0.00	1.00		1.00	1.00		0.90
Lane Grp Cap(c), veh/h	95	582	588	113	1200	0	139	660	659	20	508	460
V/C Ratio(X)	0.40	0.49	0.49	0.44	0.28	0.00	0.54	0.13	0.21	0.30	0.18	0.20
Avail Cap(c_a), veh/h	184	582	588	184	1200	0	184	660	659	181	508	460
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	19.1	19.1	31.7	17.2	0.0	31.1	15.6	13.4	34.3	19.0	19.1
Incr Delay (d2), s/veh	2.7	2.9	2.9	2.6	0.6	0.0	3.2	0.4	0.7	8.2	0.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.9	4.0	0.8	1.9	0.0	1.3	1.0	1.4	0.1	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.9	22.0	22.0	34.2	17.8	0.0	34.4	16.1	14.1	42.5	19.8	20.1
LnGrp LOS	C	C	C	C	B	A	C	B	B	D	B	C
Approach Vol, veh/h		613		390			302			189		
Approach Delay, s/veh		22.8		19.9			19.7			20.7		
Approach LOS		C		B			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	27.1	9.9	24.2	8.2	27.8	5.3	28.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	18.1	7.1	19.7	7.1	18.1	7.0	19.8					
Max Q Clear Time (g_c+1), s	11.0	4.8	5.0	3.4	6.9	2.2	5.9					
Green Ext Time (p_c), s	0.0	1.9	0.0	0.8	0.0	1.5	0.0	0.7				
Intersection Summary												
HCM 6th Ctrl Delay				21.2								
HCM 6th LOS				C								

HCM 6th Signalized Intersection Summary
 4: Nason Street & Elder Avenue/SR-60 Westbound Ramp

Village at Moreno Valley
 Project Completion (2023) NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	41	236	102	23	34	140	321	449	33	432	12
Future Volume (veh/h)	6	41	236	102	23	34	140	321	449	33	432	12
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		0.98
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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	7	51	291	126	28	42	173	396	554	41	533	15
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	16	333	458	152	477	453	197	1928	995	55	1632	46
Arrive On Green	0.01	0.18	0.18	0.08	0.25	0.25	0.18	0.89	0.89	0.03	0.46	0.46
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	3584	101
Grp Volume(v), veh/h	7	51	291	126	28	42	173	396	554	41	268	280
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1805	1879
Q Serve(g_s), s	0.5	2.8	19.7	8.6	1.4	2.4	11.6	1.8	9.0	2.8	11.9	11.9
Cycle Q Clear(g_c), s	0.5	2.8	19.7	8.6	1.4	2.4	11.6	1.8	9.0	2.8	11.9	11.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	16	333	458	152	477	453	197	1928	995	55	822	856
V/C Ratio(X)	0.45	0.15	0.64	0.83	0.06	0.09	0.88	0.21	0.56	0.75	0.33	0.33
Avail Cap(c_a), veh/h	290	365	485	290	477	453	217	1928	995	217	822	856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.72	0.72	0.72	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.7	43.7	39.1	56.3	35.6	33.1	50.3	3.3	2.5	60.1	21.8	21.8
Incr Delay (d2), s/veh	7.3	0.1	1.8	4.3	0.0	0.0	21.2	0.2	1.6	7.3	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.4	8.0	4.1	0.7	1.0	6.0	0.7	1.9	1.4	5.1	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.0	43.8	40.9	60.6	35.6	33.2	71.5	3.4	4.1	67.4	22.8	22.8
LnGrp LOS	E	D	D	E	D	C	E	A	A	E	C	C
Approach Vol, veh/h		349			196			1123			589	
Approach Delay, s/veh		41.8			51.2			14.3			25.9	
Approach LOS		D			D			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.8	72.7	15.5	27.9	18.6	62.9	6.1	37.4				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	15.0	44.0	20.0	24.0	15.0	44.0	20.0	24.0				
Max Q Clear Time (g_c+1), s	11.8	11.0	10.6	21.7	13.6	13.9	2.5	4.4				
Green Ext Time (p_c), s	0.0	2.7	0.1	0.2	0.0	1.9	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay			24.8									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary

5: Nason Street & SR-60 Eastbound Ramp

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	6	743	0	0	0	0	875	149	53	717	0
Future Volume (veh/h)	35	6	743	0	0	0	0	875	149	53	717	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	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	44	0	934				0	1094	186	66	896	0
Peak Hour Factor	0.80	0.80	0.80				0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	551	0	980				0	1582	268	86	2165	0
Arrive On Green	0.30	0.00	0.30				0.00	0.51	0.51	0.02	0.20	0.00
Sat Flow, veh/h	1810	0	3220				0	3182	523	1810	3705	0
Grp Volume(v), veh/h	44	0	934				0	638	642	66	896	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1805	1806	1810	1805	0
Q Serve(g_s), s	2.2	0.0	35.5				0.0	33.3	33.6	4.5	27.1	0.0
Cycle Q Clear(g_c), s	2.2	0.0	35.5				0.0	33.3	33.6	4.5	27.1	0.0
Prop In Lane	1.00		1.00				0.00		0.29	1.00		0.00
Lane Grp Cap(c), veh/h	551	0	980				0	925	925	86	2165	0
V/C Ratio(X)	0.08	0.00	0.95				0.00	0.69	0.69	0.77	0.41	0.00
Avail Cap(c_a), veh/h	565	0	1005				0	925	925	217	2165	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	0.84	0.84	0.92	0.92	0.00
Uniform Delay (d), s/veh	31.0	0.0	42.6				0.0	23.0	23.1	60.9	30.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	17.7				0.0	3.6	3.6	5.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	16.2				0.0	14.4	14.5	2.2	13.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.0	0.0	60.2				0.0	26.5	26.7	65.8	31.5	0.0
LnGrp LOS	C	A	E				A	C	C	E	C	A
Approach Vol, veh/h		978						1280			962	
Approach Delay, s/veh		58.9						26.6			33.8	
Approach LOS		E						C			C	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	10.9	70.0	44.0	81.0								
Change Period (Y+Rc), s	5.0	6.0	6.0	6.0								
Max Green Setting (Gmax), s	15.0	54.0	39.0	74.0								
Max Q Clear Time (g_c+1), s	10.5	35.6	37.5	29.1								
Green Ext Time (p_c), s	0.0	5.3	0.5	4.3								

Intersection Summary

HCM 6th Ctrl Delay	38.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

6: Nason Street & Fir Avenue

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	98	32	68	85	68	45	768	74	172	1102	185
Future Volume (veh/h)	125	98	32	68	85	68	45	768	74	172	1102	185
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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	149	117	38	81	101	81	54	914	88	205	1312	220
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	183	170	55	105	154	663	93	1073	103	600	2177	944
Arrive On Green	0.10	0.12	0.12	0.06	0.08	0.08	0.02	0.11	0.11	0.33	0.60	0.60
Sat Flow, veh/h	1810	1373	446	1810	1900	1586	1810	3326	320	1810	3610	1566
Grp Volume(v), veh/h	149	0	155	81	101	81	54	496	506	205	1312	220
Grp Sat Flow(s),veh/h/ln	1810	0	1818	1810	1900	1586	1810	1805	1841	1810	1805	1566
Q Serve(g_s), s	8.9	0.0	9.0	4.9	5.7	0.8	3.3	29.7	29.7	9.4	24.9	7.1
Cycle Q Clear(g_c), s	8.9	0.0	9.0	4.9	5.7	0.8	3.3	29.7	29.7	9.4	24.9	7.1
Prop In Lane	1.00		0.25	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	183	0	225	105	154	663	93	583	594	600	2177	944
V/C Ratio(X)	0.82	0.00	0.69	0.77	0.66	0.12	0.58	0.85	0.85	0.34	0.60	0.23
Avail Cap(c_a), veh/h	494	0	438	354	311	794	206	583	594	600	2177	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82	0.80	0.80	0.80
Uniform Delay (d), s/veh	48.4	0.0	46.2	51.1	49.1	8.8	52.9	46.6	46.6	27.7	13.6	10.1
Incr Delay (d2), s/veh	8.5	0.0	3.7	11.0	4.7	0.1	4.6	12.3	12.1	0.3	1.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	4.2	2.5	2.9	0.7	1.6	16.3	16.6	4.0	9.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.0	0.0	49.9	62.1	53.8	8.9	57.5	58.8	58.6	28.0	14.6	10.5
LnGrp LOS	E	A	D	E	D	A	E	E	E	C	B	B
Approach Vol, veh/h		304			263			1056			1737	
Approach Delay, s/veh		53.4			42.5			58.7			15.7	
Approach LOS		D			D			E			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	41.0	40.0	10.9	18.1	10.2	70.8	15.6	13.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	35.5	35.5	21.5	26.5	12.5	31.5	30.0	18.0				
Max Q Clear Time (g_c+M), s	31.7	31.7	6.9	11.0	5.3	26.9	10.9	7.7				
Green Ext Time (p_c), s	0.0	2.1	0.1	0.6	0.0	3.4	0.3	0.5				

Intersection Summary

HCM 6th Ctrl Delay	34.7
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

7: Nason Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	180	229	108	112	29	61	635	125	20	1099	83
Future Volume (veh/h)	222	180	229	108	112	29	61	635	125	20	1099	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.99	1.00		0.99	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No		No		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	288	234	297	140	145	38	79	825	162	26	1427	108
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	306	784	322	169	510	225	155	1772	779	63	1588	676
Arrive On Green	0.17	0.22	0.22	0.09	0.14	0.14	0.11	0.65	0.65	0.05	0.59	0.59
Sat Flow, veh/h	1810	3610	1483	1810	3610	1590	1810	3610	1587	1810	3610	1537
Grp Volume(v), veh/h	288	234	297	140	145	38	79	825	162	26	1427	108
Grp Sat Flow(s),veh/h/ln	1810	1805	1483	1810	1805	1590	1810	1805	1587	1810	1805	1537
Q Serve(g_s), s	17.3	6.0	21.6	8.4	4.0	2.3	4.5	12.5	3.0	1.5	38.0	2.0
Cycle Q Clear(g_c), s	17.3	6.0	21.6	8.4	4.0	2.3	4.5	12.5	3.0	1.5	38.0	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	306	784	322	169	510	225	155	1772	779	63	1588	676
V/C Ratio(X)	0.94	0.30	0.92	0.83	0.28	0.17	0.51	0.47	0.21	0.41	0.90	0.16
Avail Cap(c_a), veh/h	306	811	333	196	591	260	155	1772	779	115	1588	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	0.88	0.88	0.88	0.70	0.70	0.70
Uniform Delay (d), s/veh	45.2	36.0	42.1	49.0	42.2	41.5	46.5	11.9	4.5	51.4	20.7	4.1
Incr Delay (d2), s/veh	33.3	0.2	27.2	22.2	0.3	0.4	2.4	0.8	0.5	3.0	6.2	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	10.4	2.6	10.2	4.8	1.8	0.9	2.1	4.3	1.5	0.7	13.7	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.5	36.2	69.3	71.2	42.5	41.9	48.9	12.7	5.0	54.3	26.8	4.5
LnGrp LOS	E	D	E	E	D	D	D	B	A	D	C	A
Approach Vol, veh/h		819		323		1066		1561				
Approach Delay, s/veh		63.1		54.9		14.2		25.8				
Approach LOS		E		D		B		C				
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.3	58.5	14.8	28.4	13.9	52.9	23.1	20.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	48.4	11.9	24.7	7.0	48.4	18.6	18.0					
Max Q Clear Time (g_c+1), s	14.5	10.4	23.6	6.5	40.0	19.3	6.0					
Green Ext Time (p_c), s	0.0	6.8	0.0	0.3	0.0	5.8	0.0	0.7				

Intersection Summary

HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary

8: Nason Street & Dracea Avenue

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	10	86	30	24	10	215	884	12	11	1048	249
Future Volume (veh/h)	138	10	86	30	24	10	215	884	12	11	1048	249
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.98		0.98	1.00		0.98	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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	168	12	105	37	29	12	262	1078	15	13	1278	304
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	260	27	234	188	206	85	290	2264	987	159	2002	887
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.32	1.00	1.00	0.18	1.00	1.00
Sat Flow, veh/h	1360	164	1438	1276	1267	524	1810	3610	1574	1810	3610	1599
Grp Volume(v), veh/h	168	0	117	37	0	41	262	1078	15	13	1278	304
Grp Sat Flow(s),veh/h/ln	1360	0	1603	1276	0	1792	1810	1805	1574	1810	1805	1599
Q Serve(g_s), s	13.3	0.0	7.3	3.0	0.0	2.2	15.2	0.0	0.0	0.7	0.0	0.0
Cycle Q Clear(g_c), s	15.4	0.0	7.3	10.2	0.0	2.2	15.2	0.0	0.0	0.7	0.0	0.0
Prop In Lane	1.00		0.90	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	260	0	260	188	0	291	290	2264	987	159	2002	887
V/C Ratio(X)	0.65	0.00	0.45	0.20	0.00	0.14	0.90	0.48	0.02	0.08	0.64	0.34
Avail Cap(c_a), veh/h	292	0	299	219	0	334	387	2264	987	159	2002	887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.90	0.90	0.90	0.54	0.54	0.54
Uniform Delay (d), s/veh	46.1	0.0	41.6	46.2	0.0	39.5	36.6	0.0	0.0	41.7	0.0	0.0
Incr Delay (d2), s/veh	4.1	0.0	1.2	0.5	0.0	0.2	18.2	0.6	0.0	0.1	0.9	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	4.8	0.0	3.0	1.0	0.0	1.0	7.0	0.2	0.0	0.3	0.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.2	0.0	42.8	46.8	0.0	39.7	54.7	0.6	0.0	41.8	0.9	0.6
LnGrp LOS	D	A	D	D	A	D	D	A	A	D	A	A
Approach Vol, veh/h		285			78			1355			1595	
Approach Delay, s/veh		47.2			43.1			11.1			1.1	
Approach LOS		D			D			B			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	41.1	73.5		22.4	22.1	65.5		22.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	69.0			20.5	23.5	52.5		20.5				
Max Q Clear Time (g_c+1), s	2.0			17.4	17.2	2.0		12.2				
Green Ext Time (p_c), s	0.0	10.8		0.4	0.4	16.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
 9: Nason Street & Cottonwood Avenue

Village at Moreno Valley
 Project Completion (2023) NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	44	25	5	58	98	26	675	5	24	918	127
Future Volume (veh/h)	108	44	25	5	58	98	26	675	5	24	918	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	144	59	33	7	77	131	35	900	7	32	1224	169
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	174	356	302	22	186	166	313	2155	961	72	1674	747
Arrive On Green	0.10	0.19	0.19	0.01	0.10	0.10	0.17	0.60	0.60	0.03	0.31	0.31
Sat Flow, veh/h	1810	1900	1610	1810	1805	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	144	59	33	7	77	131	35	900	7	32	1224	169
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1805	1610	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	8.6	2.9	1.3	0.4	4.4	8.7	1.8	14.7	0.2	1.9	33.3	5.7
Cycle Q Clear(g_c), s	8.6	2.9	1.3	0.4	4.4	8.7	1.8	14.7	0.2	1.9	33.3	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	174	356	302	22	186	166	313	2155	961	72	1674	747
V/C Ratio(X)	0.83	0.17	0.11	0.32	0.41	0.79	0.11	0.42	0.01	0.45	0.73	0.23
Avail Cap(c_a), veh/h	255	458	388	115	295	263	313	2155	961	115	1674	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.72	0.72	0.72
Uniform Delay (d), s/veh	48.8	37.5	17.5	53.9	46.2	48.1	38.4	11.9	9.0	52.3	31.8	10.4
Incr Delay (d2), s/veh	13.3	0.2	0.2	7.9	1.5	8.0	0.2	0.6	0.0	3.1	2.1	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	4.5	1.4	0.7	0.2	2.0	3.9	0.8	5.8	0.1	0.9	15.6	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.0	37.7	17.6	61.8	47.7	56.2	38.5	12.5	9.0	55.4	33.9	10.9
LnGrp LOS	E	D	B	E	D	E	D	B	A	E	C	B
Approach Vol, veh/h		236			215			942			1425	
Approach Delay, s/veh		49.7			53.3			13.4			31.6	
Approach LOS		D			D			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	70.2	5.8	25.1	23.5	55.5	15.1	15.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	51.5	7.0	26.5	7.5	51.0	15.5	18.0					
Max Q Clear Time (g_c+1), s	16.7	2.4	4.9	3.8	35.3	10.6	10.7					
Green Ext Time (p_c), s	0.0	7.7	0.0	0.3	0.0	8.6	0.1	0.6				
Intersection Summary												
HCM 6th Ctrl Delay											28.7	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary
 10: Nason Street & Alessandro Boulevard

Village at Moreno Valley
 Project Completion (2023) NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↑↑↑	↖
Traffic Volume (veh/h)	58	137	108	142	339	134	90	505	32	53	796	109
Future Volume (veh/h)	58	137	108	142	339	134	90	505	32	53	796	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	71	167	132	173	413	163	110	616	39	65	971	133
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	198	878	392	233	481	408	137	919	410	493	2341	727
Arrive On Green	0.06	0.24	0.24	0.07	0.25	0.25	0.08	0.25	0.25	0.27	0.45	0.45
Sat Flow, veh/h	3510	3610	1610	3510	1900	1610	1810	3610	1610	1810	5187	1610
Grp Volume(v), veh/h	71	167	132	173	413	163	110	616	39	65	971	133
Grp Sat Flow(s),veh/h/ln	1755	1805	1610	1755	1900	1610	1810	1805	1610	1810	1729	1610
Q Serve(g_s), s	2.1	4.0	7.4	5.3	22.8	9.3	6.6	16.9	1.6	3.0	13.9	4.1
Cycle Q Clear(g_c), s	2.1	4.0	7.4	5.3	22.8	9.3	6.6	16.9	1.6	3.0	13.9	4.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	198	878	392	233	481	408	137	919	410	493	2341	727
V/C Ratio(X)	0.36	0.19	0.34	0.74	0.86	0.40	0.81	0.67	0.10	0.13	0.41	0.18
Avail Cap(c_a), veh/h	223	1444	644	239	769	651	156	919	410	493	2341	727
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	50.0	33.0	34.3	50.4	39.2	34.1	50.1	36.9	20.1	30.2	20.4	10.1
Incr Delay (d2), s/veh	1.1	0.1	0.5	11.5	5.7	0.6	23.1	3.9	0.5	0.1	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	0	1.8	3.0	2.7	11.3	3.7	3.8	7.9	0.8	1.3	5.6	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.1	33.1	34.8	61.9	44.9	34.8	73.1	40.7	20.6	30.3	20.9	10.7
LnGrp LOS	D	C	C	E	D	C	E	D	C	C	C	B
Approach Vol, veh/h		370			749			765			1169	
Approach Delay, s/veh		37.2			46.6			44.4			20.3	
Approach LOS		D			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	34.4	32.5	11.8	31.3	12.8	54.1	10.7	32.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	12.5	28.0	7.5	44.0	9.5	31.0	7.0	44.5				
Max Q Clear Time (g_c+1), s	11.0	18.9	7.3	9.4	8.6	15.9	4.1	24.8				
Green Ext Time (p_c), s	0.1	2.9	0.0	1.5	0.0	6.4	0.0	3.0				

Intersection Summary

HCM 6th Ctrl Delay		34.8										
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary
 11: Nason Street & Cactus Avenue

Village at Moreno Valley
 Project Completion (2023) NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	311	78	12	412	62	122	413	10	61	343	205
Future Volume (veh/h)	101	311	78	12	412	62	122	413	10	61	343	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	123	379	95	15	502	76	149	504	12	74	418	250
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	152	767	650	42	553	84	221	752	335	364	1251	558
Arrive On Green	0.08	0.40	0.40	0.02	0.34	0.34	0.06	0.21	0.21	0.20	0.35	0.35
Sat Flow, veh/h	1810	1900	1610	1810	1612	244	3510	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	123	379	95	15	0	578	149	504	12	74	418	250
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	0	1856	1755	1805	1610	1810	1805	1610
Q Serve(g_s), s	7.3	16.4	4.1	0.9	0.0	32.7	4.6	14.1	0.6	3.7	9.4	9.9
Cycle Q Clear(g_c), s	7.3	16.4	4.1	0.9	0.0	32.7	4.6	14.1	0.6	3.7	9.4	9.9
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	767	650	42	0	637	221	752	335	364	1251	558
V/C Ratio(X)	0.81	0.49	0.15	0.35	0.00	0.91	0.67	0.67	0.04	0.20	0.33	0.45
Avail Cap(c_a), veh/h	222	915	776	115	0	785	227	752	335	364	1251	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.85	0.85	0.85	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	24.4	20.8	52.9	0.0	34.5	50.4	40.1	26.1	36.6	26.6	15.5
Incr Delay (d2), s/veh	13.2	0.5	0.1	5.0	0.0	12.6	6.4	4.0	0.2	0.3	0.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	7.4	1.6	0.5	0.0	16.6	2.2	6.7	0.3	1.7	4.2	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.7	24.9	20.9	57.9	0.0	47.0	56.8	44.1	26.3	36.9	27.3	18.1
LnGrp LOS	E	C	C	E	A	D	E	D	C	D	C	B
Approach Vol, veh/h		597			593			665			742	
Approach Delay, s/veh		32.1			47.3			46.6			25.1	
Approach LOS		C			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	36.6	27.4	7.1	48.9	11.4	42.6	13.7	42.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	22.9	7.0	53.0	7.1	24.9	13.5	46.5					
Max Q Clear Time (g_c+1), s	16.1	2.9	18.4	6.6	11.9	9.3	34.7					
Green Ext Time (p_c), s	0.0	1.8	0.0	2.8	0.0	3.0	0.1	3.0				
Intersection Summary												
HCM 6th Ctrl Delay											37.3	
HCM 6th LOS											D	

HCM 6th Signalized Intersection Summary
 12: Hillrose Lane/Nason Street & Iris Avenue

Village at Moreno Valley
 Project Completion (2023) NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘				↖ ↗ ↘			↖	↖	↖	↖	↖	↖
Traffic Volume (veh/h)	314	797	25	2	6	634	90	15	44	8	123	10	256
Future Volume (veh/h)	314	797	25	2	6	634	90	15	44	8	123	10	256
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	403	1022	32		8	813	115	19	56	10	158	13	328
Peak Hour Factor	0.78	0.78	0.78		0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	0	0	0		0	0	0	0	0	0	0	0	0
Cap, veh/h	876	1831	57		228	1199	372	53	333	59	194	551	869
Arrive On Green	0.25	0.35	0.35		0.13	0.23	0.23	0.03	0.21	0.21	0.11	0.29	0.29
Sat Flow, veh/h	3510	5167	162		1810	5187	1610	1810	1569	280	1810	1900	1610
Grp Volume(v), veh/h	403	684	370		8	813	115	19	0	66	158	13	328
Grp Sat Flow(s),veh/h/ln	1755	1729	1871		1810	1729	1610	1810	0	1850	1810	1900	1610
Q Serve(g_s), s	8.8	14.3	14.3		0.3	12.9	3.9	0.9	0.0	2.6	7.7	0.4	0.0
Cycle Q Clear(g_c), s	8.8	14.3	14.3		0.3	12.9	3.9	0.9	0.0	2.6	7.7	0.4	0.0
Prop In Lane	1.00		0.09		1.00		1.00	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	876	1226	663		228	1199	372	53	0	392	194	551	869
V/C Ratio(X)	0.46	0.56	0.56		0.04	0.68	0.31	0.36	0.00	0.17	0.81	0.02	0.38
Avail Cap(c_a), veh/h	876	1226	663		228	1199	372	141	0	392	304	551	869
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.70	0.70	0.70		1.00	1.00	1.00	1.00	0.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	28.6	23.4	23.4		34.5	31.5	15.3	42.8	0.0	29.0	39.3	22.8	12.0
Incr Delay (d2), s/veh	0.3	1.3	2.4		0.1	3.1	2.1	4.0	0.0	0.9	8.6	0.1	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	8.6	5.9	6.5		0.2	5.6	2.2	0.5	0.0	1.3	3.8	0.2	3.8
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	28.9	24.7	25.8		34.6	34.6	17.4	46.8	0.0	29.9	47.8	22.9	13.2
LnGrp LOS	C	C	C		C	C	B	D	A	C	D	C	B
Approach Vol, veh/h	1457				936				85			499	
Approach Delay, s/veh	26.1				32.5				33.7			24.4	
Approach LOS	C				C				C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	15.9	36.4	7.1	30.6	27.0	25.3	14.2	23.6					
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gmax), s	31.9	7.0	26.1	18.1	20.8	15.1	18.0						
Max Q Clear Time (g_c+1), s	16.3	2.9	2.4	10.8	14.9	9.7	4.6						
Green Ext Time (p_c), s	0.0	6.3	0.0	1.2	0.9	2.9	0.2	0.2					

Intersection Summary

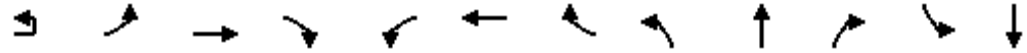
HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 1: Lasselle Street & Iris Avenue

Village at Moreno Valley
 Project Completion (2023) NP - PM Peak Hour



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔↔	↔↔↔		↔↔	↔↔↔		↔↔	↔↔	↔	↔↔	↔↔
Traffic Volume (veh/h)	7	198	473	323	674	701	97	249	686	530	235	802
Future Volume (veh/h)	7	198	473	323	674	701	97	249	686	530	235	802
Initial Q (Qb), veh		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	
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No		No			No				No
Adj Sat Flow, veh/h/ln		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h		202	483	330	688	715	99	254	700	541	240	818
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
Percent Heavy Veh, %		0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h		780	779	363	778	1036	142	362	994	800	273	801
Arrive On Green		0.22	0.23	0.23	0.22	0.22	0.22	0.10	0.28	0.28	0.08	0.25
Sat Flow, veh/h		3510	3458	1610	3510	4611	633	3510	3610	1610	3510	3206
Grp Volume(v), veh/h		202	483	330	688	535	279	254	700	541	240	461
Grp Sat Flow(s),veh/h/ln		1755	1729	1610	1755	1729	1786	1755	1805	1610	1755	1805
Q Serve(g_s), s		4.3	11.3	18.0	17.1	12.8	12.9	6.3	15.7	22.9	6.1	22.5
Cycle Q Clear(g_c), s		4.3	11.3	18.0	17.1	12.8	12.9	6.3	15.7	22.9	6.1	22.5
Prop In Lane		1.00		1.00	1.00		0.35	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		780	779	363	778	777	401	362	994	800	273	451
V/C Ratio(X)		0.26	0.62	0.91	0.88	0.69	0.70	0.70	0.70	0.68	0.88	1.02
Avail Cap(c_a), veh/h		780	788	367	858	1306	675	362	994	800	273	451
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
Upstream Filter(I)		1.00	1.00	1.00	0.74	0.74	0.74	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		28.9	31.4	34.0	33.9	32.0	32.1	39.0	29.3	17.1	41.1	33.8
Incr Delay (d2), s/veh		0.2	1.5	25.8	7.8	0.8	1.6	5.9	4.2	4.6	26.2	47.7
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
%ile BackOfQ(50%),veh/ln		1.8	4.8	9.5	7.9	5.3	5.6	3.0	7.2	8.9	3.6	15.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		29.1	32.9	59.8	41.7	32.8	33.7	45.0	33.5	21.7	67.3	81.5
LnGrp LOS		C	C	E	D	C	C	D	C	C	E	F
Approach Vol, veh/h			1015			1502			1495			1166
Approach Delay, s/veh			40.9			37.1			31.2			78.5
Approach LOS			D			D			C			E
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.5	29.3	24.4	24.8	13.8	27.0	24.5	24.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.0	22.5	22.0	20.5	7.0	22.5	8.5	34.0				
Max Q Clear Time (g_c+I1), s	8.1	24.9	19.1	20.0	8.3	24.5	6.3	14.9				
Green Ext Time (p_c), s	0.0	0.0	0.9	0.3	0.0	0.0	0.1	5.3				

Intersection Summary

HCM 6th Ctrl Delay	45.4
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 1: Lasselle Street & Iris Avenue

Village at Moreno Valley
 Project Completion (2023) NP - PM Peak Hour

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	106
Future Volume (veh/h)	106
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	108
Peak Hour Factor	0.98
Percent Heavy Veh, %	0
Cap, veh/h	106
Arrive On Green	0.25
Sat Flow, veh/h	423
Grp Volume(v), veh/h	465
Grp Sat Flow(s),veh/h/ln	1824
Q Serve(g_s), s	22.5
Cycle Q Clear(g_c), s	22.5
Prop In Lane	0.23
Lane Grp Cap(c), veh/h	456
V/C Ratio(X)	1.02
Avail Cap(c_a), veh/h	456
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	33.8
Incr Delay (d2), s/veh	47.5
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	15.7
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	81.3
LnGrp LOS	F
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔		↔	↔	
Traffic Vol, veh/h	2	138	37	59	203	11	36	22	25	14	14	3
Future Vol, veh/h	2	138	37	59	203	11	36	22	25	14	14	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	148	40	63	218	12	39	24	27	15	15	3
Number of Lanes	0	1	1	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	8.9	11.1	8.9	8.9
HCM LOS	A	B	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	1%	0%	23%	0%	100%	0%
Vol Thru, %	0%	47%	99%	0%	77%	0%	0%	82%
Vol Right, %	0%	53%	0%	100%	0%	100%	0%	18%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	47	140	37	262	11	14	17
LT Vol	36	0	2	0	59	0	14	0
Through Vol	0	22	138	0	203	0	0	14
RT Vol	0	25	0	37	0	11	0	3
Lane Flow Rate	39	51	151	40	282	12	15	18
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.067	0.075	0.214	0.049	0.401	0.014	0.026	0.029
Departure Headway (Hd)	6.227	5.347	5.116	4.405	5.126	4.31	6.308	5.678
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	574	667	700	811	701	829	565	627
Service Time	3.982	3.101	2.855	2.143	2.861	2.045	4.071	3.441
HCM Lane V/C Ratio	0.068	0.076	0.216	0.049	0.402	0.014	0.027	0.029
HCM Control Delay	9.4	8.5	9.3	7.4	11.3	7.1	9.2	8.6
HCM Lane LOS	A	A	A	A	B	A	A	A
HCM 95th-tile Q	0.2	0.2	0.8	0.2	1.9	0	0.1	0.1

HCM 6th Signalized Intersection Summary

3: Morrison Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗	↖	↗	↖	↗
Traffic Volume (veh/h)	8	188	16	47	206	7	15	32	52	1	46	29
Future Volume (veh/h)	8	188	16	47	206	7	15	32	52	1	46	29
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		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	9	202	17	51	222	8	16	34	56	1	49	31
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	29	1254	105	114	1488	53	48	582	594	3	619	359
Arrive On Green	0.02	0.37	0.37	0.06	0.42	0.42	0.03	0.31	0.31	0.00	0.28	0.28
Sat Flow, veh/h	1810	3373	281	1810	3554	128	1810	1900	1610	1810	2200	1276
Grp Volume(v), veh/h	9	107	112	51	112	118	16	34	56	1	39	41
Grp Sat Flow(s),veh/h/ln	1810	1805	1849	1810	1805	1877	1810	1900	1610	1810	1805	1670
Q Serve(g_s), s	0.3	2.8	2.8	1.9	2.7	2.7	0.6	0.9	1.6	0.0	1.1	1.3
Cycle Q Clear(g_c), s	0.3	2.8	2.8	1.9	2.7	2.7	0.6	0.9	1.6	0.0	1.1	1.3
Prop In Lane	1.00		0.15	1.00		0.07	1.00		1.00	1.00		0.76
Lane Grp Cap(c), veh/h	29	671	688	114	756	786	48	582	594	3	508	470
V/C Ratio(X)	0.31	0.16	0.16	0.45	0.15	0.15	0.33	0.06	0.09	0.29	0.08	0.09
Avail Cap(c_a), veh/h	184	671	688	184	756	786	184	582	594	181	508	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	14.7	14.7	31.6	12.6	12.6	33.4	17.2	14.4	34.9	18.5	18.5
Incr Delay (d2), s/veh	5.9	0.5	0.5	2.7	0.4	0.4	3.9	0.2	0.3	39.9	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.1	1.2	0.9	1.0	1.1	0.3	0.4	0.6	0.1	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.0	15.2	15.2	34.3	13.0	13.0	37.4	17.3	14.7	74.8	18.8	18.9
LnGrp LOS	D	B	B	C	B	B	D	B	B	E	B	B
Approach Vol, veh/h		228		281		106		81				
Approach Delay, s/veh		16.2		16.9		19.0		19.5				
Approach LOS		B		B		B		B				
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	30.5	6.4	24.2	5.6	33.8	4.6	25.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	18.1	7.1	19.7	7.1	18.1	7.0	19.8					
Max Q Clear Time (g_c+1), s	4.8	2.6	3.3	2.3	4.7	2.0	3.6					
Green Ext Time (p_c), s	0.0	0.9	0.0	0.3	0.0	0.9	0.0	0.2				

Intersection Summary

HCM 6th Ctrl Delay	17.3
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
 4: Nason Street & Elder Avenue/SR-60 Westbound Ramp

Village at Moreno Valley
 Project Completion (2023) NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	26	129	148	33	24	182	295	609	29	312	10
Future Volume (veh/h)	8	26	129	148	33	24	182	295	609	29	312	10
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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	27	132	151	34	24	186	301	621	30	318	10
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	18	169	330	178	337	324	210	2205	1142	47	1859	58
Arrive On Green	0.01	0.09	0.09	0.10	0.18	0.18	0.19	1.00	1.00	0.03	0.52	0.52
Sat Flow, veh/h	1810	1900	1610	1810	1900	1589	1810	3610	1610	1810	3570	112
Grp Volume(v), veh/h	8	27	132	151	34	24	186	301	621	30	160	168
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1589	1810	1805	1610	1810	1805	1877
Q Serve(g_s), s	0.5	1.6	8.9	10.3	1.9	1.5	12.5	0.0	0.0	2.1	5.8	5.9
Cycle Q Clear(g_c), s	0.5	1.6	8.9	10.3	1.9	1.5	12.5	0.0	0.0	2.1	5.8	5.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	18	169	330	178	337	324	210	2205	1142	47	940	977
V/C Ratio(X)	0.46	0.16	0.40	0.85	0.10	0.07	0.89	0.14	0.54	0.64	0.17	0.17
Avail Cap(c_a), veh/h	290	365	496	290	365	347	217	2205	1142	217	940	977
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.85	0.85	0.85	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.6	52.6	43.1	55.4	43.0	40.3	49.6	0.0	0.0	60.3	15.8	15.8
Incr Delay (d2), s/veh	6.7	0.2	0.3	6.2	0.0	0.0	27.3	0.1	1.6	5.3	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.8	3.6	5.0	0.9	0.6	6.7	0.0	0.5	1.0	2.4	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.3	52.8	43.3	61.6	43.1	40.3	76.9	0.1	1.6	65.6	16.1	16.1
LnGrp LOS	E	D	D	E	D	D	E	A	A	E	B	B
Approach Vol, veh/h		167			209			1108			358	
Approach Delay, s/veh		46.1			56.1			13.8			20.3	
Approach LOS		D			E			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.2	82.4	17.3	17.1	19.5	71.1	6.2	28.2				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	44.0	44.0	20.0	24.0	15.0	44.0	20.0	24.0				
Max Q Clear Time (g_c+1), s	14.5	2.0	12.3	10.9	14.5	7.9	2.5	3.9				
Green Ext Time (p_c), s	0.0	2.4	0.1	0.2	0.0	1.1	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay											22.8	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary
5: Nason Street & SR-60 Eastbound Ramp

Village at Moreno Valley
Project Completion (2023) NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	7	721	0	0	0	0	963	162	59	535	0
Future Volume (veh/h)	118	7	721	0	0	0	0	963	162	59	535	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		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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	126	0	772				0	1024	172	63	569	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	473	0	841				0	1720	288	82	2319	0
Arrive On Green	0.26	0.00	0.26				0.00	0.56	0.56	0.01	0.21	0.00
Sat Flow, veh/h	1810	0	3214				0	3182	518	1810	3705	0
Grp Volume(v), veh/h	126	0	772				0	598	598	63	569	0
Grp Sat Flow(s),veh/h/ln	1810	0	1607				0	1805	1799	1810	1805	0
Q Serve(g_s), s	6.9	0.0	29.2				0.0	27.4	27.5	4.3	16.4	0.0
Cycle Q Clear(g_c), s	6.9	0.0	29.2				0.0	27.4	27.5	4.3	16.4	0.0
Prop In Lane	1.00		1.00				0.00		0.29	1.00		0.00
Lane Grp Cap(c), veh/h	473	0	841				0	1006	1003	82	2319	0
V/C Ratio(X)	0.27	0.00	0.92				0.00	0.59	0.60	0.77	0.25	0.00
Avail Cap(c_a), veh/h	565	0	1003				0	1006	1003	217	2319	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	0.87	0.87	0.95	0.95	0.00
Uniform Delay (d), s/veh	36.6	0.0	44.9				0.0	18.3	18.4	60.9	24.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	10.7				0.0	2.3	2.3	5.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	12.7				0.0	11.4	11.4	2.1	8.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.7	0.0	55.6				0.0	20.6	20.6	66.2	24.3	0.0
LnGrp LOS	D	A	E				A	C	C	E	C	A
Approach Vol, veh/h		898						1196			632	
Approach Delay, s/veh		52.9						20.6			28.5	
Approach LOS		D						C			C	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	10.7	75.7	38.7	86.3								
Change Period (Y+Rc), s	5.0	6.0	6.0	6.0								
Max Green Setting (Gmax), s	15.0	54.0	39.0	74.0								
Max Q Clear Time (g_c+1), s	10.3	29.5	31.2	18.4								
Green Ext Time (p_c), s	0.0	5.2	1.5	2.5								

Intersection Summary

HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary

6: Nason Street & Fir Avenue

Village at Moreno Valley
Project Completion (2023) NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	100	17	162	141	144	23	791	130	291	760	202
Future Volume (veh/h)	83	100	17	162	141	144	23	791	130	291	760	202
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		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	87	105	18	171	148	152	24	833	137	306	800	213
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	180	144	25	203	197	608	60	1113	183	496	2166	964
Arrive On Green	0.10	0.09	0.09	0.11	0.10	0.10	0.01	0.12	0.12	0.27	0.60	0.60
Sat Flow, veh/h	1810	1578	270	1810	1900	1610	1810	3099	510	1810	3610	1606
Grp Volume(v), veh/h	87	0	123	171	148	152	24	485	485	306	800	213
Grp Sat Flow(s),veh/h/ln	1810	0	1848	1810	1900	1610	1810	1805	1804	1810	1805	1606
Q Serve(g_s), s	5.0	0.0	7.1	10.2	8.3	0.0	1.4	28.6	28.6	16.3	12.5	3.7
Cycle Q Clear(g_c), s	5.0	0.0	7.1	10.2	8.3	0.0	1.4	28.6	28.6	16.3	12.5	3.7
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	180	0	168	203	197	608	60	648	648	496	2166	964
V/C Ratio(X)	0.48	0.00	0.73	0.84	0.75	0.25	0.40	0.75	0.75	0.62	0.37	0.22
Avail Cap(c_a), veh/h	444	0	445	304	311	705	255	648	648	496	2166	964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90	0.89	0.89	0.89
Uniform Delay (d), s/veh	46.8	0.0	48.7	47.9	47.9	23.5	53.3	43.7	43.7	34.9	11.3	3.0
Incr Delay (d2), s/veh	2.0	0.0	6.0	12.6	5.7	0.2	3.9	7.0	7.0	2.1	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	3.5	5.2	4.2	2.7	0.7	15.0	15.0	7.2	4.7	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.8	0.0	54.7	60.4	53.6	23.7	57.2	50.7	50.7	36.9	11.7	3.5
LnGrp LOS	D	A	D	E	D	C	E	D	D	D	B	A
Approach Vol, veh/h		210			471			994			1319	
Approach Delay, s/veh		52.3			46.5			50.8			16.3	
Approach LOS		D			D			D			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	34.6	44.0	16.8	14.5	8.1	70.5	15.5	15.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	39.5	39.5	18.5	26.5	15.5	31.5	27.0	18.0				
Max Q Clear Time (g_c+11g), s	30.6	30.6	12.2	9.1	3.4	14.5	7.0	10.3				
Green Ext Time (p_c), s	0.0	3.9	0.2	0.5	0.0	5.6	0.2	0.8				

Intersection Summary

HCM 6th Ctrl Delay	35.0
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

7: Nason Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	141	66	160	140	20	33	852	209	14	823	103
Future Volume (veh/h)	72	141	66	160	140	20	33	852	209	14	823	103
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	80	157	73	178	156	22	37	947	232	16	914	114
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	105	315	137	196	496	217	363	2225	991	45	1588	702
Arrive On Green	0.06	0.09	0.09	0.11	0.14	0.14	0.27	0.82	0.82	0.01	0.15	0.15
Sat Flow, veh/h	1810	3610	1571	1810	3610	1579	1810	3610	1608	1810	3610	1596
Grp Volume(v), veh/h	80	157	73	178	156	22	37	947	232	16	914	114
Grp Sat Flow(s),veh/h/ln	1810	1805	1571	1810	1805	1579	1810	1805	1608	1810	1805	1596
Q Serve(g_s), s	4.8	4.6	4.9	10.7	4.3	1.3	1.7	8.0	1.8	1.0	26.0	5.2
Cycle Q Clear(g_c), s	4.8	4.6	4.9	10.7	4.3	1.3	1.7	8.0	1.8	1.0	26.0	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	105	315	137	196	496	217	363	2225	991	45	1588	702
V/C Ratio(X)	0.76	0.50	0.53	0.91	0.31	0.10	0.10	0.43	0.23	0.36	0.58	0.16
Avail Cap(c_a), veh/h	306	811	353	196	591	258	363	2225	991	115	1588	702
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	0.33	0.33	0.33
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.87	0.87	0.87	0.90	0.90	0.90
Uniform Delay (d), s/veh	51.1	47.9	48.0	48.5	42.8	41.5	32.8	4.5	1.1	53.7	37.4	16.5
Incr Delay (d2), s/veh	10.6	1.2	3.2	40.0	0.4	0.2	0.1	0.5	0.5	4.3	1.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.1	2.0	6.9	1.9	0.5	0.7	2.3	1.1	0.5	12.8	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	49.1	51.2	88.5	43.1	41.7	32.9	5.0	1.5	58.0	38.8	16.9
LnGrp LOS	E	D	D	F	D	D	C	A	A	E	D	B
Approach Vol, veh/h		310			356			1216			1044	
Approach Delay, s/veh		52.8			65.7			5.2			36.7	
Approach LOS		D			E			A			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.2	72.3	16.4	14.1	26.6	52.9	10.9	19.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	48.4	11.9	24.7	7.0	48.4	18.6	18.0					
Max Q Clear Time (g_c+1), s	10.0	12.7	6.9	3.7	28.0	6.8	6.3					
Green Ext Time (p_c), s	0.0	8.7	0.0	1.0	0.0	6.5	0.1	0.7				

Intersection Summary

HCM 6th Ctrl Delay	28.9
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary
 8: Nason Street & Dracea Avenue

Village at Moreno Valley
 Project Completion (2023) NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	3	44	12	5	7	49	1065	17	14	890	119
Future Volume (veh/h)	114	3	44	12	5	7	49	1065	17	14	890	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.96	0.97		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	128	3	49	13	6	8	55	1197	19	16	1000	134
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	244	12	203	209	99	132	94	2117	944	277	2483	1107
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.10	1.00	1.00	0.31	1.00	1.00
Sat Flow, veh/h	1369	90	1474	1329	720	960	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	128	0	52	13	0	14	55	1197	19	16	1000	134
Grp Sat Flow(s),veh/h/ln	1369	0	1564	1329	0	1681	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	9.9	0.0	3.3	1.0	0.0	0.8	3.2	0.0	0.0	0.7	0.0	0.0
Cycle Q Clear(g_c), s	10.7	0.0	3.3	4.2	0.0	0.8	3.2	0.0	0.0	0.7	0.0	0.0
Prop In Lane	1.00		0.94	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	244	0	215	209	0	231	94	2117	944	277	2483	1107
V/C Ratio(X)	0.52	0.00	0.24	0.06	0.00	0.06	0.59	0.57	0.02	0.06	0.40	0.12
Avail Cap(c_a), veh/h	311	0	291	274	0	313	387	2117	944	277	2483	1107
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	0.92	0.92	0.92	0.88	0.88	0.88
Uniform Delay (d), s/veh	45.9	0.0	42.3	44.2	0.0	41.2	48.2	0.0	0.0	32.5	0.0	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.6	0.1	0.0	0.1	5.3	1.0	0.0	0.1	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	1.3	0.3	0.0	0.3	1.5	0.3	0.0	0.3	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.6	0.0	42.9	44.3	0.0	41.3	53.5	1.0	0.0	32.6	0.4	0.2
LnGrp LOS	D	A	D	D	A	D	D	A	A	C	A	A
Approach Vol, veh/h		180			27			1271			1150	
Approach Delay, s/veh		46.2			42.8			3.3			0.9	
Approach LOS		D			D			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.4	69.0		19.6	10.2	80.2		19.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5	64.5		20.5	23.5	52.5		20.5				
Max Q Clear Time (g_c+1), s	12	2.0		12.7	5.2	2.0		6.2				
Green Ext Time (p_c), s	0.0	12.8		0.4	0.1	10.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	5.6
HCM 6th LOS	A

HCM 6th Signalized Intersection Summary
 9: Nason Street & Cottonwood Avenue

Village at Moreno Valley
 Project Completion (2023) NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	27	44	2	42	25	33	938	8	28	719	110
Future Volume (veh/h)	86	27	44	2	42	25	33	938	8	28	719	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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	91	29	47	2	45	27	35	998	9	30	765	117
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	117	235	199	7	141	78	444	2421	1080	69	1674	747
Arrive On Green	0.06	0.12	0.12	0.00	0.06	0.06	0.25	0.67	0.67	0.05	0.62	0.62
Sat Flow, veh/h	1810	1900	1610	1810	2244	1238	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	91	29	47	2	35	37	35	998	9	30	765	117
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1805	1677	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	5.4	1.5	1.8	0.1	2.1	2.3	1.6	13.8	0.2	1.8	12.4	2.5
Cycle Q Clear(g_c), s	5.4	1.5	1.8	0.1	2.1	2.3	1.6	13.8	0.2	1.8	12.4	2.5
Prop In Lane	1.00		1.00	1.00		0.74	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	235	199	7	114	106	444	2421	1080	69	1674	747
V/C Ratio(X)	0.78	0.12	0.24	0.29	0.31	0.35	0.08	0.41	0.01	0.43	0.46	0.16
Avail Cap(c_a), veh/h	255	458	388	115	295	274	444	2421	1080	115	1674	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	50.7	42.9	17.1	54.6	49.3	49.4	31.9	8.2	6.0	51.1	13.7	6.3
Incr Delay (d2), s/veh	10.7	0.2	0.6	22.1	1.5	1.9	0.1	0.5	0.0	3.9	0.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.7	1.2	0.1	1.0	1.0	0.7	5.1	0.1	0.9	4.5	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.4	43.1	17.7	76.7	50.8	51.3	32.0	8.8	6.0	55.0	14.5	6.7
LnGrp LOS	E	D	B	E	D	D	C	A	A	D	B	A
Approach Vol, veh/h	167			74			1042			912		
Approach Delay, s/veh	45.9			51.7			9.5			14.9		
Approach LOS	D			D			A			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.7	78.3	4.9	18.1	31.5	55.5	11.6	11.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	51.5	7.0	26.5	7.5	51.0	15.5	18.0					
Max Q Clear Time (g_c+1), s	15.8	2.1	3.8	3.6	14.4	7.4	4.3					
Green Ext Time (p_c), s	0.0	8.9	0.0	0.2	0.0	6.7	0.1	0.2				

Intersection Summary

HCM 6th Ctrl Delay	15.9
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
 10: Nason Street & Alessandro Boulevard

Village at Moreno Valley
 Project Completion (2023) NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑	↔	↔↔	↑	↔		↔	↑↑	↔	↔	↑↑↑	↔
Traffic Volume (veh/h)	135	331	85	28	212	69	1	83	763	100	53	624	79
Future Volume (veh/h)	135	331	85	28	212	69	1	83	763	100	53	624	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		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		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900		1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	147	360	92	30	230	75		90	829	109	58	678	86
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0		0	0	0	0	0	0
Cap, veh/h	221	631	281	134	285	242		114	919	410	668	2906	902
Arrive On Green	0.06	0.17	0.17	0.04	0.15	0.15		0.06	0.25	0.25	0.37	0.56	0.56
Sat Flow, veh/h	3510	3610	1610	3510	1900	1610		1810	3610	1610	1810	5187	1610
Grp Volume(v), veh/h	147	360	92	30	230	75		90	829	109	58	678	86
Grp Sat Flow(s),veh/h/ln	1755	1805	1610	1755	1900	1610		1810	1805	1610	1810	1729	1610
Q Serve(g_s), s	4.5	10.1	5.5	0.9	12.9	4.6		5.4	24.4	5.0	2.3	7.3	1.8
Cycle Q Clear(g_c), s	4.5	10.1	5.5	0.9	12.9	4.6		5.4	24.4	5.0	2.3	7.3	1.8
Prop In Lane	1.00		1.00	1.00		1.00		1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	221	631	281	134	285	242		114	919	410	668	2906	902
V/C Ratio(X)	0.67	0.57	0.33	0.22	0.81	0.31		0.79	0.90	0.27	0.09	0.23	0.10
Avail Cap(c_a), veh/h	223	1444	644	239	769	651		156	919	410	668	2906	902
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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	41.6	39.7	51.3	45.2	41.7		50.8	39.7	23.1	22.6	12.2	5.1
Incr Delay (d2), s/veh	7.2	0.8	0.7	0.8	5.4	0.7		16.6	13.8	1.6	0.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.5	2.2	0.4	6.5	1.9		3.0	12.5	2.5	1.0	2.8	1.0
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	57.6	42.4	40.4	52.2	50.6	42.4		67.4	53.4	24.7	22.7	12.4	5.3
LnGrp LOS	E	D	D	D	D	D		E	D	C	C	B	A
Approach Vol, veh/h		599			335				1028			822	
Approach Delay, s/veh		45.8			48.9				51.6			12.4	
Approach LOS		D			D				D			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	45.1	32.5	8.7	23.7	11.5	66.1	11.4	21.0					
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gmax), s	12.5	28.0	7.5	44.0	9.5	31.0	7.0	44.5					
Max Q Clear Time (g_c+1), s	14.3	26.4	2.9	12.1	7.4	9.3	6.5	14.9					
Green Ext Time (p_c), s	0.1	0.9	0.0	2.8	0.0	5.1	0.0	1.6					

Intersection Summary

HCM 6th Ctrl Delay	38.5
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 11: Nason Street & Cactus Avenue

Village at Moreno Valley
 Project Completion (2023) NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	144	434	93	26	311	47	1	39	348	23	99	487	134
Future Volume (veh/h)	144	434	93	26	311	47	1	39	348	23	99	487	134
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		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900		1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	145	438	94	26	314	47		39	352	23	100	492	135
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, %	0	0	0	0	0	0		0	0	0	0	0	0
Cap, veh/h	175	546	463	63	364	55		156	752	335	554	1696	757
Arrive On Green	0.10	0.29	0.29	0.03	0.23	0.23		0.04	0.21	0.21	0.31	0.47	0.47
Sat Flow, veh/h	1810	1900	1610	1810	1615	242		3510	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	145	438	94	26	0	361		39	352	23	100	492	135
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	0	1856		1755	1805	1610	1810	1805	1610
Q Serve(g_s), s	8.7	23.5	4.9	1.5	0.0	20.6		1.2	9.4	1.1	4.5	9.2	3.5
Cycle Q Clear(g_c), s	8.7	23.5	4.9	1.5	0.0	20.6		1.2	9.4	1.1	4.5	9.2	3.5
Prop In Lane	1.00		1.00	1.00		0.13		1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	546	463	63	0	419		156	752	335	554	1696	757
V/C Ratio(X)	0.83	0.80	0.20	0.41	0.00	0.86		0.25	0.47	0.07	0.18	0.29	0.18
Avail Cap(c_a), veh/h	222	915	776	115	0	785		227	752	335	554	1696	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00		0.94	0.94	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	36.3	29.7	52.0	0.0	40.9		50.8	38.2	25.4	28.0	17.9	7.4
Incr Delay (d2), s/veh	18.5	2.8	0.2	4.2	0.0	5.3		0.8	2.0	0.4	0.2	0.4	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	8.8	11.2	1.9	0.8	0.0	9.9		0.5	4.4	0.5	2.0	3.9	2.0
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	67.3	39.1	29.9	56.2	0.0	46.3		51.6	40.2	25.8	28.2	18.3	7.9
LnGrp LOS	E	D	C	E	A	D		D	D	C	C	B	A
Approach Vol, veh/h		677			387				414			727	
Approach Delay, s/veh		43.9			46.9				40.5			17.8	
Approach LOS		D			D				D			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	38.2	27.4	8.3	36.1	9.4	56.2	15.1	29.3					
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gmax), s	22.9	7.0	53.0	7.1	24.9	13.5	46.5						
Max Q Clear Time (g_c+10), s	11.4	3.5	25.5	3.2	11.2	10.7	22.6						
Green Ext Time (p_c), s	0.0	1.8	0.0	3.2	0.0	3.2	0.1	2.3					

Intersection Summary

HCM 6th Ctrl Delay	35.2
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 12: Hillrose Lane/Nason Street & Iris Avenue

Village at Moreno Valley
 Project Completion (2023) NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↑ ↑	↘		↖ ↗	↑ ↑	↘	↖ ↗	↑	↘	↖ ↗	↑	↘
Traffic Volume (veh/h)	237	721	19	7	16	866	137	12	38	15	121	50	395
Future Volume (veh/h)	237	721	19	7	16	866	137	12	38	15	121	50	395
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	247	751	20		17	902	143	12	40	16	126	52	411
Peak Hour Factor	0.96	0.96	0.96		0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0		0	0	0	0	0	0	0	0	0
Cap, veh/h	908	1841	49		245	1199	372	36	286	115	160	551	884
Arrive On Green	0.26	0.35	0.35		0.14	0.23	0.23	0.02	0.22	0.22	0.09	0.29	0.29
Sat Flow, veh/h	3510	5195	138		1810	5187	1610	1810	1291	516	1810	1900	1610
Grp Volume(v), veh/h	247	499	272		17	902	143	12	0	56	126	52	411
Grp Sat Flow(s),veh/h/ln	1755	1729	1875		1810	1729	1610	1810	0	1807	1810	1900	1610
Q Serve(g_s), s	5.0	9.8	9.8		0.7	14.6	5.1	0.6	0.0	2.2	6.1	1.8	0.0
Cycle Q Clear(g_c), s	5.0	9.8	9.8		0.7	14.6	5.1	0.6	0.0	2.2	6.1	1.8	0.0
Prop In Lane	1.00		0.07		1.00		1.00	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	908	1226	665		245	1199	372	36	0	401	160	551	884
V/C Ratio(X)	0.27	0.41	0.41		0.07	0.75	0.38	0.33	0.00	0.14	0.79	0.09	0.47
Avail Cap(c_a), veh/h	908	1226	665		245	1199	372	141	0	401	304	551	884
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)	0.69	0.69	0.69		1.00	1.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97
Uniform Delay (d), s/veh	26.6	21.9	21.9		34.0	32.2	16.7	43.5	0.0	28.1	40.2	23.3	12.3
Incr Delay (d2), s/veh	0.1	0.7	1.3		0.1	4.4	3.0	5.1	0.0	0.7	8.1	0.3	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.0	4.4		0.3	6.4	2.8	0.3	0.0	1.0	3.1	0.8	5.1
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	26.7	22.6	23.2		34.1	36.6	19.6	48.6	0.0	28.8	48.4	23.7	14.0
LnGrp LOS	C	C	C		C	D	B	D	A	C	D	C	B
Approach Vol, veh/h		1018				1062			68			589	
Approach Delay, s/veh		23.8				34.3			32.3			22.2	
Approach LOS		C				C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	16.7	36.4	6.3	30.6	27.8	25.3	12.4	24.5					
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gmax), s	31.9	7.0	26.1	18.1	20.8	15.1	18.0						
Max Q Clear Time (g_c+1), s	11.8	2.6	3.8	7.0	16.6	8.1	4.2						
Green Ext Time (p_c), s	0.0	5.0	0.0	1.8	0.6	2.4	0.2	0.2					

Intersection Summary

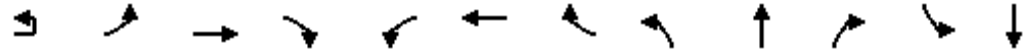
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
1: Lasselle Street & Iris Avenue

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔↔	↔↔↔		↔↔	↔↔↔		↔↔	↔↔	↔	↔↔	↔↔
Traffic Volume (veh/h)	8	147	539	323	618	648	115	409	661	477	132	525
Future Volume (veh/h)	8	147	539	323	618	648	115	409	661	477	132	525
Initial Q (Qb), veh		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	
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No		No			No				No
Adj Sat Flow, veh/h/ln		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h		156	573	344	657	689	122	435	703	507	140	559
Peak Hour Factor		0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %		0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h		758	788	367	745	995	174	386	1028	800	265	745
Arrive On Green		0.22	0.23	0.23	0.21	0.22	0.22	0.11	0.28	0.28	0.08	0.25
Sat Flow, veh/h		3510	3458	1610	3510	4441	777	3510	3610	1610	3510	2978
Grp Volume(v), veh/h		156	573	344	657	535	276	435	703	507	140	338
Grp Sat Flow(s),veh/h/ln		1755	1729	1610	1755	1729	1760	1755	1805	1610	1755	1805
Q Serve(g_s), s		3.3	13.8	18.9	16.3	12.8	13.0	9.9	15.6	20.8	3.5	15.6
Cycle Q Clear(g_c), s		3.3	13.8	18.9	16.3	12.8	13.0	9.9	15.6	20.8	3.5	15.6
Prop In Lane		1.00		1.00	1.00		0.44	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		758	788	367	745	775	394	386	1028	800	265	451
V/C Ratio(X)		0.21	0.73	0.94	0.88	0.69	0.70	1.13	0.68	0.63	0.53	0.75
Avail Cap(c_a), veh/h		758	788	367	819	1268	645	386	1028	800	273	451
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
Upstream Filter(I)		1.00	1.00	1.00	0.80	0.80	0.80	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		29.0	32.2	34.1	34.4	32.1	32.1	40.0	28.6	16.6	40.1	31.1
Incr Delay (d2), s/veh		0.1	3.4	31.5	8.6	0.9	1.8	84.5	3.7	3.8	1.8	10.9
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln		1.4	6.0	10.4	7.7	5.3	5.6	8.7	7.1	8.0	1.5	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		29.1	35.6	65.6	43.0	32.9	34.0	124.5	32.3	20.4	41.9	42.0
LnGrp LOS		C	D	E	D	C	C	F	C	C	D	D
Approach Vol, veh/h			1073			1468			1645			815
Approach Delay, s/veh			44.3			37.6			53.0			42.1
Approach LOS			D			D			D			D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.3	30.1	23.6	25.0	14.4	27.0	23.9	24.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.0	23.5	21.0	20.5	8.0	22.5	8.5	33.0				
Max Q Clear Time (g_c+I1), s	5.5	22.8	18.3	20.9	11.9	17.7	5.3	15.0				
Green Ext Time (p_c), s	0.1	0.5	0.8	0.0	0.0	1.8	0.1	5.2				

Intersection Summary

HCM 6th Ctrl Delay	44.8
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 1: Lasselle Street & Iris Avenue

Village at Moreno Valley
 Project Completion (2023) WP - AM Peak Hour

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	109
Future Volume (veh/h)	109
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	116
Peak Hour Factor	0.94
Percent Heavy Veh, %	0
Cap, veh/h	154
Arrive On Green	0.25
Sat Flow, veh/h	616
Grp Volume(v), veh/h	337
Grp Sat Flow(s),veh/h/ln	1789
Q Serve(g_s), s	15.7
Cycle Q Clear(g_c), s	15.7
Prop In Lane	0.34
Lane Grp Cap(c), veh/h	447
V/C Ratio(X)	0.75
Avail Cap(c_a), veh/h	447
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	31.2
Incr Delay (d2), s/veh	11.2
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	8.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	42.4
LnGrp LOS	D
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Intersection												
Intersection Delay, s/veh	31.4											
Intersection LOS	D											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔		↔	↔	
Traffic Vol, veh/h	4	195	208	124	218	15	127	25	97	25	58	6
Future Vol, veh/h	4	195	208	124	218	15	127	25	97	25	58	6
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	271	289	172	303	21	176	35	135	35	81	8
Number of Lanes	0	1	1	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	18	62.1	15.8	13.5
HCM LOS	C	F	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	2%	0%	36%	0%	100%	0%
Vol Thru, %	0%	20%	98%	0%	64%	0%	0%	91%
Vol Right, %	0%	80%	0%	100%	0%	100%	0%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	127	122	199	208	342	15	25	64
LT Vol	127	0	4	0	124	0	25	0
Through Vol	0	25	195	0	218	0	0	58
RT Vol	0	97	0	208	0	15	0	6
Lane Flow Rate	176	169	276	289	475	21	35	89
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.417	0.35	0.564	0.531	0.984	0.038	0.089	0.212
Departure Headway (Hd)	8.519	7.428	7.345	6.615	7.454	6.551	9.184	8.595
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	422	483	489	543	485	545	389	416
Service Time	6.289	5.197	5.114	4.384	5.218	4.314	6.971	6.381
HCM Lane V/C Ratio	0.417	0.35	0.564	0.532	0.979	0.039	0.09	0.214
HCM Control Delay	17.3	14.2	19.3	16.7	64.4	9.6	12.9	13.7
HCM Lane LOS	C	B	C	C	F	A	B	B
HCM 95th-tile Q	2	1.6	3.4	3.1	12.8	0.1	0.3	0.8

HCM 6th Signalized Intersection Summary

3: Morrison Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗		↖	↖	↖↗	↖	↖↗	
Traffic Volume (veh/h)	53	364	50	36	253	0	54	73	100	4	78	72
Future Volume (veh/h)	53	364	50	36	253	0	54	73	100	4	78	72
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		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	74	506	69	50	351	0	75	101	139	6	108	100
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	138	1030	140	113	1113	0	139	660	659	20	523	441
Arrive On Green	0.08	0.32	0.32	0.06	0.31	0.00	0.08	0.35	0.35	0.01	0.28	0.28
Sat Flow, veh/h	1810	3193	434	1810	3705	0	1810	1900	1610	1810	1857	1566
Grp Volume(v), veh/h	74	285	290	50	351	0	75	101	139	6	105	103
Grp Sat Flow(s),veh/h/ln	1810	1805	1822	1810	1805	0	1810	1900	1610	1810	1805	1618
Q Serve(g_s), s	2.8	8.9	9.0	1.9	5.2	0.0	2.8	2.6	3.9	0.2	3.1	3.4
Cycle Q Clear(g_c), s	2.8	8.9	9.0	1.9	5.2	0.0	2.8	2.6	3.9	0.2	3.1	3.4
Prop In Lane	1.00		0.24	1.00		0.00	1.00		1.00	1.00		0.97
Lane Grp Cap(c), veh/h	138	582	588	113	1113	0	139	660	659	20	508	455
V/C Ratio(X)	0.54	0.49	0.49	0.44	0.32	0.00	0.54	0.15	0.21	0.30	0.21	0.23
Avail Cap(c_a), veh/h	184	582	588	184	1113	0	184	660	659	181	508	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	19.1	19.1	31.7	18.5	0.0	31.1	15.8	13.4	34.3	19.2	19.3
Incr Delay (d2), s/veh	3.2	2.9	2.9	2.7	0.7	0.0	3.2	0.5	0.7	8.2	0.9	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	1.3	3.9	4.0	0.8	2.1	0.0	1.3	1.1	1.4	0.1	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.3	22.0	22.0	34.3	19.3	0.0	34.4	16.2	14.1	42.5	20.1	20.5
LnGrp LOS	C	C	C	C	B	A	C	B	B	D	C	C
Approach Vol, veh/h		649			401			315			214	
Approach Delay, s/veh		23.4			21.1			19.6			20.9	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	27.1	9.9	24.2	9.8	26.1	5.3	28.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	18.1	7.1	19.7	7.1	18.1	7.0	19.8					
Max Q Clear Time (g_c+1), s	11.0	4.8	5.4	4.8	7.2	2.2	5.9					
Green Ext Time (p_c), s	0.0	1.9	0.0	0.9	0.0	1.5	0.0	0.8				

Intersection Summary

HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary
 4: Nason Street & Elder Avenue/SR-60 Westbound Ramp

Village at Moreno Valley
 Project Completion (2023) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗	↘	↑	↗	↘	↑↑	↗	↘	↑↑	
Traffic Volume (veh/h)	6	41	249	121	23	34	150	344	499	33	461	12
Future Volume (veh/h)	6	41	249	121	23	34	150	344	499	33	461	12
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		0.98
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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	7	51	307	149	28	42	185	425	616	41	569	15
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	16	347	480	176	515	485	209	1855	984	55	1540	41
Arrive On Green	0.01	0.18	0.18	0.10	0.27	0.27	0.19	0.86	0.86	0.03	0.43	0.43
Sat Flow, veh/h	1810	1900	1610	1810	1900	1610	1810	3610	1610	1810	3591	95
Grp Volume(v), veh/h	7	51	307	149	28	42	185	425	616	41	286	298
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1610	1810	1805	1610	1810	1805	1881
Q Serve(g_s), s	0.5	2.8	20.7	10.1	1.4	2.3	12.4	2.6	15.0	2.8	13.4	13.5
Cycle Q Clear(g_c), s	0.5	2.8	20.7	10.1	1.4	2.3	12.4	2.6	15.0	2.8	13.4	13.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	16	347	480	176	515	485	209	1855	984	55	774	806
V/C Ratio(X)	0.45	0.15	0.64	0.85	0.05	0.09	0.89	0.23	0.63	0.75	0.37	0.37
Avail Cap(c_a), veh/h	290	365	495	290	515	485	217	1855	984	217	774	806
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.58	0.58	0.58	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.7	42.9	38.1	55.5	33.7	31.3	49.6	4.5	3.6	60.1	24.2	24.2
Incr Delay (d2), s/veh	7.3	0.1	2.0	5.6	0.0	0.0	20.2	0.2	1.8	7.3	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.3	8.4	4.9	0.6	0.9	6.3	0.9	2.6	1.4	5.9	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.0	43.0	40.1	61.1	33.7	31.3	69.9	4.7	5.4	67.4	25.6	25.5
LnGrp LOS	E	D	D	E	C	C	E	A	A	E	C	C
Approach Vol, veh/h		365			219			1226			625	
Approach Delay, s/veh		41.0			51.9			14.9			28.3	
Approach LOS		D			D			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.8	70.2	17.2	28.8	19.4	59.6	6.1	39.9				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	15.0	44.0	20.0	24.0	15.0	44.0	20.0	24.0				
Max Q Clear Time (g_c+1), s	14.8	17.0	12.1	22.7	14.4	15.5	2.5	4.3				
Green Ext Time (p_c), s	0.0	2.9	0.1	0.1	0.0	2.1	0.0	0.1				

Intersection Summary												
HCM 6th Ctrl Delay											25.6	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary
5: Nason Street & SR-60 Eastbound Ramp

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	6	808	0	0	0	0	958	164	53	779	0
Future Volume (veh/h)	35	6	808	0	0	0	0	958	164	53	779	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	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	44	0	1015				0	1198	205	66	974	0
Peak Hour Factor	0.80	0.80	0.80				0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	565	0	1005				0	1557	265	86	2137	0
Arrive On Green	0.31	0.00	0.31				0.00	0.50	0.50	0.02	0.20	0.00
Sat Flow, veh/h	1810	0	3220				0	3181	525	1810	3705	0
Grp Volume(v), veh/h	44	0	1015				0	698	705	66	974	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1805	1806	1810	1805	0
Q Serve(g_s), s	2.1	0.0	39.0				0.0	39.0	39.7	4.5	29.8	0.0
Cycle Q Clear(g_c), s	2.1	0.0	39.0				0.0	39.0	39.7	4.5	29.8	0.0
Prop In Lane	1.00		1.00				0.00		0.29	1.00		0.00
Lane Grp Cap(c), veh/h	565	0	1005				0	911	911	86	2137	0
V/C Ratio(X)	0.08	0.00	1.01				0.00	0.77	0.77	0.77	0.46	0.00
Avail Cap(c_a), veh/h	565	0	1005				0	911	911	217	2137	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.89	0.89	0.00
Uniform Delay (d), s/veh	30.3	0.0	43.0				0.0	25.0	25.2	60.9	32.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	30.9				0.0	6.1	6.4	4.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	19.5				0.0	17.3	17.7	2.2	14.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	0.0	73.9				0.0	31.1	31.5	65.7	33.1	0.0
LnGrp LOS	C	A	F				A	C	C	E	C	A
Approach Vol, veh/h		1059						1403			1040	
Approach Delay, s/veh		72.1						31.3			35.2	
Approach LOS		E						C			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	10.9	69.1	45.0	80.0								
Change Period (Y+Rc), s	5.0	6.0	6.0	6.0								
Max Green Setting (Gmax), s	15.0	54.0	39.0	74.0								
Max Q Clear Time (g_c+1), s	10.5	41.7	41.0	31.8								
Green Ext Time (p_c), s	0.0	5.0	0.0	4.8								

Intersection Summary

HCM 6th Ctrl Delay	44.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
6: Nason Street & Fir Avenue

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	271	120	107	64	104	64	217	717	69	161	1123	173
Future Volume (veh/h)	271	120	107	64	104	64	217	717	69	161	1123	173
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		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	323	143	127	76	124	76	258	854	82	192	1337	206
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	359	216	192	104	175	506	206	1074	103	404	1560	675
Arrive On Green	0.20	0.23	0.23	0.06	0.09	0.09	0.04	0.11	0.11	0.22	0.43	0.43
Sat Flow, veh/h	1810	927	823	1810	1900	1589	1810	3327	319	1810	3610	1561
Grp Volume(v), veh/h	323	0	270	76	124	76	258	463	473	192	1337	206
Grp Sat Flow(s),veh/h/ln	1810	0	1751	1810	1900	1589	1810	1805	1841	1810	1805	1561
Q Serve(g_s), s	19.2	0.0	15.4	4.5	7.0	1.3	12.5	27.6	27.6	10.1	36.7	9.5
Cycle Q Clear(g_c), s	19.2	0.0	15.4	4.5	7.0	1.3	12.5	27.6	27.6	10.1	36.7	9.5
Prop In Lane	1.00		0.47	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	359	0	408	104	175	506	206	583	594	404	1560	675
V/C Ratio(X)	0.90	0.00	0.66	0.73	0.71	0.15	1.25	0.80	0.80	0.48	0.86	0.31
Avail Cap(c_a), veh/h	494	0	422	354	311	619	206	583	594	404	1560	675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.74	0.74	0.74	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	0.0	38.2	51.0	48.5	10.9	52.9	45.6	45.6	37.1	28.2	20.4
Incr Delay (d2), s/veh	15.4	0.0	3.7	9.5	5.2	0.1	140.6	8.2	8.0	0.9	6.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	0.0	6.9	2.3	3.5	0.7	14.1	14.6	14.8	4.5	16.2	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.5	0.0	41.9	60.5	53.7	11.1	193.6	53.8	53.6	38.0	34.4	21.6
LnGrp LOS	E	A	D	E	D	B	F	D	D	D	C	C
Approach Vol, veh/h		593		276			1194			1735		
Approach Delay, s/veh		50.9		43.8			83.9			33.3		
Approach LOS		D		D			F			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	39.0	40.0	10.8	30.1	17.0	52.0	26.3	14.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	35.5	35.5	21.5	26.5	12.5	31.5	30.0	18.0				
Max Q Clear Time (g_c+M), s	29.6	29.6	6.5	17.4	14.5	38.7	21.2	9.0				
Green Ext Time (p_c), s	0.0	2.8	0.1	1.0	0.0	0.0	0.7	0.5				

Intersection Summary

HCM 6th Ctrl Delay	52.7
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary
7: Nason Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑	↗	↘	↑↑	↗	↘	↑↑	↗
Traffic Volume (veh/h)	222	180	229	108	112	42	61	739	125	30	1182	91
Future Volume (veh/h)	222	180	229	108	112	42	61	739	125	30	1182	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.99	1.00		0.99	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	288	234	297	140	145	55	79	960	162	39	1535	118
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	239	676	274	169	537	237	224	1846	812	80	1559	663
Arrive On Green	0.13	0.19	0.19	0.09	0.15	0.15	0.25	1.00	1.00	0.09	0.86	0.86
Sat Flow, veh/h	1810	3610	1463	1810	3610	1591	1810	3610	1588	1810	3610	1536
Grp Volume(v), veh/h	288	234	297	140	145	55	79	960	162	39	1535	118
Grp Sat Flow(s),veh/h/ln	1810	1805	1463	1810	1805	1591	1810	1805	1588	1810	1805	1536
Q Serve(g_s), s	14.5	6.2	20.6	8.4	3.9	3.4	4.0	0.0	0.0	2.3	42.6	0.8
Cycle Q Clear(g_c), s	14.5	6.2	20.6	8.4	3.9	3.4	4.0	0.0	0.0	2.3	42.6	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	676	274	169	537	237	224	1846	812	80	1559	663
V/C Ratio(X)	1.21	0.35	1.08	0.83	0.27	0.23	0.35	0.52	0.20	0.49	0.98	0.18
Avail Cap(c_a), veh/h	239	676	274	196	591	260	224	1846	812	115	1559	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	0.86	0.86	0.86	0.09	0.09	0.09
Uniform Delay (d), s/veh	47.8	38.8	44.7	49.0	41.5	41.3	37.7	0.0	0.0	48.9	7.2	1.7
Incr Delay (d2), s/veh	122.7	0.3	75.2	22.2	0.3	0.5	0.8	0.9	0.5	0.4	4.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	2.7	13.0	4.8	1.7	1.3	1.7	0.2	0.1	1.0	3.8	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	170.5	39.1	119.9	71.2	41.8	41.8	38.5	0.9	0.5	49.3	11.3	1.7
LnGrp LOS	F	D	F	E	D	D	D	A	A	D	B	A
Approach Vol, veh/h		819			340			1201			1692	
Approach Delay, s/veh		114.6			53.9			3.3			11.5	
Approach LOS		F			D			A			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.4	60.8	14.8	25.1	18.1	52.0	19.0	20.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.0	52.5	11.9	20.6	12.0	47.5	14.5	18.0				
Max Q Clear Time (g_c+1), s	14.5	2.0	10.4	22.6	6.0	44.6	16.5	5.9				
Green Ext Time (p_c), s	0.0	8.7	0.0	0.0	0.1	2.3	0.0	0.7				
Intersection Summary												
HCM 6th Ctrl Delay											33.5	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary

8: Nason Street & Dracea Avenue

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	10	86	30	24	10	215	988	12	11	1128	252
Future Volume (veh/h)	138	10	86	30	24	10	215	988	12	11	1128	252
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.98		0.98	1.00		0.98	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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	168	12	105	37	29	12	262	1205	15	13	1376	307
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	260	27	234	188	206	85	286	2264	987	159	2009	890
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.32	1.00	1.00	0.18	1.00	1.00
Sat Flow, veh/h	1360	164	1438	1276	1267	524	1810	3610	1574	1810	3610	1599
Grp Volume(v), veh/h	168	0	117	37	0	41	262	1205	15	13	1376	307
Grp Sat Flow(s),veh/h/ln	1360	0	1603	1276	0	1792	1810	1805	1574	1810	1805	1599
Q Serve(g_s), s	13.3	0.0	7.3	3.0	0.0	2.2	15.3	0.0	0.0	0.7	0.0	0.0
Cycle Q Clear(g_c), s	15.4	0.0	7.3	10.2	0.0	2.2	15.3	0.0	0.0	0.7	0.0	0.0
Prop In Lane	1.00		0.90	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	260	0	260	188	0	291	286	2264	987	159	2009	890
V/C Ratio(X)	0.65	0.00	0.45	0.20	0.00	0.14	0.91	0.53	0.02	0.08	0.68	0.35
Avail Cap(c_a), veh/h	292	0	299	219	0	334	304	2264	987	159	2009	890
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.86	0.86	0.86	0.48	0.48	0.48
Uniform Delay (d), s/veh	46.1	0.0	41.6	46.2	0.0	39.5	36.9	0.0	0.0	41.7	0.0	0.0
Incr Delay (d2), s/veh	4.1	0.0	1.2	0.5	0.0	0.2	26.7	0.8	0.0	0.1	0.9	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	4.8	0.0	3.0	1.0	0.0	1.0	7.7	0.2	0.0	0.3	0.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.2	0.0	42.8	46.8	0.0	39.7	63.6	0.8	0.0	41.8	0.9	0.5
LnGrp LOS	D	A	D	D	A	D	E	A	A	D	A	A
Approach Vol, veh/h		285			78			1482			1696	
Approach Delay, s/veh		47.2			43.1			11.9			1.2	
Approach LOS		D			D			B			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	41.1	73.5		22.4	21.9	65.7		22.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	69.0			20.5	18.5	57.5		20.5				
Max Q Clear Time (g_c+1), s	2.0			17.4	17.3	2.0		12.2				
Green Ext Time (p_c), s	0.0	13.0		0.4	0.1	18.5		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				10.3								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
 9: Nason Street & Cottonwood Avenue

Village at Moreno Valley
 Project Completion (2023) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	44	25	5	58	101	26	772	5	27	993	130
Future Volume (veh/h)	111	44	25	5	58	101	26	772	5	27	993	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	148	59	33	7	77	135	35	1029	7	36	1324	173
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	179	365	309	22	191	170	305	2128	949	77	1674	747
Arrive On Green	0.10	0.19	0.19	0.01	0.11	0.11	0.17	0.59	0.59	0.01	0.15	0.15
Sat Flow, veh/h	1810	1900	1610	1810	1805	1610	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	148	59	33	7	77	135	35	1029	7	36	1324	173
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1805	1610	1810	3610	1610	1810	3610	1610
Q Serve(g_s), s	8.8	2.8	1.3	0.4	4.4	9.0	1.8	18.0	0.2	2.2	38.9	6.9
Cycle Q Clear(g_c), s	8.8	2.8	1.3	0.4	4.4	9.0	1.8	18.0	0.2	2.2	38.9	6.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	365	309	22	191	170	305	2128	949	77	1674	747
V/C Ratio(X)	0.83	0.16	0.11	0.32	0.40	0.79	0.11	0.48	0.01	0.47	0.79	0.23
Avail Cap(c_a), veh/h	255	458	388	115	295	263	305	2128	949	115	1674	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.68	0.68	0.68
Uniform Delay (d), s/veh	48.7	37.0	17.5	53.9	45.9	48.0	38.8	13.0	9.3	53.0	41.5	12.9
Incr Delay (d2), s/veh	14.1	0.2	0.2	7.9	1.4	8.7	0.2	0.8	0.0	3.0	2.7	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	4.7	1.3	0.7	0.2	2.0	4.0	0.8	7.2	0.1	1.1	19.4	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.8	37.3	17.6	61.8	47.3	56.7	39.0	13.8	9.3	56.0	44.1	13.4
LnGrp LOS	E	D	B	E	D	E	D	B	A	E	D	B
Approach Vol, veh/h		240			219			1071			1533	
Approach Delay, s/veh		50.3			53.6			14.5			41.0	
Approach LOS		D			D			B			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	69.3	5.8	25.6	23.0	55.5	15.4	16.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.0	51.5	7.0	26.5	7.5	51.0	15.5	18.0				
Max Q Clear Time (g_c+1), s	2.0	20.0	2.4	4.8	3.8	40.9	10.8	11.0				
Green Ext Time (p_c), s	0.0	9.0	0.0	0.3	0.0	6.7	0.1	0.6				

Intersection Summary

HCM 6th Ctrl Delay	33.4
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary
 10: Nason Street & Alessandro Boulevard

Village at Moreno Valley
 Project Completion (2023) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↑↑↑	↖
Traffic Volume (veh/h)	81	137	108	142	339	140	90	573	32	58	849	127
Future Volume (veh/h)	81	137	108	142	339	140	90	573	32	58	849	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	167	132	173	413	171	110	699	39	71	1035	155
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	213	894	399	233	482	408	137	919	410	485	2318	720
Arrive On Green	0.06	0.25	0.25	0.07	0.25	0.25	0.08	0.25	0.25	0.27	0.45	0.45
Sat Flow, veh/h	3510	3610	1610	3510	1900	1610	1810	3610	1610	1810	5187	1610
Grp Volume(v), veh/h	99	167	132	173	413	171	110	699	39	71	1035	155
Grp Sat Flow(s),veh/h/ln	1755	1805	1610	1755	1900	1610	1810	1805	1610	1810	1729	1610
Q Serve(g_s), s	3.0	4.0	7.4	5.3	22.8	9.8	6.6	19.7	1.6	3.3	15.2	4.8
Cycle Q Clear(g_c), s	3.0	4.0	7.4	5.3	22.8	9.8	6.6	19.7	1.6	3.3	15.2	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	894	399	233	482	408	137	919	410	485	2318	720
V/C Ratio(X)	0.47	0.19	0.33	0.74	0.86	0.42	0.81	0.76	0.10	0.15	0.45	0.22
Avail Cap(c_a), veh/h	223	1444	644	239	769	651	156	919	410	485	2318	720
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	50.0	32.6	33.9	50.4	39.2	34.3	50.1	37.9	20.1	30.7	21.0	10.3
Incr Delay (d2), s/veh	1.6	0.1	0.5	11.5	5.7	0.7	23.1	5.9	0.5	0.1	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4	1.8	2.9	2.7	11.3	3.9	3.8	9.4	0.8	1.5	6.2	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.5	32.7	34.4	61.9	44.9	35.0	73.1	43.8	20.6	30.8	21.6	11.0
LnGrp LOS	D	C	C	E	D	C	E	D	C	C	C	B
Approach Vol, veh/h		398			757			848			1261	
Approach Delay, s/veh		38.0			46.5			46.5			20.8	
Approach LOS		D			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	34.0	32.5	11.8	31.7	12.8	53.7	11.2	32.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	12.5	28.0	7.5	44.0	9.5	31.0	7.0	44.5				
Max Q Clear Time (g_c+1), s	11.3	21.7	7.3	9.4	8.6	17.2	5.0	24.8				
Green Ext Time (p_c), s	0.1	2.5	0.0	1.5	0.0	6.6	0.0	3.1				

Intersection Summary

HCM 6th Ctrl Delay	35.6
HCM 6th LOS	D

HCM 6th Signalized Intersection Summary
 11: Nason Street & Cactus Avenue

Village at Moreno Valley
 Project Completion (2023) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	311	78	12	412	75	122	455	10	71	376	215
Future Volume (veh/h)	114	311	78	12	412	75	122	455	10	71	376	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	139	379	95	15	502	91	149	555	12	87	459	262
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	169	801	678	42	550	100	221	752	335	332	1187	529
Arrive On Green	0.09	0.42	0.42	0.02	0.35	0.35	0.06	0.21	0.21	0.18	0.33	0.33
Sat Flow, veh/h	1810	1900	1610	1810	1565	284	3510	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	139	379	95	15	0	593	149	555	12	87	459	262
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	0	1849	1755	1805	1610	1810	1805	1610
Q Serve(g_s), s	8.3	15.9	4.0	0.9	0.0	33.7	4.6	15.8	0.6	4.5	10.8	10.6
Cycle Q Clear(g_c), s	8.3	15.9	4.0	0.9	0.0	33.7	4.6	15.8	0.6	4.5	10.8	10.6
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	169	801	678	42	0	650	221	752	335	332	1187	529
V/C Ratio(X)	0.82	0.47	0.14	0.35	0.00	0.91	0.67	0.74	0.04	0.26	0.39	0.50
Avail Cap(c_a), veh/h	222	915	776	115	0	782	227	752	335	332	1187	529
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	0.81	0.81	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.0	23.0	19.6	52.9	0.0	34.0	50.4	40.7	26.1	38.5	28.4	16.2
Incr Delay (d2), s/veh	17.1	0.4	0.1	5.0	0.0	13.4	6.1	5.2	0.2	0.4	1.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	7.1	1.5	0.5	0.0	17.2	2.2	7.5	0.3	2.1	4.8	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.1	23.4	19.7	57.9	0.0	47.4	56.5	46.0	26.3	38.9	29.4	19.5
LnGrp LOS	E	C	B	E	A	D	E	D	C	D	C	B
Approach Vol, veh/h		613			608			716			808	
Approach Delay, s/veh		32.5			47.7			47.8			27.2	
Approach LOS		C			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	24.7	27.4	7.1	50.8	11.4	40.7	14.7	43.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	22.9	7.0	53.0	7.1	24.9	13.5	46.5					
Max Q Clear Time (g_c+10), s	17.8	2.9	17.9	6.6	12.8	10.3	35.7					
Green Ext Time (p_c), s	0.0	1.7	0.0	2.8	0.0	3.2	0.1	3.0				
Intersection Summary												
HCM 6th Ctrl Delay											38.3	
HCM 6th LOS											D	

HCM 6th Signalized Intersection Summary
 12: Hillrose Lane/Nason Street & Iris Avenue

Village at Moreno Valley
 Project Completion (2023) WP - AM Peak Hour



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘				↖ ↗ ↘			↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	353	797	25	2	6	634	90	15	47	8	123	13	286
Future Volume (veh/h)	353	797	25	2	6	634	90	15	47	8	123	13	286
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	453	1022	32		8	813	115	19	60	10	158	17	367
Peak Hour Factor	0.78	0.78	0.78		0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	0	0	0		0	0	0	0	0	0	0	0	0
Cap, veh/h	876	1751	55		256	1199	372	53	336	56	194	551	869
Arrive On Green	0.25	0.34	0.34		0.14	0.23	0.23	0.03	0.21	0.21	0.11	0.29	0.29
Sat Flow, veh/h	3510	5167	162		1810	5187	1610	1810	1588	265	1810	1900	1610
Grp Volume(v), veh/h	453	684	370		8	813	115	19	0	70	158	17	367
Grp Sat Flow(s),veh/h/ln	1755	1729	1871		1810	1729	1610	1810	0	1852	1810	1900	1610
Q Serve(g_s), s	10.0	14.7	14.7		0.3	12.9	3.9	0.9	0.0	2.8	7.7	0.6	0.0
Cycle Q Clear(g_c), s	10.0	14.7	14.7		0.3	12.9	3.9	0.9	0.0	2.8	7.7	0.6	0.0
Prop In Lane	1.00		0.09		1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	876	1172	634		256	1199	372	53	0	393	194	551	869
V/C Ratio(X)	0.52	0.58	0.58		0.03	0.68	0.31	0.36	0.00	0.18	0.81	0.03	0.42
Avail Cap(c_a), veh/h	876	1172	634		256	1199	372	141	0	393	304	551	869
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)	0.69	0.69	0.69		1.00	1.00	1.00	1.00	0.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	29.1	24.5	24.5		33.3	31.5	15.3	42.8	0.0	29.0	39.3	22.9	12.4
Incr Delay (d2), s/veh	0.4	1.5	2.7		0.0	3.1	2.1	4.0	0.0	1.0	8.4	0.1	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	4.2	6.0	6.8		0.2	5.6	2.2	0.5	0.0	1.3	3.8	0.3	4.4
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	29.5	26.0	27.2		33.3	34.6	17.4	46.8	0.0	30.0	47.7	23.0	13.8
LnGrp LOS	C	C	C		C	C	B	D	A	C	D	C	B
Approach Vol, veh/h	1507				936				89			542	
Approach Delay, s/veh	27.3				32.5				33.6			23.9	
Approach LOS	C				C				C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	7.3	35.0	7.1	30.6	27.0	25.3	14.2	23.6					
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gmax), s	30.5	30.5	7.0	26.1	18.1	20.8	15.1	18.0					
Max Q Clear Time (g_c+1), s	16.7	16.7	2.9	2.6	12.0	14.9	9.7	4.8					
Green Ext Time (p_c), s	0.0	5.9	0.0	1.4	0.9	2.9	0.2	0.2					

Intersection Summary

HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

HCM 6th TWSC
13: Fir Avenue & Project Driveway 1

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour

Intersection						
Int Delay, s/veh	8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	88	238	326	97	260	32
Future Vol, veh/h	88	238	326	97	260	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	75	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	93	251	343	102	274	34

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	445	0	-	0	831
Stage 1	-	-	-	-	394
Stage 2	-	-	-	-	437
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1132	-	-	-	346
Stage 1	-	-	-	-	747
Stage 2	-	-	-	-	655
Platoon blocked, %	1	-	-	-	1
Mov Cap-1 Maneuver	1132	-	-	-	317
Mov Cap-2 Maneuver	-	-	-	-	450
Stage 1	-	-	-	-	685
Stage 2	-	-	-	-	655

Approach	EB	WB	SB
HCM Control Delay, s	2.3	0	25.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1132	-	-	-	472
HCM Lane V/C Ratio	0.082	-	-	-	0.651
HCM Control Delay (s)	8.5	-	-	-	25.8
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.3	-	-	-	4.6

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑			↑
Traffic Vol, veh/h	0	498	392	102	0	32
Future Vol, veh/h	0	498	392	102	0	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	524	413	107	0	34

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	- 0 - 467
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	-	- - 6.2
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	-	- - 3.3
Pot Cap-1 Maneuver	0	-	- 0 *773
Stage 1	0	-	- 0 -
Stage 2	0	-	- 0 -
Platoon blocked, %	-	-	- - 1
Mov Cap-1 Maneuver	-	-	- - *773
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	773
HCM Lane V/C Ratio	-	-	-	0.044
HCM Control Delay (s)	-	-	-	9.9
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	
Traffic Vol, veh/h	0	94	0	1059	1364	222
Future Vol, veh/h	0	94	0	1059	1364	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	99	0	1115	1436	234

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	835	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.9	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.3	-
Pot Cap-1 Maneuver	0	*517	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %		1	-
Mov Cap-1 Maneuver	-	*517	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

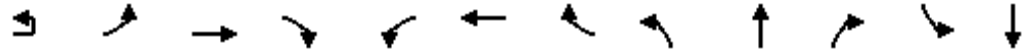
Approach	EB	NB	SB
HCM Control Delay, s	13.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 517	-	-
HCM Lane V/C Ratio	- 0.191	-	-
HCM Control Delay (s)	- 13.6	-	-
HCM Lane LOS	- B	-	-
HCM 95th %tile Q(veh)	- 0.7	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
1: Lasselle Street & Iris Avenue

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		↔↔	↔↔↔		↔↔	↔↔↔		↔↔	↔↔	↔	↔↔	↔↔
Traffic Volume (veh/h)	7	198	483	323	683	710	97	249	686	540	235	802
Future Volume (veh/h)	7	198	483	323	683	710	97	249	686	540	235	802
Initial Q (Qb), veh		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	
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No		No			No				No
Adj Sat Flow, veh/h/ln		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h		202	493	330	697	724	99	254	700	551	240	818
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
Percent Heavy Veh, %		0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h		780	779	363	785	1047	142	355	987	800	273	801
Arrive On Green		0.22	0.23	0.23	0.22	0.23	0.23	0.10	0.27	0.27	0.08	0.25
Sat Flow, veh/h		3510	3458	1610	3510	4619	626	3510	3610	1610	3510	3206
Grp Volume(v), veh/h		202	493	330	697	540	283	254	700	551	240	461
Grp Sat Flow(s),veh/h/ln		1755	1729	1610	1755	1729	1787	1755	1805	1610	1755	1805
Q Serve(g_s), s		4.3	11.6	18.0	17.3	12.9	13.1	6.3	15.7	23.6	6.1	22.5
Cycle Q Clear(g_c), s		4.3	11.6	18.0	17.3	12.9	13.1	6.3	15.7	23.6	6.1	22.5
Prop In Lane		1.00		1.00	1.00		0.35	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		780	779	363	785	784	405	355	987	800	273	451
V/C Ratio(X)		0.26	0.63	0.91	0.89	0.69	0.70	0.72	0.71	0.69	0.88	1.02
Avail Cap(c_a), veh/h		780	788	367	858	1306	675	355	987	800	273	451
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
Upstream Filter(I)		1.00	1.00	1.00	0.74	0.74	0.74	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh		28.9	31.5	34.0	33.8	31.9	32.0	39.2	29.5	17.3	41.1	33.8
Incr Delay (d2), s/veh		0.2	1.6	25.8	8.1	0.8	1.6	6.7	4.3	4.8	26.2	47.7
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
%ile BackOfQ(50%),veh/ln		1.8	4.9	9.4	8.1	5.4	5.7	3.0	7.2	9.2	3.6	15.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh		29.1	33.1	59.8	42.0	32.7	33.6	45.9	33.8	22.1	67.3	81.5
LnGrp LOS		C	C	E	D	C	C	D	C	C	E	F
Approach Vol, veh/h			1025		1520			1505				1166
Approach Delay, s/veh			40.9		37.1			31.6				78.5
Approach LOS			D		D			C				E
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.5	29.1	24.6	24.8	13.6	27.0	24.5	24.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.0	22.5	22.0	20.5	7.0	22.5	8.5	34.0				
Max Q Clear Time (g_c+I1), s	8.1	25.6	19.3	20.0	8.3	24.5	6.3	15.1				
Green Ext Time (p_c), s	0.0	0.0	0.8	0.3	0.0	0.0	0.1	5.3				

Intersection Summary

HCM 6th Ctrl Delay	45.5
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 1: Lasselle Street & Iris Avenue

Village at Moreno Valley
 Project Completion (2023) WP - PM Peak Hour

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	106
Future Volume (veh/h)	106
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	108
Peak Hour Factor	0.98
Percent Heavy Veh, %	0
Cap, veh/h	106
Arrive On Green	0.25
Sat Flow, veh/h	423
Grp Volume(v), veh/h	465
Grp Sat Flow(s),veh/h/ln	1824
Q Serve(g_s), s	22.5
Cycle Q Clear(g_c), s	22.5
Prop In Lane	0.23
Lane Grp Cap(c), veh/h	456
V/C Ratio(X)	1.02
Avail Cap(c_a), veh/h	456
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	33.8
Incr Delay (d2), s/veh	47.5
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	15.7
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	81.3
LnGrp LOS	F
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Intersection

Intersection Delay, s/veh 10.6

Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔	↔	↔	↔		↔	↔	
Traffic Vol, veh/h	2	152	37	72	216	15	36	22	47	18	14	3
Future Vol, veh/h	2	152	37	72	216	15	36	22	47	18	14	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	163	40	77	232	16	39	24	51	19	15	3
Number of Lanes	0	1	1	0	1	1	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	9.3	12	9.1	9.2
HCM LOS	A	B	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	1%	0%	25%	0%	100%	0%
Vol Thru, %	0%	32%	99%	0%	75%	0%	0%	82%
Vol Right, %	0%	68%	0%	100%	0%	100%	0%	18%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	69	154	37	288	15	18	17
LT Vol	36	0	2	0	72	0	18	0
Through Vol	0	22	152	0	216	0	0	14
RT Vol	0	47	0	37	0	15	0	3
Lane Flow Rate	39	74	166	40	310	16	19	18
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.068	0.111	0.241	0.05	0.45	0.02	0.035	0.03
Departure Headway (Hd)	6.361	5.375	5.232	4.521	5.233	4.404	6.472	5.842
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	560	662	682	787	684	808	549	608
Service Time	4.134	3.146	2.992	2.28	2.986	2.157	4.257	3.626
HCM Lane V/C Ratio	0.07	0.112	0.243	0.051	0.453	0.02	0.035	0.03
HCM Control Delay	9.6	8.8	9.7	7.5	12.2	7.2	9.5	8.8
HCM Lane LOS	A	A	A	A	B	A	A	A
HCM 95th-tile Q	0.2	0.4	0.9	0.2	2.3	0.1	0.1	0.1

HCM 6th Signalized Intersection Summary

3: Morrison Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗	↖	↗	↖	↗
Traffic Volume (veh/h)	24	188	16	47	212	7	15	38	52	1	50	38
Future Volume (veh/h)	24	188	16	47	212	7	15	38	52	1	50	38
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		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	26	202	17	51	228	8	16	41	56	1	54	41
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	72	1254	105	114	1406	49	48	582	594	3	576	396
Arrive On Green	0.04	0.37	0.37	0.06	0.40	0.40	0.03	0.31	0.31	0.00	0.28	0.28
Sat Flow, veh/h	1810	3373	281	1810	3558	124	1810	1900	1610	1810	2047	1405
Grp Volume(v), veh/h	26	107	112	51	115	121	16	41	56	1	47	48
Grp Sat Flow(s),veh/h/ln	1810	1805	1849	1810	1805	1878	1810	1900	1610	1810	1805	1647
Q Serve(g_s), s	1.0	2.8	2.8	1.9	2.9	2.9	0.6	1.1	1.6	0.0	1.3	1.5
Cycle Q Clear(g_c), s	1.0	2.8	2.8	1.9	2.9	2.9	0.6	1.1	1.6	0.0	1.3	1.5
Prop In Lane	1.00		0.15	1.00		0.07	1.00		1.00	1.00		0.85
Lane Grp Cap(c), veh/h	72	671	688	114	713	742	48	582	594	3	508	464
V/C Ratio(X)	0.36	0.16	0.16	0.45	0.16	0.16	0.33	0.07	0.09	0.29	0.09	0.10
Avail Cap(c_a), veh/h	184	671	688	184	713	742	184	582	594	181	508	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	14.7	14.7	31.6	13.7	13.7	33.4	17.2	14.4	34.9	18.6	18.6
Incr Delay (d2), s/veh	3.0	0.5	0.5	2.7	0.5	0.5	3.9	0.2	0.3	39.9	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.1	1.2	0.9	1.1	1.2	0.3	0.5	0.6	0.1	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.8	15.2	15.2	34.3	14.2	14.2	37.4	17.5	14.7	74.8	18.9	19.1
LnGrp LOS	D	B	B	C	B	B	D	B	B	E	B	B
Approach Vol, veh/h		245			287			113			96	
Approach Delay, s/veh		17.4			17.7			18.9			19.6	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	30.5	6.4	24.2	7.3	32.2	4.6	25.9				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	18.1	7.1	19.7	7.1	18.1	7.0	19.8					
Max Q Clear Time (g_c+1), s	4.8	2.6	3.5	3.0	4.9	2.0	3.6					
Green Ext Time (p_c), s	0.0	0.9	0.0	0.3	0.0	0.9	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay				18.0								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary
 4: Nason Street & Elder Avenue/SR-60 Westbound Ramp

Village at Moreno Valley
 Project Completion (2023) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	26	137	160	33	24	189	312	646	29	330	10
Future Volume (veh/h)	8	26	137	160	33	24	189	312	646	29	330	10
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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	27	140	163	34	24	193	318	659	30	337	10
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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	18	176	342	190	358	341	217	2166	1136	47	1811	54
Arrive On Green	0.01	0.09	0.09	0.11	0.19	0.19	0.20	1.00	1.00	0.03	0.51	0.51
Sat Flow, veh/h	1810	1900	1610	1810	1900	1589	1810	3610	1610	1810	3577	106
Grp Volume(v), veh/h	8	27	140	163	34	24	193	318	659	30	170	177
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1900	1589	1810	1805	1610	1810	1805	1878
Q Serve(g_s), s	0.5	1.6	9.4	11.1	1.8	1.5	13.0	0.0	0.0	2.1	6.4	6.4
Cycle Q Clear(g_c), s	0.5	1.6	9.4	11.1	1.8	1.5	13.0	0.0	0.0	2.1	6.4	6.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	18	176	342	190	358	341	217	2166	1136	47	914	951
V/C Ratio(X)	0.46	0.15	0.41	0.86	0.10	0.07	0.89	0.15	0.58	0.64	0.19	0.19
Avail Cap(c_a), veh/h	290	365	502	290	365	347	217	2166	1136	217	914	951
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.6	52.2	42.4	55.0	41.9	39.2	49.2	0.0	0.0	60.3	16.8	16.8
Incr Delay (d2), s/veh	6.7	0.1	0.3	9.6	0.0	0.0	28.2	0.1	1.8	5.3	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.8	3.8	5.6	0.9	0.6	7.0	0.0	0.6	1.0	2.7	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.3	52.3	42.7	64.6	42.0	39.2	77.4	0.1	1.8	65.6	17.3	17.3
LnGrp LOS	E	D	D	E	D	D	E	A	A	E	B	B
Approach Vol, veh/h		175			221			1170			377	
Approach Delay, s/veh		45.4			58.4			13.8			21.1	
Approach LOS		D			E			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.2	81.0	18.1	17.6	20.0	69.3	6.2	29.5				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	15.0	44.0	20.0	24.0	15.0	44.0	20.0	24.0				
Max Q Clear Time (g_c+1), s	11.5	2.0	13.1	11.4	15.0	8.4	2.5	3.8				
Green Ext Time (p_c), s	0.0	2.6	0.1	0.2	0.0	1.2	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay											23.1	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary

5: Nason Street & SR-60 Eastbound Ramp

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	7	760	0	0	0	0	1024	173	59	572	0
Future Volume (veh/h)	118	7	760	0	0	0	0	1024	173	59	572	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		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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	126	0	814				0	1089	184	63	609	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	495	0	880				0	1681	283	82	2275	0
Arrive On Green	0.27	0.00	0.27				0.00	0.55	0.55	0.01	0.21	0.00
Sat Flow, veh/h	1810	0	3214				0	3179	520	1810	3705	0
Grp Volume(v), veh/h	126	0	814				0	636	637	63	609	0
Grp Sat Flow(s),veh/h/ln	1810	0	1607				0	1805	1799	1810	1805	0
Q Serve(g_s), s	6.8	0.0	30.8				0.0	30.9	31.2	4.3	17.7	0.0
Cycle Q Clear(g_c), s	6.8	0.0	30.8				0.0	30.9	31.2	4.3	17.7	0.0
Prop In Lane	1.00		1.00				0.00		0.29	1.00		0.00
Lane Grp Cap(c), veh/h	495	0	880				0	984	980	82	2275	0
V/C Ratio(X)	0.25	0.00	0.93				0.00	0.65	0.65	0.77	0.27	0.00
Avail Cap(c_a), veh/h	565	0	1003				0	984	980	217	2275	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.33	0.33	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	1.00	1.00	0.95	0.95	0.00
Uniform Delay (d), s/veh	35.4	0.0	44.2				0.0	20.0	20.0	60.9	25.3	0.0
Incr Delay (d2), s/veh	0.1	0.0	12.2				0.0	3.3	3.3	5.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.0	13.5				0.0	13.1	13.2	2.1	8.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	0.0	56.3				0.0	23.2	23.4	66.2	25.6	0.0
LnGrp LOS	D	A	E				A	C	C	E	C	A
Approach Vol, veh/h		940						1273			672	
Approach Delay, s/veh		53.5						23.3			29.4	
Approach LOS		D						C			C	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	10.7	74.1	40.2	84.8								
Change Period (Y+Rc), s	5.0	6.0	6.0	6.0								
Max Green Setting (Gmax), s	15.0	54.0	39.0	74.0								
Max Q Clear Time (g_c+10), s	10.3	33.2	32.8	19.7								
Green Ext Time (p_c), s	0.0	5.4	1.4	2.7								

Intersection Summary

HCM 6th Ctrl Delay	34.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

HCM 6th Signalized Intersection Summary
6: Nason Street & Fir Avenue

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	129	72	152	166	135	150	743	122	273	782	190
Future Volume (veh/h)	207	129	72	152	166	135	150	743	122	273	782	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	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		No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	218	136	76	160	175	142	158	782	128	287	823	200
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	253	172	96	192	221	543	191	1114	182	399	1713	762
Arrive On Green	0.14	0.15	0.15	0.11	0.12	0.12	0.03	0.12	0.12	0.22	0.47	0.47
Sat Flow, veh/h	1810	1142	638	1810	1900	1610	1810	3102	508	1810	3610	1605
Grp Volume(v), veh/h	218	0	212	160	175	142	158	455	455	287	823	200
Grp Sat Flow(s),veh/h/ln	1810	0	1781	1810	1900	1610	1810	1805	1805	1810	1805	1605
Q Serve(g_s), s	13.0	0.0	12.6	9.5	9.9	0.0	9.5	26.7	26.7	16.2	17.1	4.8
Cycle Q Clear(g_c), s	13.0	0.0	12.6	9.5	9.9	0.0	9.5	26.7	26.7	16.2	17.1	4.8
Prop In Lane	1.00		0.36	1.00		1.00	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	253	0	268	192	221	543	191	648	648	399	1713	762
V/C Ratio(X)	0.86	0.00	0.79	0.83	0.79	0.26	0.83	0.70	0.70	0.72	0.48	0.26
Avail Cap(c_a), veh/h	444	0	429	304	311	619	255	648	648	399	1713	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	45.1	48.2	47.3	26.5	52.1	42.8	42.8	39.7	19.7	5.8
Incr Delay (d2), s/veh	8.4	0.0	5.2	10.6	8.8	0.3	13.8	5.5	5.5	6.1	1.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	5.9	4.8	5.1	2.7	5.2	13.8	13.8	7.7	7.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.6	0.0	50.3	58.8	56.1	26.7	65.9	48.4	48.4	45.8	20.6	6.6
LnGrp LOS	D	A	D	E	E	C	E	D	D	D	C	A
Approach Vol, veh/h		430			477			1068			1310	
Approach Delay, s/veh		52.5			48.3			51.0			24.0	
Approach LOS		D			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	38.8	44.0	16.2	21.1	16.1	56.7	19.9	17.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	39.5	39.5	18.5	26.5	15.5	31.5	27.0	18.0				
Max Q Clear Time (g_c+10), s	28.7	28.7	11.5	14.6	11.5	19.1	15.0	11.9				
Green Ext Time (p_c), s	0.0	4.1	0.2	0.8	0.1	4.8	0.5	0.7				

Intersection Summary

HCM 6th Ctrl Delay	40.0
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

HCM 6th Signalized Intersection Summary

7: Nason Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	141	66	160	140	28	33	915	209	21	884	109
Future Volume (veh/h)	72	141	66	160	140	28	33	915	209	21	884	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		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	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	80	157	73	178	156	31	37	1017	232	23	982	121
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	105	315	137	196	496	217	363	2198	979	58	1588	702
Arrive On Green	0.06	0.09	0.09	0.11	0.14	0.14	0.27	0.81	0.81	0.01	0.15	0.15
Sat Flow, veh/h	1810	3610	1571	1810	3610	1579	1810	3610	1608	1810	3610	1596
Grp Volume(v), veh/h	80	157	73	178	156	31	37	1017	232	23	982	121
Grp Sat Flow(s),veh/h/ln	1810	1805	1571	1810	1805	1579	1810	1805	1608	1810	1805	1596
Q Serve(g_s), s	4.8	4.6	4.9	10.7	4.3	1.9	1.7	9.4	1.9	1.4	28.1	5.5
Cycle Q Clear(g_c), s	4.8	4.6	4.9	10.7	4.3	1.9	1.7	9.4	1.9	1.4	28.1	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	105	315	137	196	496	217	363	2198	979	58	1588	702
V/C Ratio(X)	0.76	0.50	0.53	0.91	0.31	0.14	0.10	0.46	0.24	0.40	0.62	0.17
Avail Cap(c_a), veh/h	306	811	353	196	591	258	363	2198	979	115	1588	702
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	0.33	0.33	0.33
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.84	0.84	0.84	0.79	0.79	0.79
Uniform Delay (d), s/veh	51.1	47.9	48.0	48.5	42.8	41.7	32.8	5.0	1.2	53.4	38.3	16.6
Incr Delay (d2), s/veh	10.6	1.2	3.2	40.0	0.4	0.3	0.1	0.6	0.5	3.4	1.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.1	2.0	6.9	1.9	0.8	0.7	2.6	1.2	0.7	13.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	49.1	51.2	88.5	43.1	42.0	32.9	5.6	1.7	56.8	39.8	17.0
LnGrp LOS	E	D	D	F	D	D	C	A	A	E	D	B
Approach Vol, veh/h		310			365			1286			1126	
Approach Delay, s/veh		52.8			65.2			5.7			37.7	
Approach LOS		D			E			A			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	71.5	16.4	14.1	26.6	52.9	10.9	19.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	48.4	11.9	24.7	7.0	48.4	18.6	18.0					
Max Q Clear Time (g_c+1), s	11.4	12.7	6.9	3.7	30.1	6.8	6.3					
Green Ext Time (p_c), s	0.0	9.4	0.0	1.0	0.0	6.8	0.1	0.7				

Intersection Summary

HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary
8: Nason Street & Dracea Avenue

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	3	44	12	5	7	49	1128	17	14	949	121
Future Volume (veh/h)	114	3	44	12	5	7	49	1128	17	14	949	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.96	0.97		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	128	3	49	13	6	8	55	1267	19	16	1066	136
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	244	12	203	209	99	132	94	1854	827	409	2483	1107
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.10	1.00	1.00	0.45	1.00	1.00
Sat Flow, veh/h	1369	90	1474	1329	720	960	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	128	0	52	13	0	14	55	1267	19	16	1066	136
Grp Sat Flow(s),veh/h/ln	1369	0	1564	1329	0	1681	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	9.9	0.0	3.3	1.0	0.0	0.8	3.2	0.0	0.0	0.5	0.0	0.0
Cycle Q Clear(g_c), s	10.7	0.0	3.3	4.2	0.0	0.8	3.2	0.0	0.0	0.5	0.0	0.0
Prop In Lane	1.00		0.94	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	244	0	215	209	0	231	94	1854	827	409	2483	1107
V/C Ratio(X)	0.52	0.00	0.24	0.06	0.00	0.06	0.59	0.68	0.02	0.04	0.43	0.12
Avail Cap(c_a), veh/h	311	0	291	274	0	313	387	1854	827	409	2483	1107
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	0.90	0.90	0.90	0.87	0.87	0.87
Uniform Delay (d), s/veh	45.9	0.0	42.3	44.2	0.0	41.2	48.2	0.0	0.0	23.5	0.0	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.6	0.1	0.0	0.1	5.2	1.9	0.0	0.0	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	1.3	0.3	0.0	0.3	1.5	0.5	0.0	0.2	0.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.6	0.0	42.9	44.3	0.0	41.3	53.3	1.9	0.0	23.5	0.5	0.2
LnGrp LOS	D	A	D	D	A	D	D	A	A	C	A	A
Approach Vol, veh/h		180			27			1341			1218	
Approach Delay, s/veh		46.2			42.8			3.9			0.7	
Approach LOS		D			D			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	29.4	61.0		19.6	10.2	80.2		19.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	19.5	56.5		20.5	23.5	52.5		20.5				
Max Q Clear Time (g_c+1), s	12.5	2.0		12.7	5.2	2.0		6.2				
Green Ext Time (p_c), s	0.0	13.9		0.4	0.1	11.1		0.0				

Intersection Summary

HCM 6th Ctrl Delay	5.7
HCM 6th LOS	A

HCM 6th Signalized Intersection Summary
 9: Nason Street & Cottonwood Avenue

Village at Moreno Valley
 Project Completion (2023) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	27	44	2	42	27	33	997	8	30	774	112
Future Volume (veh/h)	88	27	44	2	42	27	33	997	8	30	774	112
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	94	29	47	2	45	29	35	1061	9	32	823	119
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	120	239	202	7	138	81	440	2409	1074	72	1674	747
Arrive On Green	0.07	0.13	0.13	0.00	0.06	0.06	0.24	0.67	0.67	0.04	0.46	0.46
Sat Flow, veh/h	1810	1900	1610	1810	2186	1287	1810	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	94	29	47	2	36	38	35	1061	9	32	823	119
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	1805	1668	1810	1805	1610	1810	1805	1610
Q Serve(g_s), s	5.6	1.5	1.8	0.1	2.1	2.4	1.6	15.2	0.2	1.9	17.4	3.4
Cycle Q Clear(g_c), s	5.6	1.5	1.8	0.1	2.1	2.4	1.6	15.2	0.2	1.9	17.4	3.4
Prop In Lane	1.00		1.00	1.00		0.77	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	120	239	202	7	114	105	440	2409	1074	72	1674	747
V/C Ratio(X)	0.78	0.12	0.23	0.29	0.32	0.36	0.08	0.44	0.01	0.45	0.49	0.16
Avail Cap(c_a), veh/h	255	458	388	115	295	273	440	2409	1074	115	1674	747
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	1.00	1.00	0.90	0.90	0.90
Uniform Delay (d), s/veh	50.6	42.7	17.1	54.6	49.3	49.4	32.1	8.6	6.1	51.6	20.5	8.9
Incr Delay (d2), s/veh	10.5	0.2	0.6	22.1	1.6	2.0	0.1	0.6	0.0	3.9	0.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.7	1.2	0.1	1.0	1.0	0.7	5.7	0.1	0.9	7.4	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.1	42.9	17.7	76.7	50.9	51.4	32.2	9.2	6.1	55.5	21.4	9.4
LnGrp LOS	E	D	B	E	D	D	C	A	A	E	C	A
Approach Vol, veh/h	170			76			1105			974		
Approach Delay, s/veh	46.0			51.8			9.9			21.1		
Approach LOS	D			D			A			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	77.9	4.9	18.3	31.3	55.5	11.8	11.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	51.5	7.0	26.5	7.5	51.0	15.5	18.0					
Max Q Clear Time (g_c+1), s	17.2	2.1	3.8	3.6	19.4	7.6	4.4					
Green Ext Time (p_c), s	0.0	9.6	0.0	0.2	0.0	7.2	0.1	0.2				

Intersection Summary

HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary
 10: Nason Street & Alessandro Boulevard

Village at Moreno Valley
 Project Completion (2023) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↔↔	↑↑	↔	↔↔	↑	↔		↔	↑↑	↔	↔	↑↑↑
Traffic Volume (veh/h)	149	331	85	28	212	73	1	83	804	100	57	663
Future Volume (veh/h)	149	331	85	28	212	73	1	83	804	100	57	663
Initial Q (Qb), veh	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	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No				No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900		1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	162	360	92	30	230	79		90	874	109	62	721
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
Percent Heavy Veh, %	0	0	0	0	0	0		0	0	0	0	0
Cap, veh/h	222	632	282	134	285	242		114	919	410	667	2904
Arrive On Green	0.06	0.18	0.18	0.04	0.15	0.15		0.06	0.25	0.25	0.37	0.56
Sat Flow, veh/h	3510	3610	1610	3510	1900	1610		1810	3610	1610	1810	5187
Grp Volume(v), veh/h	162	360	92	30	230	79		90	874	109	62	721
Grp Sat Flow(s),veh/h/ln	1755	1805	1610	1755	1900	1610		1810	1805	1610	1810	1729
Q Serve(g_s), s	5.0	10.1	5.5	0.9	12.9	4.8		5.4	26.2	5.0	2.5	7.8
Cycle Q Clear(g_c), s	5.0	10.1	5.5	0.9	12.9	4.8		5.4	26.2	5.0	2.5	7.8
Prop In Lane	1.00		1.00	1.00		1.00		1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	222	632	282	134	285	242		114	919	410	667	2904
V/C Ratio(X)	0.73	0.57	0.33	0.22	0.81	0.33		0.79	0.95	0.27	0.09	0.25
Avail Cap(c_a), veh/h	223	1444	644	239	769	651		156	919	410	667	2904
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
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
Uniform Delay (d), s/veh	50.6	41.6	39.7	51.3	45.2	41.8		50.8	40.3	23.1	22.7	12.4
Incr Delay (d2), s/veh	11.4	0.8	0.7	0.8	5.4	0.8		16.6	20.0	1.6	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	4.5	2.2	0.4	6.5	2.0		3.0	14.0	2.5	1.1	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.0	42.4	40.4	52.2	50.6	42.6		67.4	60.3	24.7	22.8	12.6
LnGrp LOS	E	D	D	D	D	D		E	E	C	C	B
Approach Vol, veh/h		614			339				1073			883
Approach Delay, s/veh		47.3			48.8				57.3			12.5
Approach LOS		D			D				E			B
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	45.0	32.5	8.7	23.8	11.5	66.1	11.5	21.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	12.5	28.0	7.5	44.0	9.5	31.0	7.0	44.5				
Max Q Clear Time (g_c+I1), s	4.5	28.2	2.9	12.1	7.4	9.8	7.0	14.9				
Green Ext Time (p_c), s	0.1	0.0	0.0	2.8	0.0	5.4	0.0	1.6				

Intersection Summary

HCM 6th Ctrl Delay	40.6
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 10: Nason Street & Alessandro Boulevard

Village at Moreno Valley
 Project Completion (2023) WP - PM Peak Hour

Movement	SBR
▲▲▲ Configurations	▲
Traffic Volume (veh/h)	92
Future Volume (veh/h)	92
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	100
Peak Hour Factor	0.92
Percent Heavy Veh, %	0
Cap, veh/h	902
Arrive On Green	0.56
Sat Flow, veh/h	1610
Grp Volume(v), veh/h	100
Grp Sat Flow(s),veh/h/ln	1610
Q Serve(g_s), s	2.1
Cycle Q Clear(g_c), s	2.1
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	902
V/C Ratio(X)	0.11
Avail Cap(c_a), veh/h	902
HCM Platoon Ratio	1.00
Upstream Filter(l)	1.00
Uniform Delay (d), s/veh	5.1
Incr Delay (d2), s/veh	0.2
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	1.2
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	5.4
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

HCM 6th Signalized Intersection Summary
 11: Nason Street & Cactus Avenue

Village at Moreno Valley
 Project Completion (2023) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	152	434	93	26	311	55	1	39	374	23	106	511	141
Future Volume (veh/h)	152	434	93	26	311	55	1	39	374	23	106	511	141
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		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900		1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	154	438	94	26	314	56		39	378	23	107	516	142
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, %	0	0	0	0	0	0		0	0	0	0	0	0
Cap, veh/h	184	566	480	63	363	65		156	706	315	557	1657	739
Arrive On Green	0.10	0.30	0.30	0.03	0.23	0.23		0.04	0.20	0.20	0.31	0.46	0.46
Sat Flow, veh/h	1810	1900	1610	1810	1570	280		3510	3610	1610	1810	3610	1610
Grp Volume(v), veh/h	154	438	94	26	0	370		39	378	23	107	516	142
Grp Sat Flow(s),veh/h/ln	1810	1900	1610	1810	0	1850		1755	1805	1610	1810	1805	1610
Q Serve(g_s), s	9.2	23.1	4.8	1.5	0.0	21.1		1.2	10.4	1.1	4.8	9.9	3.8
Cycle Q Clear(g_c), s	9.2	23.1	4.8	1.5	0.0	21.1		1.2	10.4	1.1	4.8	9.9	3.8
Prop In Lane	1.00		1.00	1.00		0.15		1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	566	480	63	0	428		156	706	315	557	1657	739
V/C Ratio(X)	0.84	0.77	0.20	0.41	0.00	0.86		0.25	0.54	0.07	0.19	0.31	0.19
Avail Cap(c_a), veh/h	222	915	776	115	0	782		227	706	315	557	1657	739
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	0.00	1.00		0.93	0.93	0.93	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	35.2	28.8	52.0	0.0	40.6		50.8	39.8	26.4	28.0	18.8	7.7
Incr Delay (d2), s/veh	20.5	2.3	0.2	4.2	0.0	5.3		0.8	2.7	0.4	0.2	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	5.2	10.9	1.9	0.8	0.0	10.2		0.5	4.8	0.5	2.1	4.2	2.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	69.0	37.5	29.0	56.2	0.0	45.9		51.6	42.5	26.8	28.2	19.3	8.3
LnGrp LOS	E	D	C	E	A	D		D	D	C	C	B	A
Approach Vol, veh/h		686			396				440			765	
Approach Delay, s/veh		43.4			46.6				42.5			18.5	
Approach LOS		D			D				D			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	38.4	26.0	8.3	37.3	9.4	55.0	15.7	30.0					
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gmax), s	10.5	21.5	7.0	53.0	7.1	24.9	13.5	46.5					
Max Q Clear Time (g_c+10), s	10.8	12.4	3.5	25.1	3.2	11.9	11.2	23.1					
Green Ext Time (p_c), s	0.1	1.7	0.0	3.2	0.0	3.2	0.1	2.3					

Intersection Summary

HCM 6th Ctrl Delay	35.4
HCM 6th LOS	D

Notes

User approved ignoring U-Turning movement.

HCM 6th Signalized Intersection Summary
 12: Hillrose Lane/Nason Street & Iris Avenue

Village at Moreno Valley
 Project Completion (2023) WP - PM Peak Hour



Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔↔				↔↔↔			↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	261	721	19	7	16	866	137	12	40	15	121	52	417
Future Volume (veh/h)	261	721	19	7	16	866	137	12	40	15	121	52	417
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No				No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	272	751	20		17	902	143	12	42	16	126	54	434
Peak Hour Factor	0.96	0.96	0.96		0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0		0	0	0	0	0	0	0	0	0
Cap, veh/h	908	1761	47		273	1199	372	36	291	111	160	551	884
Arrive On Green	0.26	0.34	0.34		0.15	0.23	0.23	0.02	0.22	0.22	0.09	0.29	0.29
Sat Flow, veh/h	3510	5195	138		1810	5187	1610	1810	1311	499	1810	1900	1610
Grp Volume(v), veh/h	272	499	272		17	902	143	12	0	58	126	54	434
Grp Sat Flow(s),veh/h/ln	1755	1729	1875		1810	1729	1610	1810	0	1810	1810	1900	1610
Q Serve(g_s), s	5.6	10.0	10.1		0.7	14.6	5.1	0.6	0.0	2.3	6.1	1.9	0.0
Cycle Q Clear(g_c), s	5.6	10.0	10.1		0.7	14.6	5.1	0.6	0.0	2.3	6.1	1.9	0.0
Prop In Lane	1.00		0.07		1.00		1.00	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	908	1172	635		273	1199	372	36	0	402	160	551	884
V/C Ratio(X)	0.30	0.43	0.43		0.06	0.75	0.38	0.33	0.00	0.14	0.79	0.10	0.49
Avail Cap(c_a), veh/h	908	1172	635		273	1199	372	141	0	402	304	551	884
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.68		1.00	1.00	1.00	1.00	0.00	1.00	0.96	0.96	0.96
Uniform Delay (d), s/veh	26.8	23.0	23.0		32.7	32.2	16.7	43.5	0.0	28.1	40.2	23.3	12.5
Incr Delay (d2), s/veh	0.1	0.8	1.4		0.1	4.4	3.0	5.1	0.0	0.8	8.1	0.3	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	4.1	4.6		0.3	6.4	2.8	0.3	0.0	1.1	3.1	0.9	5.5
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	26.9	23.8	24.4		32.8	36.6	19.6	48.6	0.0	28.9	48.3	23.7	14.4
LnGrp LOS	C	C	C		C	D	B	D	A	C	D	C	B
Approach Vol, veh/h	1043				1062				70			614	
Approach Delay, s/veh	24.8				34.3				32.3			22.2	
Approach LOS	C				C				C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	38.1	35.0	6.3	30.6	27.8	25.3	12.4	24.5					
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5					
Max Green Setting (Gmax), s	30.5	30.5	7.0	26.1	18.1	20.8	15.1	18.0					
Max Q Clear Time (g_c+1), s	12.1	12.1	2.6	3.9	7.6	16.6	8.1	4.3					
Green Ext Time (p_c), s	0.0	4.8	0.0	1.9	0.7	2.4	0.2	0.2					

Intersection Summary

HCM 6th Ctrl Delay	28.0												
HCM 6th LOS	C												

Notes

User approved ignoring U-Turning movement.

HCM 6th TWSC
13: Fir Avenue & Project Driveway 1

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour

Intersection						
Int Delay, s/veh	5.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	55	188	372	78	220	28
Future Vol, veh/h	55	188	372	78	220	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	75	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	58	198	392	82	232	29

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	474	0	-	0	747
Stage 1	-	-	-	-	433
Stage 2	-	-	-	-	314
Critical Hdwy	4.1	-	-	-	6.4
Critical Hdwy Stg 1	-	-	-	-	5.4
Critical Hdwy Stg 2	-	-	-	-	5.4
Follow-up Hdwy	2.2	-	-	-	3.5
Pot Cap-1 Maneuver	1103	-	-	-	405
Stage 1	-	-	-	-	720
Stage 2	-	-	-	-	745
Platoon blocked, %	1	-	-	-	1
Mov Cap-1 Maneuver	1103	-	-	-	384
Mov Cap-2 Maneuver	-	-	-	-	500
Stage 1	-	-	-	-	682
Stage 2	-	-	-	-	745

Approach	EB	WB	SB
HCM Control Delay, s	1.9	0	18.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1103	-	-	-	520
HCM Lane V/C Ratio	0.052	-	-	-	0.502
HCM Control Delay (s)	8.4	-	-	-	18.7
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	2.8

HCM 6th TWSC
14: Fir Avenue & Project Driveway 2

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑			↑
Traffic Vol, veh/h	0	408	423	83	0	28
Future Vol, veh/h	0	408	423	83	0	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	429	445	87	0	29

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	745
HCM Lane V/C Ratio	-	-	-	0.04
HCM Control Delay (s)	-	-	-	10
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	
Traffic Vol, veh/h	0	69	0	1090	1179	154
Future Vol, veh/h	0	69	0	1090	1179	154
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	73	0	1147	1241	162

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	702	-	0	0
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-
Pot Cap-1 Maneuver	0	*616	0	-	-
Stage 1	0	-	0	-	-
Stage 2	0	-	0	-	-
Platoon blocked, %		1		-	-
Mov Cap-1 Maneuver	-	*616	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 616	-	-
HCM Lane V/C Ratio	- 0.118	-	-
HCM Control Delay (s)	- 11.6	-	-
HCM Lane LOS	- B	-	-
HCM 95th %tile Q(veh)	- 0.4	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Intersection Delay, s/veh	17.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕	↕	↕		↕	↕		↕	↕	
Traffic Vol, veh/h	4	195	208	124	218	15	127	25	97	25	58	6
Future Vol, veh/h	4	195	208	124	218	15	127	25	97	25	58	6
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	271	289	172	303	21	176	35	135	35	81	8
Number of Lanes	0	1	1	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	17.2	19.5	15.1	13
HCM LOS	C	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	2%	0%	100%	0%	100%	0%
Vol Thru, %	0%	20%	98%	0%	0%	94%	0%	91%
Vol Right, %	0%	80%	0%	100%	0%	6%	0%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	127	122	199	208	124	233	25	64
LT Vol	127	0	4	0	124	0	25	0
Through Vol	0	25	195	0	0	218	0	58
RT Vol	0	97	0	208	0	15	0	6
Lane Flow Rate	176	169	276	289	172	324	35	89
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.405	0.338	0.551	0.518	0.369	0.644	0.085	0.204
Departure Headway (Hd)	8.275	7.188	7.179	6.452	7.717	7.159	8.861	8.275
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	436	500	503	558	467	505	404	433
Service Time	6.025	4.938	4.925	4.197	5.464	4.905	6.622	6.036
HCM Lane V/C Ratio	0.404	0.338	0.549	0.518	0.368	0.642	0.087	0.206
HCM Control Delay	16.6	13.6	18.4	16	14.9	22	12.4	13.2
HCM Lane LOS	C	B	C	C	B	C	B	B
HCM 95th-tile Q	1.9	1.5	3.3	3	1.7	4.5	0.3	0.8

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗	↖	↗		↖	↗		↖	↗	
Traffic Vol, veh/h	2	152	37	72	216	15	36	22	47	18	14	3
Future Vol, veh/h	2	152	37	72	216	15	36	22	47	18	14	3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	163	40	77	232	16	39	24	51	19	15	3
Number of Lanes	0	1	1	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	9.3	10.2	9.1	9.1
HCM LOS	A	B	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	1%	0%	100%	0%	100%	0%
Vol Thru, %	0%	32%	99%	0%	0%	94%	0%	82%
Vol Right, %	0%	68%	0%	100%	0%	6%	0%	18%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	69	154	37	72	231	18	17
LT Vol	36	0	2	0	72	0	18	0
Through Vol	0	22	152	0	0	216	0	14
RT Vol	0	47	0	37	0	15	0	3
Lane Flow Rate	39	74	166	40	77	248	19	18
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.068	0.11	0.241	0.05	0.121	0.349	0.035	0.029
Departure Headway (Hd)	6.326	5.339	5.241	4.531	5.609	5.061	6.433	5.802
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	564	667	682	786	637	708	553	612
Service Time	4.093	3.106	2.997	2.286	3.359	2.811	4.212	3.581
HCM Lane V/C Ratio	0.069	0.111	0.243	0.051	0.121	0.35	0.034	0.029
HCM Control Delay	9.6	8.8	9.7	7.5	9.1	10.5	9.4	8.8
HCM Lane LOS	A	A	A	A	A	B	A	A
HCM 95th-tile Q	0.2	0.4	0.9	0.2	0.4	1.6	0.1	0.1

APPENDIX E:

FREEWAY LEVEL OF SERVICE WORKSHEETS

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	1	Segment Name	West of Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	5280	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.88
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	2322	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,GP}), pc/h/ln	1235
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	65.0
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D _{GP}), pc/mi/ln	19.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	995	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1059
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.62
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	63.8
Speed 2 (S_2), mi/h	1.2	Density (D_{ML}), pc/mi/ln	16.6
Speed 3 (S_3), mi/h	4.1	Level of Service (LOS)	B

HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	2	Segment Name	Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	65.0	35.0
Segment Length (L) / Deceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2322	754
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	0.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000
Flow Rate (vi),pc/h	2470	802
Capacity (c), pc/h	4700	2000
Volume-to-Capacity Ratio (v/c)	0.53	0.40

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.500
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.5
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	71.3
Flow in Lanes 1 and 2 (v12), pc/h	2470	Ramp Junction Speed (S), mi/h	53.5
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	23.1

Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	18.3
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, ln	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	995	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1059
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.62
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	63.8
Speed 2 (S ₂), mi/h	1.2	Density (D _{ML}), pc/mi/ln	16.6
Speed 3 (S ₃), mi/h	4.1	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	3	Segment Name	Nason Street Off-Ramp and Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	2725	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	1568	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,GP}$), pc/h/ln	834
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	64.6
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (DGP), pc/mi/ln	12.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	995	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1059
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.62
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	63.8
Speed 2 (S_2), mi/h	1.2	Density (D_{ML}), pc/mi/ln	16.6
Speed 3 (S_3), mi/h	4.1	Level of Service (LOS)	B

HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	4	Segment Name	East of Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (Ls), ft	500	Number of Maneuver Lanes (NWL), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LCRF), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LCFR), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LCRR), lc	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (Vi), veh/h	1568	200	0	0
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	0.00	0.00	0.00	0.00
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000	1.000	1.000
Flow Rate (vi), pc/h	1668	213	0	0
Weaving Flow Rate (vw), pc/h	213	Freeway Max Capacity (ciFL), pc/h/ln		2350
Non-Weaving Flow Rate (vNW), pc/h	1668	Density-Based Capacity (ciWL), pc/h/ln		2108
Total Flow Rate (v), pc/h	1881	Demand Flow-Based Capacity (ciW), pc/h		21239
Volume Ratio (VR)	0.113	Weaving Segment Capacity (cw), veh/h		6324
Minimum Lane Change Rate (LCMIN), lc/h	213	Adjusted Weaving Area Capacity, pc/h		6324
Maximum Weaving Length (LMAX), ft	3666	Volume-to-Capacity Ratio (v/c)		0.30

Speed and Density

Non-Weaving Vehicle Index (INW)	42	Average Weaving Speed (SW), mi/h	58.1
Non-Weaving Lane Change Rate (LCNW), lc/h	37	Average Non-Weaving Speed (SNW), mi/h	60.5
Weaving Lane Change Rate (LCW), lc/h	282	Average Speed (S), mi/h	60.2
Weaving Lane Change Rate (LCAII), lc/h	319	Density (D), pc/mi/ln	10.4
Weaving Intensity Factor (W)	0.159	Level of Service (LOS)	B

Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V_{ML}), veh/h	995	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1059
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.62
Passenger Car Equivalent (E_T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	63.8
Speed 2 (S_2), mi/h	1.2	Density (D_{ML}), pc/mi/ln	16.6
Speed 3 (S_3), mi/h	4.1	Level of Service (LOS)	B

HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	1	Segment Name	East of Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (Ls), ft	500	Number of Maneuver Lanes (NWL), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LCRF), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LCFR), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LCRR), lc	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (Vi), veh/h	1478	0	0	153
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	0.00	0.00	0.00	0.00
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000	1.000	1.000
Flow Rate (vi), pc/h	1572	0	0	163
Weaving Flow Rate (vw), pc/h	163	Freeway Max Capacity (ciFL), pc/h/ln		2350
Non-Weaving Flow Rate (vNW), pc/h	1572	Density-Based Capacity (ciWL), pc/h/ln		2122
Total Flow Rate (v), pc/h	1735	Demand Flow-Based Capacity (ciW), pc/h		25532
Volume Ratio (VR)	0.094	Weaving Segment Capacity (cw), veh/h		6366
Minimum Lane Change Rate (LCMIN), lc/h	163	Adjusted Weaving Area Capacity, pc/h		6366
Maximum Weaving Length (LMAX), ft	3481	Volume-to-Capacity Ratio (v/c)		0.27

Speed and Density

Non-Weaving Vehicle Index (INW)	39	Average Weaving Speed (SW), mi/h	59.2
Non-Weaving Lane Change Rate (LCNW), lc/h	17	Average Non-Weaving Speed (SNW), mi/h	61.1
Weaving Lane Change Rate (LCW), lc/h	232	Average Speed (S), mi/h	60.9
Weaving Lane Change Rate (LCAII), lc/h	249	Density (D), pc/mi/ln	9.5
Weaving Intensity Factor (W)	0.130	Level of Service (LOS)	A

Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	849	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	903
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	64.5
Speed 2 (S ₂), mi/h	0.5	Density (D _{ML}), pc/mi/ln	14.0
Speed 3 (S ₃), mi/h	2.1	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	2	Segment Name	Nason Street Off-Ramp and Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	1700	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	1478	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,GP}$), pc/h/ln	786
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.33
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	64.8
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (DGP), pc/mi/ln	12.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	849	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	903
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	64.5
Speed 2 (S_2), mi/h	0.5	Density (D_{ML}), pc/mi/ln	14.0
Speed 3 (S_3), mi/h	2.1	Level of Service (LOS)	B

HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	3	Segment Name	Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	65.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1478	503
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	0.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000
Flow Rate (vi),pc/h	1572	535
Capacity (c), pc/h	4700	2000
Volume-to-Capacity Ratio (v/c)	0.45	0.27

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.297
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	58.2
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.0
Flow in Lanes 1 and 2 (v12), pc/h	1572	Ramp Junction Speed (S), mi/h	58.2
Flow Entering Ramp-Infl. Area (vR12), pc/h	2107	Average Density (D), pc/mi/ln	18.1

Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	16.7
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, ln	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	849	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	903
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	64.5
Speed 2 (S ₂), mi/h	0.5	Density (D _{ML}), pc/mi/ln	14.0
Speed 3 (S ₃), mi/h	2.1	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	4	Segment Name	West of Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	5280	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	1981	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,GP}), pc/h/ln	1054
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.45
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	65.0
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D _{GP}), pc/mi/ln	16.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	849	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	903
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	64.5
Speed 2 (S_2), mi/h	0.5	Density (D_{ML}), pc/mi/ln	14.0
Speed 3 (S_3), mi/h	2.1	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	1	Segment Name	West of Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	5280	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.88
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	2962	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,GP}), pc/h/ln	1576
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.67
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	64.6
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D _{GP}), pc/mi/ln	24.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	1269	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1350
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.79
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	61.5
Speed 2 (S_2), mi/h	3.5	Density (D_{ML}), pc/mi/ln	22.0
Speed 3 (S_3), mi/h	9.5	Level of Service (LOS)	C

HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	2	Segment Name	Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), In	2	1
Free-Flow Speed (FFS), mi/h	65.0	35.0
Segment Length (L) / Deceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2962	813
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	0.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000
Flow Rate (vi),pc/h	3151	865
Capacity (c), pc/h	4700	2000
Volume-to-Capacity Ratio (v/c)	0.67	0.43

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.506
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	71.3
Flow in Lanes 1 and 2 (v12), pc/h	3151	Ramp Junction Speed (S), mi/h	53.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	29.5

Level of Service (LOS)	C	Density in Ramp Influence Area (DR), pc/mi/ln	24.2
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, ln	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	1269	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1350
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.79
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	61.5
Speed 2 (S ₂), mi/h	3.5	Density (D _{ML}), pc/mi/ln	22.0
Speed 3 (S ₃), mi/h	9.5	Level of Service (LOS)	C

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	3	Segment Name	Nason Street Off-Ramp and Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	2725	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	2149	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,GP}), pc/h/ln	1143
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.49
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (f _{lw})	-	Average Speed (S), mi/h	64.6
Right-Side Lateral Clearance Adj. (f _{RLC})	-	Density (D _{GP}), pc/mi/ln	17.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	1269	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1350
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.79
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	61.5
Speed 2 (S_2), mi/h	3.5	Density (D_{ML}), pc/mi/ln	22.0
Speed 3 (S_3), mi/h	9.5	Level of Service (LOS)	C

HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	4	Segment Name	East of Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (Ls), ft	500	Number of Maneuver Lanes (NWL), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LCRF), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LCFR), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LCRR), lc	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (Vi), veh/h	2149	220	0	0
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	0.00	0.00	0.00	0.00
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000	1.000	1.000
Flow Rate (vi), pc/h	2286	234	0	0
Weaving Flow Rate (vw), pc/h	234	Freeway Max Capacity (ciFL), pc/h/ln		2350
Non-Weaving Flow Rate (vNW), pc/h	2286	Density-Based Capacity (ciWL), pc/h/ln		2123
Total Flow Rate (v), pc/h	2520	Demand Flow-Based Capacity (ciW), pc/h		25806
Volume Ratio (VR)	0.093	Weaving Segment Capacity (cw), veh/h		6369
Minimum Lane Change Rate (LCMIN), lc/h	234	Adjusted Weaving Area Capacity, pc/h		6369
Maximum Weaving Length (LMAX), ft	3472	Volume-to-Capacity Ratio (v/c)		0.40

Speed and Density

Non-Weaving Vehicle Index (INW)	57	Average Weaving Speed (SW), mi/h	56.2
Non-Weaving Lane Change Rate (LCNW), lc/h	164	Average Non-Weaving Speed (SNW), mi/h	59.3
Weaving Lane Change Rate (LCW), lc/h	303	Average Speed (S), mi/h	59.0
Weaving Lane Change Rate (LCAII), lc/h	467	Density (D), pc/mi/ln	14.2
Weaving Intensity Factor (W)	0.214	Level of Service (LOS)	B

Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V_{ML}), veh/h	1269	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1350
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.79
Passenger Car Equivalent (E_T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	61.5
Speed 2 (S_2), mi/h	3.5	Density (D_{ML}), pc/mi/ln	22.0
Speed 3 (S_3), mi/h	9.5	Level of Service (LOS)	C

HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	1	Segment Name	East of Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Segment Type	Freeway
Segment Length (Ls), ft	500	Number of Maneuver Lanes (NWL), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LCRF), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LCFR), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LCRR), lc	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (Vi), veh/h	1479	0	0	197
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	0.00	0.00	0.00	0.00
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000	1.000	1.000
Flow Rate (vi), pc/h	1573	0	0	210
Weaving Flow Rate (vw), pc/h	210	Freeway Max Capacity (ciFL), pc/h/ln		2350
Non-Weaving Flow Rate (vNW), pc/h	1573	Density-Based Capacity (ciWL), pc/h/ln		2104
Total Flow Rate (v), pc/h	1783	Demand Flow-Based Capacity (ciW), pc/h		20339
Volume Ratio (VR)	0.118	Weaving Segment Capacity (cw), veh/h		6312
Minimum Lane Change Rate (LCMIN), lc/h	210	Adjusted Weaving Area Capacity, pc/h		6312
Maximum Weaving Length (LMAX), ft	3715	Volume-to-Capacity Ratio (v/c)		0.28

Speed and Density

Non-Weaving Vehicle Index (INW)	39	Average Weaving Speed (SW), mi/h	58.5
Non-Weaving Lane Change Rate (LCNW), lc/h	17	Average Non-Weaving Speed (SNW), mi/h	60.6
Weaving Lane Change Rate (LCW), lc/h	279	Average Speed (S), mi/h	60.3
Weaving Lane Change Rate (LCAII), lc/h	296	Density (D), pc/mi/ln	9.9
Weaving Intensity Factor (W)	0.149	Level of Service (LOS)	A

Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V_{ML}), veh/h	908	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	966
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.57
Passenger Car Equivalent (E_T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	64.2
Speed 2 (S_2), mi/h	0.8	Density (D_{ML}), pc/mi/ln	15.0
Speed 3 (S_3), mi/h	2.8	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	2	Segment Name	Nason Street Off-Ramp and Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	1700	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	1479	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,GP}$), pc/h/ln	786
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.33
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	64.8
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (DGP), pc/mi/ln	12.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	908	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	966
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.57
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	64.2
Speed 2 (S_2), mi/h	0.8	Density (D_{ML}), pc/mi/ln	15.0
Speed 3 (S_3), mi/h	2.8	Level of Service (LOS)	B

HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	3	Segment Name	Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), In	2	1
Free-Flow Speed (FFS), mi/h	65.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1479	639
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	0.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000
Flow Rate (vi),pc/h	1573	680
Capacity (c), pc/h	4700	2000
Volume-to-Capacity Ratio (v/c)	0.48	0.34

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.302
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	58.1
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.0
Flow in Lanes 1 and 2 (v12), pc/h	1573	Ramp Junction Speed (S), mi/h	58.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	2253	Average Density (D), pc/mi/ln	19.4

Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	17.8
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, ln	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	908	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	966
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.57
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	64.2
Speed 2 (S ₂), mi/h	0.8	Density (D _{ML}), pc/mi/ln	15.0
Speed 3 (S ₃), mi/h	2.8	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Existing NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	4	Segment Name	West of Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	5280	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	2118	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,GP}), pc/h/ln	1126
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.48
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	65.0
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (D _{GP}), pc/mi/ln	17.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	908	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	966
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.57
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	64.2
Speed 2 (S_2), mi/h	0.8	Density (D_{ML}), pc/mi/ln	15.0
Speed 3 (S_3), mi/h	2.8	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	1	Segment Name	West of Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	5280	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.88
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	2415	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,GP}$), pc/h/ln	1284
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	65.0
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (DGP), pc/mi/ln	19.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	1035	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1101
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.65
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	63.5
Speed 2 (S_2), mi/h	1.5	Density (D_{ML}), pc/mi/ln	17.3
Speed 3 (S_3), mi/h	4.7	Level of Service (LOS)	B

HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	2	Segment Name	Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	65.0	35.0
Segment Length (L) / Deceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2415	784
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	0.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000
Flow Rate (vi),pc/h	2569	834
Capacity (c), pc/h	4700	2000
Volume-to-Capacity Ratio (v/c)	0.55	0.42

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.503
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	71.3
Flow in Lanes 1 and 2 (v12), pc/h	2569	Ramp Junction Speed (S), mi/h	53.4
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	24.1

Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	19.1
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, ln	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	1035	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1101
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.65
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	63.5
Speed 2 (S ₂), mi/h	1.5	Density (D _{ML}), pc/mi/ln	17.3
Speed 3 (S ₃), mi/h	4.7	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	3	Segment Name	Nason Street Off-Ramp and Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	2725	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	1631	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,GP}$), pc/h/ln	868
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.37
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	64.6
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (DGP), pc/mi/ln	13.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFSadj), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	1035	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1101
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.65
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	63.5
Speed 2 (S_2), mi/h	1.5	Density (D_{ML}), pc/mi/ln	17.3
Speed 3 (S_3), mi/h	4.7	Level of Service (LOS)	B

HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	4	Segment Name	East of Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

Number of Lanes (N), In	3	Segment Type	Freeway
Segment Length (Ls), ft	500	Number of Maneuver Lanes (NWL), In	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LCRF), Ic	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LCFR), Ic	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LCRR), Ic	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (Vi), veh/h	1631	208	0	0
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	0.00	0.00	0.00	0.00
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000	1.000	1.000
Flow Rate (vi), pc/h	1735	221	0	0
Weaving Flow Rate (vw), pc/h	221	Freeway Max Capacity (cIFL), pc/h/ln	2350	
Non-Weaving Flow Rate (vNW), pc/h	1735	Density-Based Capacity (cIWL), pc/h/ln	2108	
Total Flow Rate (v), pc/h	1956	Demand Flow-Based Capacity (cIW), pc/h	21239	
Volume Ratio (VR)	0.113	Weaving Segment Capacity (cW), veh/h	6324	
Minimum Lane Change Rate (LCMIN), Ic/h	221	Adjusted Weaving Area Capacity, pc/h	6324	
Maximum Weaving Length (LMAX), ft	3666	Volume-to-Capacity Ratio (v/c)	0.31	

Speed and Density

Non-Weaving Vehicle Index (INW)	43	Average Weaving Speed (Sw), mi/h	57.8
Non-Weaving Lane Change Rate (LCNW), Ic/h	51	Average Non-Weaving Speed (SNW), mi/h	60.3
Weaving Lane Change Rate (LCW), Ic/h	290	Average Speed (S), mi/h	60.0
Weaving Lane Change Rate (LCAII), Ic/h	341	Density (D), pc/mi/ln	10.9

Weaving Intensity Factor (W)	0.167	Level of Service (LOS)	B
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	1035	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1101
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.65
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	63.5
Speed 2 (S ₂), mi/h	1.5	Density (D _{ML}), pc/mi/ln	17.3
Speed 3 (S ₃), mi/h	4.7	Level of Service (LOS)	B

HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	1	Segment Name	East of Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

Number of Lanes (N), In	3	Segment Type	Freeway
Segment Length (Ls), ft	500	Number of Maneuver Lanes (NWL), In	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LCRF), Ic	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LCFR), Ic	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LCRR), Ic	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (Vi), veh/h	1537	0	0	159
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	0.00	0.00	0.00	0.00
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000	1.000	1.000
Flow Rate (vi), pc/h	1635	0	0	169
Weaving Flow Rate (vw), pc/h	169	Freeway Max Capacity (cIFL), pc/h/ln		2350
Non-Weaving Flow Rate (vNW), pc/h	1635	Density-Based Capacity (cIWL), pc/h/ln		2122
Total Flow Rate (v), pc/h	1804	Demand Flow-Based Capacity (cIW), pc/h		25532
Volume Ratio (VR)	0.094	Weaving Segment Capacity (cW), veh/h		6366
Minimum Lane Change Rate (LCMIN), Ic/h	169	Adjusted Weaving Area Capacity, pc/h		6366
Maximum Weaving Length (LMAX), ft	3481	Volume-to-Capacity Ratio (v/c)		0.28

Speed and Density

Non-Weaving Vehicle Index (INW)	41	Average Weaving Speed (Sw), mi/h	58.9
Non-Weaving Lane Change Rate (LCNW), Ic/h	30	Average Non-Weaving Speed (SNW), mi/h	60.9
Weaving Lane Change Rate (LCW), Ic/h	238	Average Speed (S), mi/h	60.7
Weaving Lane Change Rate (LCAII), Ic/h	268	Density (D), pc/mi/ln	9.9

Weaving Intensity Factor (W)	0.138	Level of Service (LOS)	A
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	883	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	939
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	64.3
Speed 2 (S ₂), mi/h	0.7	Density (D _{ML}), pc/mi/ln	14.6
Speed 3 (S ₃), mi/h	2.5	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	2	Segment Name	Nason Street Off-Ramp and Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	1700	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	1537	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.94	Flow Rate (V_p, GP), pc/h/ln	818
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	64.8
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (DGP), pc/mi/ln	12.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFSadj), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	883	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	939
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	64.3
Speed 2 (S_2), mi/h	0.7	Density (D_{ML}), pc/mi/ln	14.6
Speed 3 (S_3), mi/h	2.5	Level of Service (LOS)	B

HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	3	Segment Name	Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), In	2	1
Free-Flow Speed (FFS), mi/h	65.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1537	523
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	0.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000
Flow Rate (vi),pc/h	1635	556
Capacity (c), pc/h	4700	2000
Volume-to-Capacity Ratio (v/c)	0.47	0.28

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.300
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	58.1
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.0
Flow in Lanes 1 and 2 (v12), pc/h	1635	Ramp Junction Speed (S), mi/h	58.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	2191	Average Density (D), pc/mi/ln	18.9

Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	17.4
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, ln	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	883	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	939
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	64.3
Speed 2 (S ₂), mi/h	0.7	Density (D _{ML}), pc/mi/ln	14.6
Speed 3 (S ₃), mi/h	2.5	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	4	Segment Name	West of Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	5280	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	2060	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,GP}$), pc/h/ln	1096
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.47
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	65.0
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (DGP), pc/mi/ln	16.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	883	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	939
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	64.3
Speed 2 (S_2), mi/h	0.7	Density (D_{ML}), pc/mi/ln	14.6
Speed 3 (S_3), mi/h	2.5	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	1	Segment Name	West of Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	5280	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.88
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	3080	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,GP}), pc/h/ln	1638
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.70
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (f _{lw})	-	Average Speed (S), mi/h	64.2
Right-Side Lateral Clearance Adj. (f _{RLC})	-	Density (D _{GP}), pc/mi/ln	25.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	1320	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1404
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.83
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	60.9
Speed 2 (S_2), mi/h	4.1	Density (D_{ML}), pc/mi/ln	23.1
Speed 3 (S_3), mi/h	10.7	Level of Service (LOS)	C

HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	2	Segment Name	Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	65.0	35.0
Segment Length (L) / Deceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3080	846
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	0.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000
Flow Rate (vi),pc/h	3277	900
Capacity (c), pc/h	4700	2000
Volume-to-Capacity Ratio (v/c)	0.70	0.45

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.509
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.3
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	71.3
Flow in Lanes 1 and 2 (v12), pc/h	3277	Ramp Junction Speed (S), mi/h	53.3
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	30.7

Level of Service (LOS)	C	Density in Ramp Influence Area (DR), pc/mi/ln	25.2
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, ln	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	1320	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1404
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.83
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	60.9
Speed 2 (S ₂), mi/h	4.1	Density (D _{ML}), pc/mi/ln	23.1
Speed 3 (S ₃), mi/h	10.7	Level of Service (LOS)	C

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	3	Segment Name	Nason Street Off-Ramp and Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	2725	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	2234	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,GP}), pc/h/ln	1188
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.51
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (f _{lW})	-	Average Speed (S), mi/h	64.6
Right-Side Lateral Clearance Adj. (f _{RLC})	-	Density (D _{GP}), pc/mi/ln	18.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	1320	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1404
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.83
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	60.9
Speed 2 (S_2), mi/h	4.1	Density (D_{ML}), pc/mi/ln	23.1
Speed 3 (S_3), mi/h	10.7	Level of Service (LOS)	C

HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	4	Segment Name	East of Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

Number of Lanes (N), In	3	Segment Type	Freeway
Segment Length (L _s), ft	500	Number of Maneuver Lanes (NWL), In	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LCRF), Ic	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LCFR), Ic	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LCRR), Ic	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V _i), veh/h	2234	228	0	0
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	0.00	0.00	0.00	0.00
Heavy Vehicle Adjustment Factor (f _{HV})	1.000	1.000	1.000	1.000
Flow Rate (v _i), pc/h	2377	243	0	0
Weaving Flow Rate (v _w), pc/h	243	Freeway Max Capacity (c _{IFL}), pc/h/ln	2350	
Non-Weaving Flow Rate (v _{NW}), pc/h	2377	Density-Based Capacity (c _{IWL}), pc/h/ln	2123	
Total Flow Rate (v), pc/h	2620	Demand Flow-Based Capacity (c _{IW}), pc/h	25806	
Volume Ratio (VR)	0.093	Weaving Segment Capacity (c _w), veh/h	6369	
Minimum Lane Change Rate (LC _{MIN}), Ic/h	243	Adjusted Weaving Area Capacity, pc/h	6369	
Maximum Weaving Length (L _{MAX}), ft	3472	Volume-to-Capacity Ratio (v/c)	0.41	

Speed and Density

Non-Weaving Vehicle Index (INW)	59	Average Weaving Speed (S _w), mi/h	55.8
Non-Weaving Lane Change Rate (LC _{NW}), Ic/h	183	Average Non-Weaving Speed (S _{NW}), mi/h	59.1
Weaving Lane Change Rate (LC _w), Ic/h	312	Average Speed (S), mi/h	58.8
Weaving Lane Change Rate (LC _{AI}), Ic/h	495	Density (D), pc/mi/ln	14.9

Weaving Intensity Factor (W)	0.224	Level of Service (LOS)	B
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	1320	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1404
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.83
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	60.9
Speed 2 (S ₂), mi/h	4.1	Density (D _{ML}), pc/mi/ln	23.1
Speed 3 (S ₃), mi/h	10.7	Level of Service (LOS)	C

HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	1	Segment Name	East of Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

Number of Lanes (N), In	3	Segment Type	Freeway
Segment Length (L _s), ft	500	Number of Maneuver Lanes (NWL), In	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LCRF), Ic	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LCFR), Ic	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LCRR), Ic	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V _i), veh/h	1539	0	0	205
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	0.00	0.00	0.00	0.00
Heavy Vehicle Adjustment Factor (f _{HV})	1.000	1.000	1.000	1.000
Flow Rate (v _i), pc/h	1637	0	0	218
Weaving Flow Rate (v _w), pc/h	218	Freeway Max Capacity (c _{IFL}), pc/h/ln		2350
Non-Weaving Flow Rate (v _{NW}), pc/h	1637	Density-Based Capacity (c _{IWL}), pc/h/ln		2104
Total Flow Rate (v), pc/h	1855	Demand Flow-Based Capacity (c _{IW}), pc/h		20339
Volume Ratio (VR)	0.118	Weaving Segment Capacity (c _w), veh/h		6312
Minimum Lane Change Rate (LC _{MIN}), Ic/h	218	Adjusted Weaving Area Capacity, pc/h		6312
Maximum Weaving Length (L _{MAX}), ft	3715	Volume-to-Capacity Ratio (v/c)		0.29

Speed and Density

Non-Weaving Vehicle Index (INW)	41	Average Weaving Speed (S _w), mi/h	58.2
Non-Weaving Lane Change Rate (LC _{NW}), Ic/h	30	Average Non-Weaving Speed (S _{NW}), mi/h	60.5
Weaving Lane Change Rate (LC _w), Ic/h	287	Average Speed (S), mi/h	60.2
Weaving Lane Change Rate (LC _{AI}), Ic/h	317	Density (D), pc/mi/ln	10.3

Weaving Intensity Factor (W)	0.158	Level of Service (LOS)	B
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	944	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1004
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	64.0
Speed 2 (S ₂), mi/h	1.0	Density (D _{ML}), pc/mi/ln	15.7
Speed 3 (S ₃), mi/h	3.3	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	2	Segment Name	Nason Street Off-Ramp and Nason Street On- Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	1700	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	1539	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,GP}$), pc/h/ln	818
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	64.8
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (DGP), pc/mi/ln	12.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFSadj), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	944	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1004
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	64.0
Speed 2 (S_2), mi/h	1.0	Density (D_{ML}), pc/mi/ln	15.7
Speed 3 (S_3), mi/h	3.3	Level of Service (LOS)	B

HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	3	Segment Name	Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), In	2	1
Free-Flow Speed (FFS), mi/h	65.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1539	664
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	0.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000
Flow Rate (vi),pc/h	1637	706
Capacity (c), pc/h	4700	2000
Volume-to-Capacity Ratio (v/c)	0.50	0.35

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.306
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	58.0
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.0
Flow in Lanes 1 and 2 (v12), pc/h	1637	Ramp Junction Speed (S), mi/h	58.0
Flow Entering Ramp-Infl. Area (vR12), pc/h	2343	Average Density (D), pc/mi/ln	20.2

Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	18.5
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, ln	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	944	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1004
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	64.0
Speed 2 (S ₂), mi/h	1.0	Density (D _{ML}), pc/mi/ln	15.7
Speed 3 (S ₃), mi/h	3.3	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) NP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	4	Segment Name	West of Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	5280	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	2203	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,GP}), pc/h/ln	1172
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.50
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (f _{lw})	-	Average Speed (S), mi/h	65.0
Right-Side Lateral Clearance Adj. (f _{RLC})	-	Density (D _{GP}), pc/mi/ln	18.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	944	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1004
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	64.0
Speed 2 (S_2), mi/h	1.0	Density (D_{ML}), pc/mi/ln	15.7
Speed 3 (S_3), mi/h	3.3	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	1	Segment Name	West of Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	5280	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.88
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	2480	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,GP}), pc/h/ln	1319
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.56
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (f _{lw})	-	Average Speed (S), mi/h	65.0
Right-Side Lateral Clearance Adj. (f _{RLC})	-	Density (D _{GP}), pc/mi/ln	20.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	1035	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1101
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.65
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	63.5
Speed 2 (S_2), mi/h	1.5	Density (D_{ML}), pc/mi/ln	17.3
Speed 3 (S_3), mi/h	4.7	Level of Service (LOS)	B

HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	2	Segment Name	Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), In	2	1
Free-Flow Speed (FFS), mi/h	65.0	35.0
Segment Length (L) / Deceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	2480	849
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	0.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000
Flow Rate (vi),pc/h	2638	903
Capacity (c), pc/h	4700	2000
Volume-to-Capacity Ratio (v/c)	0.56	0.45

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.509
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.3
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	71.3
Flow in Lanes 1 and 2 (v12), pc/h	2638	Ramp Junction Speed (S), mi/h	53.3
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	24.7

Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	19.7
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, ln	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	1035	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1101
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.65
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	63.5
Speed 2 (S ₂), mi/h	1.5	Density (D _{ML}), pc/mi/ln	17.3
Speed 3 (S ₃), mi/h	4.7	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	3	Segment Name	Nason Street Off-Ramp and Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	2725	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	1631	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate (V_p, GP), pc/h/ln	868
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.37
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	64.6
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (DGP), pc/mi/ln	13.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFSadj), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	1035	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1101
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.65
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	63.5
Speed 2 (S_2), mi/h	1.5	Density (D_{ML}), pc/mi/ln	17.3
Speed 3 (S_3), mi/h	4.7	Level of Service (LOS)	B

HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	4	Segment Name	East of Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

Number of Lanes (N), In	3	Segment Type	Freeway
Segment Length (L _s), ft	500	Number of Maneuver Lanes (NWL), In	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LCRF), Ic	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LCFR), Ic	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LCRR), Ic	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V _i), veh/h	1631	223	0	0
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	0.00	0.00	0.00	0.00
Heavy Vehicle Adjustment Factor (f _{HV})	1.000	1.000	1.000	1.000
Flow Rate (v _i), pc/h	1735	237	0	0
Weaving Flow Rate (v _w), pc/h	237	Freeway Max Capacity (c _{IFL}), pc/h/ln		2350
Non-Weaving Flow Rate (v _{NW}), pc/h	1735	Density-Based Capacity (c _{IWL}), pc/h/ln		2103
Total Flow Rate (v), pc/h	1972	Demand Flow-Based Capacity (c _{IW}), pc/h		20000
Volume Ratio (VR)	0.120	Weaving Segment Capacity (c _w), veh/h		6309
Minimum Lane Change Rate (LC _{MIN}), Ic/h	237	Adjusted Weaving Area Capacity, pc/h		6309
Maximum Weaving Length (L _{MAX}), ft	3735	Volume-to-Capacity Ratio (v/c)		0.31

Speed and Density

Non-Weaving Vehicle Index (INW)	43	Average Weaving Speed (S _w), mi/h	57.6
Non-Weaving Lane Change Rate (LC _{NW}), Ic/h	51	Average Non-Weaving Speed (S _{NW}), mi/h	60.1
Weaving Lane Change Rate (LC _w), Ic/h	306	Average Speed (S), mi/h	59.8
Weaving Lane Change Rate (LC _{AI}), Ic/h	357	Density (D), pc/mi/ln	11.0

Weaving Intensity Factor (W)	0.173	Level of Service (LOS)	B
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	1035	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1101
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.65
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	63.5
Speed 2 (S ₂), mi/h	1.5	Density (D _{ML}), pc/mi/ln	17.3
Speed 3 (S ₃), mi/h	4.7	Level of Service (LOS)	B

HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	1	Segment Name	East of Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

Number of Lanes (N), In	3	Segment Type	Freeway
Segment Length (L _s), ft	500	Number of Maneuver Lanes (NWL), In	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LCRF), Ic	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LCFR), Ic	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LCRR), Ic	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V _i), veh/h	1537	0	0	178
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	0.00	0.00	0.00	0.00
Heavy Vehicle Adjustment Factor (f _{HV})	1.000	1.000	1.000	1.000
Flow Rate (v _i), pc/h	1635	0	0	189
Weaving Flow Rate (v _w), pc/h	189	Freeway Max Capacity (c _{IFL}), pc/h/ln		2350
Non-Weaving Flow Rate (v _{NW}), pc/h	1635	Density-Based Capacity (c _{IWL}), pc/h/ln		2114
Total Flow Rate (v), pc/h	1824	Demand Flow-Based Capacity (c _{IW}), pc/h		23077
Volume Ratio (VR)	0.104	Weaving Segment Capacity (c _w), veh/h		6342
Minimum Lane Change Rate (LC _{MIN}), Ic/h	189	Adjusted Weaving Area Capacity, pc/h		6342
Maximum Weaving Length (L _{MAX}), ft	3578	Volume-to-Capacity Ratio (v/c)		0.29

Speed and Density

Non-Weaving Vehicle Index (INW)	41	Average Weaving Speed (S _w), mi/h	58.6
Non-Weaving Lane Change Rate (LC _{NW}), Ic/h	30	Average Non-Weaving Speed (S _{NW}), mi/h	60.7
Weaving Lane Change Rate (LC _w), Ic/h	258	Average Speed (S), mi/h	60.5
Weaving Lane Change Rate (LC _{AI}), Ic/h	288	Density (D), pc/mi/ln	10.0

Weaving Intensity Factor (W)	0.146	Level of Service (LOS)	A
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	883	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	939
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	64.3
Speed 2 (S ₂), mi/h	0.7	Density (D _{ML}), pc/mi/ln	14.6
Speed 3 (S ₃), mi/h	2.5	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	2	Segment Name	Nason Street Off-Ramp and Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	1700	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	1537	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate (V_p, GP), pc/h/ln	818
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	64.8
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (DGP), pc/mi/ln	12.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFSadj), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	883	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	939
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	64.3
Speed 2 (S_2), mi/h	0.7	Density (D_{ML}), pc/mi/ln	14.6
Speed 3 (S_3), mi/h	2.5	Level of Service (LOS)	B

HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	3	Segment Name	Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), In	2	1
Free-Flow Speed (FFS), mi/h	65.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1537	573
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	0.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000
Flow Rate (vi),pc/h	1635	610
Capacity (c), pc/h	4700	2000
Volume-to-Capacity Ratio (v/c)	0.48	0.31

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.302
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	58.1
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.0
Flow in Lanes 1 and 2 (v12), pc/h	1635	Ramp Junction Speed (S), mi/h	58.1
Flow Entering Ramp-Infl. Area (vR12), pc/h	2245	Average Density (D), pc/mi/ln	19.3

Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	17.8
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, ln	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	883	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	939
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	64.3
Speed 2 (S ₂), mi/h	0.7	Density (D _{ML}), pc/mi/ln	14.6
Speed 3 (S ₃), mi/h	2.5	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	A.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	4	Segment Name	West of Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	5280	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	2110	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,GP}), pc/h/ln	1122
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.48
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (f _{lw})	-	Average Speed (S), mi/h	65.0
Right-Side Lateral Clearance Adj. (f _{RLC})	-	Density (D _{GP}), pc/mi/ln	17.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	883	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	939
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	64.3
Speed 2 (S_2), mi/h	0.7	Density (D_{ML}), pc/mi/ln	14.6
Speed 3 (S_3), mi/h	2.5	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	1	Segment Name	West of Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	5280	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.88
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	3119	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,GP}$), pc/h/ln	1659
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	64.1
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (DGP), pc/mi/ln	25.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	1320	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1404
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.83
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	60.9
Speed 2 (S_2), mi/h	4.1	Density (D_{ML}), pc/mi/ln	23.1
Speed 3 (S_3), mi/h	10.7	Level of Service (LOS)	C

HCS7 Freeway Diverge Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	2	Segment Name	Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), In	2	1
Free-Flow Speed (FFS), mi/h	65.0	35.0
Segment Length (L) / Deceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	3119	885
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	0.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000
Flow Rate (vi),pc/h	3318	941
Capacity (c), pc/h	4700	2000
Volume-to-Capacity Ratio (v/c)	0.71	0.47

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.513
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.2
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	1.000	Outer Lanes Freeway Speed (SO), mi/h	71.3
Flow in Lanes 1 and 2 (v12), pc/h	3318	Ramp Junction Speed (S), mi/h	53.2
Flow Entering Ramp-Infl. Area (vR12), pc/h	-	Average Density (D), pc/mi/ln	31.2

Level of Service (LOS)	C	Density in Ramp Influence Area (DR), pc/mi/ln	25.6
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, ln	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	1320	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1404
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.83
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	60.9
Speed 2 (S ₂), mi/h	4.1	Density (D _{ML}), pc/mi/ln	23.1
Speed 3 (S ₃), mi/h	10.7	Level of Service (LOS)	C

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	3	Segment Name	Nason Street Off-Ramp and Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	2725	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	2234	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,GP}), pc/h/ln	1188
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.51
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	64.6
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (DGP), pc/mi/ln	18.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	1320	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1404
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.83
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	60.9
Speed 2 (S_2), mi/h	4.1	Density (D_{ML}), pc/mi/ln	23.1
Speed 3 (S_3), mi/h	10.7	Level of Service (LOS)	C

HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	4	Segment Name	East of Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

Number of Lanes (N), In	3	Segment Type	Freeway
Segment Length (Ls), ft	500	Number of Maneuver Lanes (NWL), In	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LCRF), Ic	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LCFR), Ic	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LCRR), Ic	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (Vi), veh/h	2234	239	0	0
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	0.00	0.00	0.00	0.00
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000	1.000	1.000
Flow Rate (vi), pc/h	2377	254	0	0
Weaving Flow Rate (vw), pc/h	254	Freeway Max Capacity (cIFL), pc/h/ln	2350	
Non-Weaving Flow Rate (vNW), pc/h	2377	Density-Based Capacity (cIWL), pc/h/ln	2120	
Total Flow Rate (v), pc/h	2631	Demand Flow-Based Capacity (cIW), pc/h	24742	
Volume Ratio (VR)	0.097	Weaving Segment Capacity (cW), veh/h	6360	
Minimum Lane Change Rate (LCMIN), Ic/h	254	Adjusted Weaving Area Capacity, pc/h	6360	
Maximum Weaving Length (LMAX), ft	3511	Volume-to-Capacity Ratio (v/c)	0.41	

Speed and Density

Non-Weaving Vehicle Index (INW)	59	Average Weaving Speed (Sw), mi/h	55.7
Non-Weaving Lane Change Rate (LCNW), Ic/h	183	Average Non-Weaving Speed (SNW), mi/h	59.0
Weaving Lane Change Rate (LCW), Ic/h	323	Average Speed (S), mi/h	58.7
Weaving Lane Change Rate (LCAII), Ic/h	506	Density (D), pc/mi/ln	14.9

Weaving Intensity Factor (W)	0.228	Level of Service (LOS)	B
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	1320	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1404
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.83
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	60.9
Speed 2 (S ₂), mi/h	4.1	Density (D _{ML}), pc/mi/ln	23.1
Speed 3 (S ₃), mi/h	10.7	Level of Service (LOS)	C

HCS7 Freeway Weaving Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	1	Segment Name	East of Nason Street Off-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

Number of Lanes (N), In	3	Segment Type	Freeway
Segment Length (Ls), ft	500	Number of Maneuver Lanes (NWL), In	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LCRF), Ic	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LCFR), Ic	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LCRR), Ic	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (Vi), veh/h	1539	0	0	217
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	0.00	0.00	0.00	0.00
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000	1.000	1.000
Flow Rate (vi), pc/h	1637	0	0	231
Weaving Flow Rate (vw), pc/h	231	Freeway Max Capacity (cIFL), pc/h/ln		2350
Non-Weaving Flow Rate (vNW), pc/h	1637	Density-Based Capacity (cIWL), pc/h/ln		2100
Total Flow Rate (v), pc/h	1868	Demand Flow-Based Capacity (cIW), pc/h		19355
Volume Ratio (VR)	0.124	Weaving Segment Capacity (cw), veh/h		6300
Minimum Lane Change Rate (LCMIN), Ic/h	231	Adjusted Weaving Area Capacity, pc/h		6300
Maximum Weaving Length (LMAX), ft	3774	Volume-to-Capacity Ratio (v/c)		0.30

Speed and Density

Non-Weaving Vehicle Index (INW)	41	Average Weaving Speed (Sw), mi/h	58.0
Non-Weaving Lane Change Rate (LCNW), Ic/h	30	Average Non-Weaving Speed (SNW), mi/h	60.3
Weaving Lane Change Rate (LCW), Ic/h	300	Average Speed (S), mi/h	60.0
Weaving Lane Change Rate (LCAII), Ic/h	330	Density (D), pc/mi/ln	10.4

Weaving Intensity Factor (W)	0.163	Level of Service (LOS)	B
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	944	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1004
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	64.0
Speed 2 (S ₂), mi/h	1.0	Density (D _{ML}), pc/mi/ln	15.7
Speed 3 (S ₃), mi/h	3.3	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	2	Segment Name	Nason Street Off-Ramp and Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	1700	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	1539	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate (V_p, GP), pc/h/ln	818
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (fLW)	-	Average Speed (S), mi/h	64.8
Right-Side Lateral Clearance Adj. (fRLC)	-	Density (DGP), pc/mi/ln	12.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFSadj), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	944	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1004
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	64.0
Speed 2 (S_2), mi/h	1.0	Density (D_{ML}), pc/mi/ln	15.7
Speed 3 (S_3), mi/h	3.3	Level of Service (LOS)	B

HCS7 Freeway Merge Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	3	Segment Name	Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), In	2	1
Free-Flow Speed (FFS), mi/h	65.0	35.0
Segment Length (L) / Acceleration Length (LA),ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Final Capacity Adjustment Factor (CAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000

Demand and Capacity

Demand Volume (Vi)	1539	701
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	0.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (fHV)	1.000	1.000
Flow Rate (vi),pc/h	1637	746
Capacity (c), pc/h	4700	2000
Volume-to-Capacity Ratio (v/c)	0.51	0.37

Speed and Density

Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO)	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.307
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	57.9
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	1.000	Outer Lanes Freeway Speed (SO), mi/h	65.0
Flow in Lanes 1 and 2 (v12), pc/h	1637	Ramp Junction Speed (S), mi/h	57.9
Flow Entering Ramp-Infl. Area (vR12), pc/h	2383	Average Density (D), pc/mi/ln	20.6

Level of Service (LOS)	B	Density in Ramp Influence Area (DR), pc/mi/ln	18.8
Managed Lane Geometric Data			
Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, ln	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-
Managed Lane Adjustment Factors			
Driver Population	All Familiar	Driver Population CAF	1.000
Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		
Managed Lane Demand and Capacity			
Volume (V _{ML}), veh/h	944	Heavy Vehicle Adjustment Factor (f _{HV})	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,ML}), pc/h/ln	1004
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (E _T)	2.000		
Managed Lane Speed and Density			
Breakpoint (BP _{ML})	500	Indicator Variable (I _c)	0
Speed 1 (S ₁), mi/h	65.0	Average Speed (S _{ML}), mi/h	64.0
Speed 2 (S ₂), mi/h	1.0	Density (D _{ML}), pc/mi/ln	15.7
Speed 3 (S ₃), mi/h	3.3	Level of Service (LOS)	B

HCS7 Basic Freeway Report

Project Information

Analyst		Date	5/4/2021
Agency	LSA	Analysis Year	Project Completion (2023) WP
Jurisdiction		Time Period Analyzed	P.M. Peak Hour
Project Description	Village at Moreno Valley	Unit	United States Customary
Segment Number	4	Segment Name	West of Nason Street On-Ramp
Time Period Number	1	Segment Analysis Time Period	07:00-07:15

General Purpose Geometric Data

Number of General Purpose Lanes, In	2	Terrain Type	Level
Segment Length (L), ft	5280	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	65.0	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	65.0
Right-Side Lateral Clearance, ft	-		

General Purpose Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Final Capacity Adjustment Factor (CAF)	1.000
Incident Type	No Incident	Demand Adjustment Factor (DAF)	1.000

General Purpose Demand and Capacity

Demand Volume veh/h	2240	Heavy Vehicle Adjustment Factor (fhv)	1.000
Peak Hour Factor	0.94	Flow Rate (V _{p,GP}), pc/h/ln	1192
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2350
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c _{adj}), pc/h/ln	2350
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.51
Passenger Car Equivalent (ET)	2.000		

General Purpose Speed and Density

Lane Width Adjustment (f _{lw})	-	Average Speed (S), mi/h	65.0
Right-Side Lateral Clearance Adj. (f _{RLC})	-	Density (D _{GP}), pc/mi/ln	18.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS _{adj}), mi/h	65.0		

Managed Lane Geometric Data

Managed Lane Type	Continuous Access	Free-Flow Speed (FFS), mi/h	65.0
Number of Managed Lanes, In	1	Terrain Type	Level
Managed Lane Length, ft	5280	Percent Grade, %	-

Managed Lane Adjustment Factors

Driver Population	All Familiar	Driver Population CAF	1.000
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Weather Type	Non-Severe Weather	Weather Type CAF	1.000
Driver Population SAF	1.000	Final Speed Adjustment Factor (SAF)	1.000
Weather Type SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Demand Adjustment Factor (DAF)	1.000		

Managed Lane Demand and Capacity

Volume (V_{ML}), veh/h	944	Heavy Vehicle Adjustment Factor (f_{HV})	1.000
Peak Hour Factor	0.94	Flow Rate ($V_{p,ML}$), pc/h/ln	1004
Total Trucks, %	0.00	Capacity (c), pc/h/ln	1700
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	1700
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.59
Passenger Car Equivalent (E_T)	2.000		

Managed Lane Speed and Density

Breakpoint (BP_{ML})	500	Indicator Variable (I_c)	0
Speed 1 (S_1), mi/h	65.0	Average Speed (S_{ML}), mi/h	64.0
Speed 2 (S_2), mi/h	1.0	Density (D_{ML}), pc/mi/ln	15.7
Speed 3 (S_3), mi/h	3.3	Level of Service (LOS)	B

APPENDIX F:

QUEUING ANALYSIS WORKSHEETS

Queues
1: Lasselle Street & Iris Avenue

Village at Moreno Valley
Existing NP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	159	866	619	768	418	677	471	135	649
v/c Ratio	0.22	0.75	0.80	0.65	1.34	0.65	0.49	0.49	0.65
Control Delay	30.8	31.2	32.9	23.6	209.3	32.3	10.8	46.0	31.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.8	31.2	32.9	23.6	209.3	32.3	10.8	46.0	31.8
Queue Length 50th (ft)	37	135	91	79	-161	184	111	38	171
Queue Length 95th (ft)	68	181	151	82	#254	246	190	68	233
Internal Link Dist (ft)		580		4542		530			400
Turn Bay Length (ft)	200		220		200		200	200	
Base Capacity (vph)	721	1237	817	1887	311	1041	978	278	1000
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.70	0.76	0.41	1.34	0.65	0.48	0.49	0.65

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.

Intersection: 2: Morrison Street & Fir Avenue

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	90	100	122	30	68	46	25	45
Average Queue (ft)	47	47	68	7	29	26	11	21
95th Queue (ft)	80	80	111	27	54	44	31	41
Link Distance (ft)	85		2544		910	910		453
Upstream Blk Time (%)	1	0						
Queuing Penalty (veh)	0	0						
Storage Bay Dist (ft)		100		100			100	
Storage Blk Time (%)	1	0	2					
Queuing Penalty (veh)	1	1	0					

Queues
3: Morrison Street & Eucalyptus Avenue

Village at Moreno Valley
Existing NP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	36	553	49	328	72	85	133	6	176
v/c Ratio	0.20	0.53	0.27	0.25	0.40	0.11	0.13	0.03	0.16
Control Delay	31.8	23.1	33.2	18.1	36.4	14.9	2.5	29.0	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.8	23.1	33.2	18.1	36.4	14.9	2.5	29.0	11.3
Queue Length 50th (ft)	15	105	20	45	30	20	0	2	16
Queue Length 95th (ft)	32	115	40	73	53	46	14	10	27
Internal Link Dist (ft)		992		2544		621			276
Turn Bay Length (ft)	150		155		155			105	
Base Capacity (vph)	183	1050	183	1292	183	787	992	180	1114
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.53	0.27	0.25	0.39	0.11	0.13	0.03	0.16
Intersection Summary									

Queues

4: Nason Street & Elder Avenue/SR-60 Westbound Ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	7	48	280	121	27	41	167	381	533	40	527
v/c Ratio	0.09	0.41	0.51	0.66	0.08	0.08	0.71	0.17	0.38	0.38	0.27
Control Delay	59.8	66.2	10.5	70.4	41.7	2.5	60.7	6.3	8.5	66.0	17.7
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	59.8	66.2	10.5	70.4	41.7	2.5	60.7	6.3	8.5	66.0	17.7
Queue Length 50th (ft)	6	38	26	96	18	0	98	76	269	32	118
Queue Length 95th (ft)	19	69	65	138	41	5	137	84	391	62	170
Internal Link Dist (ft)		278			273			818			577
Turn Bay Length (ft)	120		120			165	360		150	95	
Base Capacity (vph)	288	364	557	288	383	588	251	2293	1432	216	1968
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.13	0.50	0.42	0.07	0.07	0.67	0.17	0.37	0.19	0.27

Intersection Summary

Queues
5: Nason Street & SR-60 Eastbound Ramp

Village at Moreno Valley
Existing NP - AM Peak Hour



Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	43	455	446	1230	64	861
v/c Ratio	0.09	0.90	0.89	0.62	0.50	0.37
Control Delay	32.9	50.7	48.4	22.8	67.0	17.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.9	50.7	48.4	22.8	67.0	17.5
Queue Length 50th (ft)	26	254	245	360	52	173
Queue Length 95th (ft)	47	303	294	425	89	269
Internal Link Dist (ft)		344		1043		818
Turn Bay Length (ft)			250		245	
Base Capacity (vph)	563	588	586	1980	216	2356
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	0.08	0.77	0.76	0.62	0.30	0.37
Intersection Summary						

Queues
6: Nason Street & Fir Avenue

Village at Moreno Valley
Existing NP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	143	149	77	98	77	51	964	196	1262	212
v/c Ratio	0.62	0.50	0.46	0.52	0.19	0.35	0.51	1.41	0.64	0.23
Control Delay	56.6	44.7	55.6	55.9	1.0	43.3	12.6	259.7	21.7	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.6	44.7	55.6	55.9	1.0	43.3	12.6	259.7	21.7	5.4
Queue Length 50th (ft)	97	90	52	67	0	30	267	~186	323	15
Queue Length 95th (ft)	143	137	91	108	0	m53	305	#304	453	55
Internal Link Dist (ft)		2558		456			1250		1043	
Turn Bay Length (ft)	100		165			230		505		260
Base Capacity (vph)	492	449	352	310	405	205	1894	139	1982	924
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.33	0.22	0.32	0.19	0.25	0.51	1.41	0.64	0.23

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.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues
7: Nason Street & Eucalyptus Avenue

Village at Moreno Valley
Existing NP - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	277	225	286	135	140	36	77	794	156	25	1373	104
v/c Ratio	0.92	0.43	0.81	0.56	0.34	0.12	0.68	0.41	0.18	0.22	0.74	0.13
Control Delay	81.2	43.8	35.2	55.3	46.0	0.8	65.6	8.6	0.7	50.7	20.5	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.2	43.8	35.2	55.3	46.0	0.8	65.6	8.6	0.7	50.7	20.5	1.9
Queue Length 50th (ft)	194	77	80	91	50	0	58	101	1	14	467	10
Queue Length 95th (ft)	#267	88	116	134	64	0	m#97	86	2	m26	467	10
Internal Link Dist (ft)		2544			704			1224			1250	
Turn Bay Length (ft)	200		220	200		100	275		155	250		205
Base Capacity (vph)	305	810	452	239	590	382	114	1931	888	114	1856	825
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.28	0.63	0.56	0.24	0.09	0.68	0.41	0.18	0.22	0.74	0.13

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues
8: Nason Street & Dracea Avenue

Village at Moreno Valley
Existing NP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	162	113	35	40	252	1037	15	13	1229	291
v/c Ratio	0.77	0.34	0.19	0.14	0.78	0.40	0.01	0.11	0.63	0.32
Control Delay	67.3	12.6	41.4	30.2	43.0	9.4	0.1	32.5	6.0	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.3	12.6	41.4	30.2	43.0	9.4	0.1	32.5	6.0	1.5
Queue Length 50th (ft)	109	7	22	17	149	283	0	9	92	3
Queue Length 95th (ft)	161	45	47	42	161	144	m0	m11	105	8
Internal Link Dist (ft)		836		752		1235			1224	
Turn Bay Length (ft)	200		105		180		100	280		100
Base Capacity (vph)	253	383	216	344	385	2602	1149	114	1959	902
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.30	0.16	0.12	0.65	0.40	0.01	0.11	0.63	0.32

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
9: Nason Street & Cottonwood Avenue

Village at Moreno Valley
Existing NP - AM Peak Hour



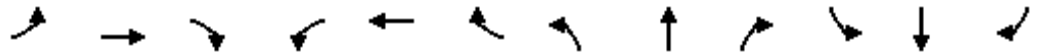
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	139	56	32	7	200	33	865	7	31	1177	163
v/c Ratio	0.65	0.14	0.07	0.06	0.54	0.28	0.39	0.01	0.24	0.53	0.15
Control Delay	60.6	35.7	0.3	49.8	24.7	71.8	25.0	0.0	65.2	3.4	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.6	35.7	0.3	49.8	24.7	71.8	25.0	0.0	65.2	3.4	0.4
Queue Length 50th (ft)	94	31	0	5	26	25	309	0	18	15	0
Queue Length 95th (ft)	129	58	0	16	43	48	300	m0	m29	21	1
Internal Link Dist (ft)	1005			1051			2198			1235	
Turn Bay Length (ft)	90		55	300		200		160	240		295
Base Capacity (vph)	254	467	510	114	639	123	2203	1044	128	2222	1056
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.12	0.06	0.06	0.31	0.27	0.39	0.01	0.24	0.53	0.15

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
10: Nason Street & Alessandro Boulevard

Village at Moreno Valley
Existing NP - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	68	161	127	167	398	157	106	593	38	62	933	128
v/c Ratio	0.27	0.18	0.25	0.70	0.78	0.29	0.58	0.38	0.05	0.33	0.43	0.17
Control Delay	50.9	29.9	3.8	66.6	47.3	5.4	39.4	25.2	2.9	38.3	18.7	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.9	29.9	3.8	66.6	47.3	5.4	39.4	25.2	2.9	38.3	18.7	4.1
Queue Length 50th (ft)	23	45	0	60	259	0	74	222	2	31	62	0
Queue Length 95th (ft)	42	56	19	87	289	32	m125	261	m14	59	119	26
Internal Link Dist (ft)		755			555			1910			275	
Turn Bay Length (ft)	250		125	245		245	285		285	255		320
Base Capacity (vph)	249	1444	735	238	768	746	190	1565	784	205	2148	756
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.11	0.17	0.70	0.52	0.21	0.56	0.38	0.05	0.30	0.43	0.17

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
11: Nason Street & Cactus Avenue

Village at Moreno Valley
Existing NP - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	118	365	91	15	556	143	484	12	72	402	240
v/c Ratio	0.61	0.42	0.11	0.13	0.85	0.53	0.42	0.02	0.51	0.37	0.37
Control Delay	60.6	21.5	0.7	51.4	44.7	56.3	33.8	0.1	82.5	53.2	27.9
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	60.6	21.5	0.7	51.4	44.7	56.3	33.8	0.1	82.5	53.2	27.9
Queue Length 50th (ft)	80	150	0	10	350	50	148	0	54	158	87
Queue Length 95th (ft)	126	207	0	29	382	77	199	0	m93	192	153
Internal Link Dist (ft)		661			502		5439			589	
Turn Bay Length (ft)	205			95		240		325	275		340
Base Capacity (vph)	224	926	864	114	792	272	1162	621	149	1092	656
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.39	0.11	0.13	0.70	0.53	0.42	0.02	0.48	0.37	0.37

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
12: Hillrose Lane/Nason Street & Iris Avenue

Village at Moreno Valley
Existing NP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	387	1013	11	782	112	18	64	151	13	315
v/c Ratio	0.66	0.46	0.08	0.65	0.20	0.13	0.13	0.62	0.02	0.29
Control Delay	49.2	26.2	40.0	34.3	0.8	40.9	25.9	47.3	21.4	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.2	26.2	40.0	34.3	0.8	40.9	25.9	47.3	21.4	4.1
Queue Length 50th (ft)	114	181	6	147	0	10	24	82	4	18
Queue Length 95th (ft)	137	197	20	160	0	26	52	119	16	49
Internal Link Dist (ft)		4542		882			142		5439	
Turn Bay Length (ft)	260		170		160			210		
Base Capacity (vph)	704	2187	140	1198	554	140	498	302	760	1061
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.46	0.08	0.65	0.20	0.13	0.13	0.50	0.02	0.30
Intersection Summary										

Queues
1: Lasselle Street & Iris Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	201	781	661	783	244	673	520	231	891
v/c Ratio	0.29	0.70	0.81	0.64	0.90	0.69	0.55	0.71	0.87
Control Delay	31.8	28.8	34.7	27.6	76.4	34.3	12.1	53.9	42.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.8	28.8	34.7	27.6	76.4	34.3	12.1	53.9	42.0
Queue Length 50th (ft)	48	115	105	87	72	185	133	67	257
Queue Length 95th (ft)	84	155	166	92	#141	249	224	#131	#397
Internal Link Dist (ft)		580		4542		530			400
Turn Bay Length (ft)	200		220		200		200	200	
Base Capacity (vph)	704	1246	856	1944	272	981	970	325	1028
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.63	0.77	0.40	0.90	0.69	0.54	0.71	0.87

Intersection Summary

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

Intersection: 2: Morrison Street & Fir Avenue

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	100	82	80	31	48	44	25	21
Average Queue (ft)	40	25	49	12	18	18	7	13
95th Queue (ft)	71	53	69	35	38	34	25	28
Link Distance (ft)	85		2544		910	910		453
Upstream Blk Time (%)	0	0						
Queuing Penalty (veh)	0	0						
Storage Bay Dist (ft)		100		100			100	
Storage Blk Time (%)	0	0	0					
Queuing Penalty (veh)	0	0	0					

Queues
3: Morrison Street & Eucalyptus Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	9	211	48	221	15	33	54	1	77
v/c Ratio	0.05	0.20	0.26	0.16	0.08	0.04	0.06	0.01	0.05
Control Delay	29.4	19.4	33.1	15.1	29.8	14.7	1.2	28.0	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.4	19.4	33.1	15.1	29.8	14.7	1.2	28.0	10.2
Queue Length 50th (ft)	4	35	20	28	6	8	0	0	5
Queue Length 95th (ft)	16	61	49	65	22	29	8	5	22
Internal Link Dist (ft)		992		2544		621			276
Turn Bay Length (ft)	150		155		155			105	
Base Capacity (vph)	183	1050	183	1408	183	787	976	180	1425
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.20	0.26	0.16	0.08	0.04	0.06	0.01	0.05
Intersection Summary									

Queues

4: Nason Street & Elder Avenue/SR-60 Westbound Ramp

Village at Moreno Valley

Existing NP - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	8	26	127	145	33	23	179	290	598	29	316
v/c Ratio	0.10	0.27	0.30	0.70	0.11	0.06	0.71	0.12	0.42	0.30	0.16
Control Delay	60.1	63.5	7.5	70.4	43.2	0.3	55.0	11.7	7.1	64.5	16.5
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	60.1	63.5	7.5	70.4	43.2	0.3	55.0	11.7	7.1	64.5	16.5
Queue Length 50th (ft)	6	21	0	115	22	0	142	72	53	23	67
Queue Length 95th (ft)	24	51	45	178	53	0	183	114	403	55	117
Internal Link Dist (ft)		278			273			818			577
Turn Bay Length (ft)	120		120			165	360		150	95	
Base Capacity (vph)	288	364	438	288	383	499	263	2369	1466	216	1987
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.07	0.29	0.50	0.09	0.05	0.68	0.12	0.41	0.13	0.16

Intersection Summary

Queues
5: Nason Street & SR-60 Eastbound Ramp

Village at Moreno Valley
Existing NP - PM Peak Hour



Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	120	376	368	1151	61	547
v/c Ratio	0.53	0.81	0.80	0.48	0.49	0.19
Control Delay	57.6	24.4	22.6	11.9	67.6	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	24.4	22.6	11.9	67.6	7.7
Queue Length 50th (ft)	94	52	45	204	50	44
Queue Length 95th (ft)	139	158	148	380	96	158
Internal Link Dist (ft)		344		1043		818
Turn Bay Length (ft)			250		245	
Base Capacity (vph)	563	688	686	2418	216	2807
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	0.21	0.55	0.54	0.48	0.28	0.19
Intersection Summary						

Queues
6: Nason Street & Fir Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	84	118	164	143	145	23	933	295	769	204
v/c Ratio	0.40	0.57	0.68	0.52	0.28	0.19	0.50	2.40	0.36	0.20
Control Delay	49.2	53.9	59.2	51.1	6.7	54.5	10.0	676.9	14.8	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.2	53.9	59.2	51.1	6.7	54.5	10.0	676.9	14.8	3.0
Queue Length 50th (ft)	55	76	111	97	0	14	218	~344	123	0
Queue Length 95th (ft)	101	129	178	156	47	m32	197	#515	255	42
Internal Link Dist (ft)		2558		456			1250		1043	
Turn Bay Length (ft)	100		165			230		505		260
Base Capacity (vph)	443	451	303	322	519	254	1859	123	2124	1006
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.26	0.54	0.44	0.28	0.09	0.50	2.40	0.36	0.20

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.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues
7: Nason Street & Eucalyptus Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	77	151	70	171	150	21	36	910	223	14	879	110
v/c Ratio	0.46	0.46	0.25	0.62	0.24	0.05	0.32	0.43	0.22	0.12	0.43	0.12
Control Delay	55.7	51.7	2.2	53.2	40.8	0.3	41.9	7.9	1.2	40.8	16.8	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.7	51.7	2.2	53.2	40.8	0.3	41.9	7.9	1.2	40.8	16.8	5.7
Queue Length 50th (ft)	52	54	0	114	49	0	27	81	0	10	241	10
Queue Length 95th (ft)	98	85	0	179	78	0	m55	83	2	m24	331	63
Internal Link Dist (ft)		2544			704			1224			1250	
Turn Bay Length (ft)	200		220	200		100	275		155	250		205
Base Capacity (vph)	305	810	471	276	642	401	114	2130	1016	117	2060	953
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.19	0.15	0.62	0.23	0.05	0.32	0.43	0.22	0.12	0.43	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
8: Nason Street & Dracea Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	124	50	13	14	53	1151	18	15	962	128
v/c Ratio	0.67	0.19	0.07	0.06	0.36	0.43	0.01	0.13	0.39	0.11
Control Delay	61.5	14.1	39.6	26.2	43.9	9.7	0.4	40.0	2.5	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.5	14.1	39.6	26.2	43.9	9.7	0.4	40.0	2.5	0.7
Queue Length 50th (ft)	84	2	8	4	26	328	0	11	21	1
Queue Length 95th (ft)	139	34	25	21	58	457	m1	m26	57	m8
Internal Link Dist (ft)		836		752		1235			1224	
Turn Bay Length (ft)	200		105		180		100	280		100
Base Capacity (vph)	256	342	256	322	385	2673	1211	114	2459	1125
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.15	0.05	0.04	0.14	0.43	0.01	0.13	0.39	0.11

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
9: Nason Street & Cottonwood Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



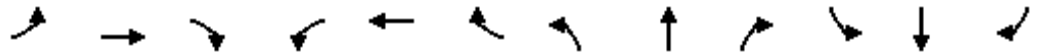
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	88	28	45	2	69	34	960	9	29	735	113
v/c Ratio	0.50	0.09	0.12	0.02	0.27	0.29	0.38	0.01	0.23	0.29	0.10
Control Delay	56.2	38.2	0.6	48.5	35.3	77.7	25.4	0.0	60.8	3.2	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.2	38.2	0.6	48.5	35.3	77.7	25.4	0.0	60.8	3.2	1.0
Queue Length 50th (ft)	60	16	0	1	15	22	321	0	18	55	0
Queue Length 95th (ft)	107	44	0	10	37	m57	443	m0	45	67	2
Internal Link Dist (ft)	1005			1051			2198			1235	
Turn Bay Length (ft)	90		55	300		200		160	240		295
Base Capacity (vph)	254	457	502	114	578	123	2497	1163	127	2512	1169
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.06	0.09	0.02	0.12	0.28	0.38	0.01	0.23	0.29	0.10

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
10: Nason Street & Alessandro Boulevard

Village at Moreno Valley
Existing NP - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	141	346	89	29	222	72	88	798	104	55	652	83
v/c Ratio	0.45	0.41	0.18	0.13	0.70	0.18	0.50	0.44	0.12	0.29	0.25	0.09
Control Delay	51.9	37.2	1.4	49.9	54.4	1.0	47.1	24.8	4.3	30.5	9.5	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.9	37.2	1.4	49.9	54.4	1.0	47.1	24.8	4.3	30.5	9.5	0.2
Queue Length 50th (ft)	49	115	0	10	150	0	62	251	2	38	35	0
Queue Length 95th (ft)	79	145	6	25	216	0	m111	342	32	59	48	1
Internal Link Dist (ft)		755			555			1910			275	
Turn Bay Length (ft)	250		125	245		245	285		285	255		320
Base Capacity (vph)	311	1444	735	238	768	742	185	1794	877	205	2609	886
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.24	0.12	0.12	0.29	0.10	0.48	0.44	0.12	0.27	0.25	0.09

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
11: Nason Street & Cactus Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	139	421	90	25	347	38	338	22	96	473	130
v/c Ratio	0.62	0.65	0.14	0.22	0.77	0.17	0.24	0.03	0.64	0.29	0.16
Control Delay	57.1	35.2	0.9	53.8	49.4	50.1	25.5	0.1	86.2	39.3	21.7
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	57.1	35.2	0.9	53.8	49.4	50.1	25.5	0.1	86.2	39.3	21.7
Queue Length 50th (ft)	94	267	0	17	225	13	83	0	59	146	33
Queue Length 95th (ft)	152	310	5	46	295	30	144	0	#144	241	103
Internal Link Dist (ft)		661			502		5439			589	
Turn Bay Length (ft)	205			95		240		325	275		340
Base Capacity (vph)	247	915	855	114	792	232	1409	721	149	1622	807
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.46	0.11	0.22	0.44	0.16	0.24	0.03	0.64	0.29	0.16

Intersection Summary

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

Queues
12: Hillrose Lane/Nason Street & Iris Avenue

Village at Moreno Valley
Existing NP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	238	741	23	868	138	13	54	121	50	396
v/c Ratio	0.46	0.38	0.16	0.72	0.25	0.09	0.10	0.54	0.06	0.35
Control Delay	45.0	25.0	41.8	36.0	1.1	40.2	21.8	45.3	18.1	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.0	25.0	41.8	36.0	1.1	40.2	21.8	45.3	18.1	4.4
Queue Length 50th (ft)	71	133	13	167	0	7	15	66	14	32
Queue Length 95th (ft)	m105	166	37	213	0	25	50	115	48	103
Internal Link Dist (ft)		4542		882			142		5439	
Turn Bay Length (ft)	260		170		160			210		
Base Capacity (vph)	704	1948	140	1198	554	140	552	302	848	1119
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.38	0.16	0.72	0.25	0.09	0.10	0.40	0.06	0.35

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
1: Lasselle Street & Iris Avenue

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	165	900	644	798	435	703	490	140	675
v/c Ratio	0.23	0.76	0.82	0.65	1.40	0.70	0.52	0.50	0.70
Control Delay	31.4	31.4	34.3	22.1	231.2	34.0	11.5	46.3	33.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.4	31.4	34.3	22.1	231.2	34.0	11.5	46.3	33.5
Queue Length 50th (ft)	39	143	100	75	-172	193	119	40	180
Queue Length 95th (ft)	72	190	#161	78	#265	257	203	70	243
Internal Link Dist (ft)		580		4542		530			400
Turn Bay Length (ft)	200		220		200		200	200	
Base Capacity (vph)	720	1238	817	1886	311	1005	963	280	967
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.73	0.79	0.42	1.40	0.70	0.51	0.50	0.70

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.

Intersection: 2: Morrison Street & Fir Avenue

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	56	95	126	30	48	45	25	45
Average Queue (ft)	38	51	75	8	30	22	11	21
95th Queue (ft)	58	87	115	29	46	36	31	40
Link Distance (ft)	85		2544		910	910		453
Upstream Blk Time (%)		1						
Queuing Penalty (veh)		0						
Storage Bay Dist (ft)		100		100			100	
Storage Blk Time (%)		1	3					
Queuing Penalty (veh)		2	0					

Queues
3: Morrison Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	38	575	50	340	75	88	139	6	183
v/c Ratio	0.21	0.55	0.27	0.26	0.41	0.11	0.14	0.03	0.16
Control Delay	32.0	23.4	33.3	18.2	36.9	14.9	2.4	29.0	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.0	23.4	33.3	18.2	36.9	14.9	2.4	29.0	11.3
Queue Length 50th (ft)	15	110	20	46	31	21	0	2	16
Queue Length 95th (ft)	33	121	40	75	54	47	14	10	27
Internal Link Dist (ft)		992		2544		621			276
Turn Bay Length (ft)	150		155		155			105	
Base Capacity (vph)	183	1049	183	1292	183	787	995	180	1116
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.55	0.27	0.26	0.41	0.11	0.14	0.03	0.16
Intersection Summary									

Queues

4: Nason Street & Elder Avenue/SR-60 Westbound Ramp

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	7	51	291	126	28	42	173	396	554	41	548
v/c Ratio	0.09	0.43	0.54	0.67	0.09	0.08	0.71	0.17	0.40	0.39	0.28
Control Delay	59.8	66.5	13.0	70.4	41.2	2.7	61.1	5.6	8.2	66.3	18.5
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	59.8	66.5	13.0	70.4	41.2	2.7	61.1	5.6	8.2	66.3	18.5
Queue Length 50th (ft)	6	40	42	100	18	0	102	62	302	33	127
Queue Length 95th (ft)	19	73	83	141	42	6	143	86	413	62	181
Internal Link Dist (ft)		278			273			818			577
Turn Bay Length (ft)	120		120			165	360		150	95	
Base Capacity (vph)	288	364	552	288	386	595	256	2276	1431	216	1935
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.14	0.53	0.44	0.07	0.07	0.68	0.17	0.39	0.19	0.28

Intersection Summary

Queues
5: Nason Street & SR-60 Eastbound Ramp

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	44	473	464	1280	66	896
v/c Ratio	0.09	0.91	0.90	0.67	0.51	0.39
Control Delay	32.2	53.4	51.0	24.9	67.5	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.2	53.4	51.0	24.9	67.5	18.6
Queue Length 50th (ft)	26	277	267	405	53	209
Queue Length 95th (ft)	48	336	325	451	89	277
Internal Link Dist (ft)		344		1043		818
Turn Bay Length (ft)			250		245	
Base Capacity (vph)	563	580	578	1920	216	2299
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	0.08	0.82	0.80	0.67	0.31	0.39
Intersection Summary						

Queues
6: Nason Street & Fir Avenue

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	149	155	81	101	81	54	1002	205	1312	220
v/c Ratio	0.63	0.51	0.47	0.52	0.20	0.37	0.53	1.47	0.67	0.24
Control Delay	56.5	44.9	55.7	56.0	1.1	44.0	12.8	284.9	23.0	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.5	44.9	55.7	56.0	1.1	44.0	12.8	284.9	23.0	6.0
Queue Length 50th (ft)	101	94	55	69	0	32	279	~199	348	18
Queue Length 95th (ft)	148	140	94	111	0	m55	m315	#319	487	61
Internal Link Dist (ft)		2558		456			1250		1043	
Turn Bay Length (ft)	100		165			230		505		260
Base Capacity (vph)	492	450	352	310	408	205	1876	139	1959	914
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.34	0.23	0.33	0.20	0.26	0.53	1.47	0.67	0.24

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.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues
7: Nason Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	288	234	297	140	145	38	79	825	162	26	1427	108
v/c Ratio	0.94	0.42	0.82	0.59	0.34	0.12	0.69	0.43	0.18	0.23	0.78	0.13
Control Delay	85.3	42.9	37.2	56.8	45.4	0.8	66.5	8.8	0.8	51.9	21.9	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	85.3	42.9	37.2	56.8	45.4	0.8	66.5	8.8	0.8	51.9	21.9	1.9
Queue Length 50th (ft)	203	78	91	95	50	0	59	109	1	15	515	12
Queue Length 95th (ft)	#283	91	128	138	66	0	m#102	89	2	m25	517	10
Internal Link Dist (ft)		2544			704			1224			1250	
Turn Bay Length (ft)	200		220	200		100	275		155	250		205
Base Capacity (vph)	305	810	449	238	590	382	114	1904	879	114	1828	815
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.29	0.66	0.59	0.25	0.10	0.69	0.43	0.18	0.23	0.78	0.13

Intersection Summary

- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues
8: Nason Street & Dracea Avenue

Village at Moreno Valley
 Project Completion (2023) NP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	168	117	37	41	262	1078	15	13	1278	304
v/c Ratio	0.78	0.34	0.20	0.14	0.80	0.42	0.01	0.11	0.66	0.34
Control Delay	68.3	12.3	41.6	30.4	44.4	9.7	0.1	32.1	6.3	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.3	12.3	41.6	30.4	44.4	9.7	0.1	32.1	6.3	1.6
Queue Length 50th (ft)	113	7	23	17	154	296	0	9	97	3
Queue Length 95th (ft)	167	46	48	43	174	146	m1	m11	109	10
Internal Link Dist (ft)		836		752		1235			1224	
Turn Bay Length (ft)	200		105		180		100	280		100
Base Capacity (vph)	253	386	213	345	385	2591	1144	114	1936	893
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.30	0.17	0.12	0.68	0.42	0.01	0.11	0.66	0.34

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
9: Nason Street & Cottonwood Avenue

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	144	59	33	7	208	35	900	7	32	1224	169
v/c Ratio	0.67	0.14	0.07	0.06	0.55	0.29	0.41	0.01	0.25	0.55	0.16
Control Delay	61.4	35.6	0.3	49.8	24.5	71.5	25.1	0.0	65.7	3.4	0.3
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	61.4	35.6	0.3	49.8	24.5	71.5	25.1	0.0	65.7	3.4	0.3
Queue Length 50th (ft)	98	33	0	5	27	26	323	0	19	15	0
Queue Length 95th (ft)	133	60	0	16	44	51	311	m0	m28	22	1
Internal Link Dist (ft)		1005			1051		2198			1235	
Turn Bay Length (ft)	90		55	300		200		160	240		295
Base Capacity (vph)	254	468	510	114	644	123	2194	1040	129	2214	1056
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.13	0.06	0.06	0.32	0.28	0.41	0.01	0.25	0.55	0.16

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
10: Nason Street & Alessandro Boulevard

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	71	167	132	173	413	163	110	616	39	65	971	133
v/c Ratio	0.28	0.18	0.25	0.73	0.78	0.29	0.59	0.40	0.05	0.35	0.46	0.18
Control Delay	51.0	29.1	4.0	68.4	46.5	5.2	39.9	25.6	3.0	40.5	20.6	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.0	29.1	4.0	68.4	46.5	5.2	39.9	25.6	3.0	40.5	20.6	5.0
Queue Length 50th (ft)	25	46	0	62	269	0	78	234	2	34	80	4
Queue Length 95th (ft)	43	57	21	#94	297	32	m129	269	m13	63	130	32
Internal Link Dist (ft)		755			555			1910			275	
Turn Bay Length (ft)	250		125	245		245	285		285	255		320
Base Capacity (vph)	251	1444	735	238	768	750	190	1530	770	205	2095	741
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.12	0.18	0.73	0.54	0.22	0.58	0.40	0.05	0.32	0.46	0.18

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues
11: Nason Street & Cactus Avenue

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	123	379	95	15	578	149	504	12	74	418	250
v/c Ratio	0.63	0.43	0.11	0.13	0.86	0.56	0.45	0.02	0.52	0.39	0.38
Control Delay	61.2	20.9	0.8	51.4	44.9	58.1	35.2	0.1	83.4	54.7	28.2
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	61.2	20.9	0.8	51.4	44.9	58.1	35.2	0.1	83.4	54.7	28.2
Queue Length 50th (ft)	84	152	0	10	363	52	158	0	56	164	92
Queue Length 95th (ft)	130	216	1	29	402	79	207	0	m94	198	160
Internal Link Dist (ft)		661			502		5439			589	
Turn Bay Length (ft)	205			95		240		325	275		340
Base Capacity (vph)	225	931	867	114	792	264	1122	604	149	1059	650
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.41	0.11	0.13	0.73	0.56	0.45	0.02	0.50	0.39	0.38

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
12: Hillrose Lane/Nason Street & Iris Avenue

Village at Moreno Valley
Project Completion (2023) NP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	403	1054	11	813	115	19	66	158	13	328
v/c Ratio	0.67	0.48	0.08	0.68	0.21	0.14	0.14	0.63	0.02	0.30
Control Delay	48.7	26.0	40.0	34.9	0.8	41.1	26.5	47.7	21.6	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.7	26.0	40.0	34.9	0.8	41.1	26.5	47.7	21.6	4.4
Queue Length 50th (ft)	119	188	6	154	0	10	25	85	4	21
Queue Length 95th (ft)	142	204	20	167	0	28	53	123	16	54
Internal Link Dist (ft)		4542		882			142		5439	
Turn Bay Length (ft)	260		170		160			210		
Base Capacity (vph)	704	2215	140	1198	554	140	483	302	750	1053
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.48	0.08	0.68	0.21	0.14	0.14	0.52	0.02	0.31
Intersection Summary										

Queues
1: Lasselle Street & Iris Avenue

Village at Moreno Valley
Project Completion (2023) NP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	209	813	688	814	254	700	541	240	926
v/c Ratio	0.30	0.72	0.83	0.65	0.93	0.73	0.57	0.75	0.92
Control Delay	32.3	29.4	36.2	26.4	83.1	35.7	12.7	56.9	47.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.3	29.4	36.2	26.4	83.1	35.7	12.7	56.9	47.6
Queue Length 50th (ft)	51	121	113	89	75	195	144	70	~273
Queue Length 95th (ft)	87	163	#180	95	#148	260	240	#138	#421
Internal Link Dist (ft)		580		4542		530			400
Turn Bay Length (ft)	200		220		200		200	200	
Base Capacity (vph)	696	1246	856	1944	272	965	963	320	1008
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.65	0.80	0.42	0.93	0.73	0.56	0.75	0.92

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.

Intersection: 2: Morrison Street & Fir Avenue

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	100	50	72	30	25	48	25	21
Average Queue (ft)	42	22	49	8	17	19	8	9
95th Queue (ft)	71	45	68	29	34	39	27	26
Link Distance (ft)	85		2544		910	910		453
Upstream Blk Time (%)	0							
Queuing Penalty (veh)	0							
Storage Bay Dist (ft)		100		100			100	
Storage Blk Time (%)	0							
Queuing Penalty (veh)	0							

Queues
3: Morrison Street & Eucalyptus Avenue

Village at Moreno Valley
 Project Completion (2023) NP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	9	219	51	230	16	34	56	1	80
v/c Ratio	0.05	0.21	0.28	0.16	0.09	0.04	0.06	0.01	0.06
Control Delay	29.4	19.5	33.5	15.2	29.9	14.7	1.3	28.0	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.4	19.5	33.5	15.2	29.9	14.7	1.3	28.0	10.2
Queue Length 50th (ft)	4	36	21	30	6	8	0	0	5
Queue Length 95th (ft)	16	63	52	67	23	30	8	5	23
Internal Link Dist (ft)		992		2544		621			276
Turn Bay Length (ft)	150		155		155			105	
Base Capacity (vph)	183	1050	183	1408	183	787	976	180	1425
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.21	0.28	0.16	0.09	0.04	0.06	0.01	0.06
Intersection Summary									

Queues

4: Nason Street & Elder Avenue/SR-60 Westbound Ramp

Village at Moreno Valley
Project Completion (2023) NP - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	8	27	132	151	34	24	186	301	621	30	328
v/c Ratio	0.10	0.28	0.30	0.72	0.12	0.06	0.71	0.13	0.43	0.31	0.17
Control Delay	60.1	63.6	7.2	71.0	43.0	0.3	53.8	10.4	7.7	64.7	17.1
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	60.1	63.6	7.2	71.0	43.0	0.3	53.8	10.4	7.7	64.7	17.1
Queue Length 50th (ft)	6	21	0	119	22	0	147	76	104	24	72
Queue Length 95th (ft)	24	52	46	184	54	0	174	97	453	56	123
Internal Link Dist (ft)		278			273			818			577
Turn Bay Length (ft)	120		120			165	360		150	95	
Base Capacity (vph)	288	364	449	288	387	504	271	2357	1467	216	1956
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.07	0.29	0.52	0.09	0.05	0.69	0.13	0.42	0.14	0.17

Intersection Summary

Queues
5: Nason Street & SR-60 Eastbound Ramp

Village at Moreno Valley
 Project Completion (2023) NP - PM Peak Hour



Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	126	391	383	1196	63	569
v/c Ratio	0.49	0.83	0.82	0.51	0.50	0.21
Control Delay	53.7	28.2	26.4	13.6	68.5	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.7	28.2	26.4	13.6	68.5	9.0
Queue Length 50th (ft)	97	78	70	232	51	70
Queue Length 95th (ft)	139	185	175	433	98	173
Internal Link Dist (ft)		344		1043		818
Turn Bay Length (ft)			250		245	
Base Capacity (vph)	563	677	676	2359	216	2750
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.58	0.57	0.51	0.29	0.21
Intersection Summary						

Queues
6: Nason Street & Fir Avenue

Village at Moreno Valley
Project Completion (2023) NP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	87	123	171	148	152	24	970	306	800	213
v/c Ratio	0.40	0.58	0.70	0.53	0.29	0.20	0.53	2.49	0.38	0.21
Control Delay	48.9	54.1	59.8	51.2	6.6	54.8	10.2	715.8	15.3	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.9	54.1	59.8	51.2	6.6	54.8	10.2	715.8	15.3	3.1
Queue Length 50th (ft)	57	79	116	101	0	15	241	~360	132	0
Queue Length 95th (ft)	104	134	184	161	48	m32	204	#534	269	43
Internal Link Dist (ft)		2558		456			1250		1043	
Turn Bay Length (ft)	100		165			230		505		260
Base Capacity (vph)	443	451	303	324	528	254	1840	123	2102	1002
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.27	0.56	0.46	0.29	0.09	0.53	2.49	0.38	0.21

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.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues
7: Nason Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) NP - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	80	157	73	178	156	22	37	947	232	16	914	114
v/c Ratio	0.47	0.47	0.26	0.62	0.24	0.05	0.32	0.45	0.23	0.14	0.45	0.12
Control Delay	55.8	51.8	2.2	52.2	40.3	0.2	40.7	8.0	1.3	40.9	17.6	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.8	51.8	2.2	52.2	40.3	0.2	40.7	8.0	1.3	40.9	17.6	5.8
Queue Length 50th (ft)	55	56	0	118	51	0	28	84	0	11	256	12
Queue Length 95th (ft)	101	88	0	185	81	0	m50	83	2	m26	349	66
Internal Link Dist (ft)		2544			704			1224			1250	
Turn Bay Length (ft)	200		220	200		100	275		155	250		205
Base Capacity (vph)	305	810	471	289	656	407	114	2097	1003	118	2029	941
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.19	0.15	0.62	0.24	0.05	0.32	0.45	0.23	0.14	0.45	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
8: Nason Street & Dracea Avenue

Village at Moreno Valley
 Project Completion (2023) NP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	128	52	13	14	55	1197	19	16	1000	134
v/c Ratio	0.68	0.19	0.07	0.06	0.37	0.46	0.02	0.11	0.41	0.12
Control Delay	61.9	13.9	39.4	26.1	45.7	10.1	0.4	34.0	2.4	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.9	13.9	39.4	26.1	45.7	10.1	0.4	34.0	2.4	0.6
Queue Length 50th (ft)	87	2	8	4	28	343	0	12	25	1
Queue Length 95th (ft)	142	35	25	21	60	481	m1	m24	58	8
Internal Link Dist (ft)		836		752		1235			1224	
Turn Bay Length (ft)	200		105		180		100	280		100
Base Capacity (vph)	256	344	256	322	385	2606	1182	188	2448	1120
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.15	0.05	0.04	0.14	0.46	0.02	0.09	0.41	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
9: Nason Street & Cottonwood Avenue

Village at Moreno Valley
Project Completion (2023) NP - PM Peak Hour



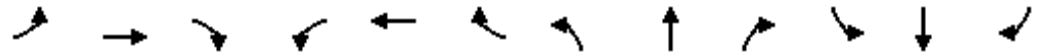
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	91	29	47	2	72	35	998	9	30	765	117
v/c Ratio	0.51	0.09	0.12	0.02	0.28	0.29	0.40	0.01	0.24	0.31	0.10
Control Delay	56.3	38.0	0.6	48.5	35.2	77.1	25.4	0.0	62.2	3.0	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.3	38.0	0.6	48.5	35.2	77.1	25.4	0.0	62.2	3.0	1.0
Queue Length 50th (ft)	62	17	0	1	16	23	334	0	19	57	0
Queue Length 95th (ft)	111	45	0	10	39	m58	460	m0	m46	70	3
Internal Link Dist (ft)	1005			1051			2198			1235	
Turn Bay Length (ft)	90		55	300		200		160	240		295
Base Capacity (vph)	254	457	502	114	580	123	2490	1160	127	2506	1166
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.06	0.09	0.02	0.12	0.28	0.40	0.01	0.24	0.31	0.10

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
10: Nason Street & Alessandro Boulevard

Village at Moreno Valley
Project Completion (2023) NP - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	147	360	92	30	230	75	91	829	109	58	678	86
v/c Ratio	0.46	0.41	0.18	0.13	0.70	0.19	0.51	0.47	0.13	0.31	0.26	0.10
Control Delay	51.8	36.5	1.6	49.9	53.5	1.0	47.1	25.6	4.5	31.5	10.3	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	0.0
Total Delay	51.8	36.5	1.6	49.9	53.5	1.0	47.1	25.6	4.5	31.5	10.3	0.4
Queue Length 50th (ft)	51	120	0	10	155	0	64	266	3	38	37	0
Queue Length 95th (ft)	82	148	8	26	220	0	m114	358	47	64	57	1
Internal Link Dist (ft)		755			555			1910			275	
Turn Bay Length (ft)	250		125	245		245	285		285	255		320
Base Capacity (vph)	318	1444	735	238	768	742	188	1765	865	205	2559	872
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.25	0.13	0.13	0.30	0.10	0.48	0.47	0.13	0.28	0.26	0.10

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
11: Nason Street & Cactus Avenue

Village at Moreno Valley
Project Completion (2023) NP - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	145	438	94	26	361	40	352	23	100	492	135
v/c Ratio	0.62	0.65	0.14	0.23	0.78	0.17	0.26	0.03	0.67	0.31	0.17
Control Delay	56.8	34.5	1.0	54.1	49.1	50.2	26.5	0.1	89.0	41.2	22.4
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	56.8	34.5	1.0	54.1	49.1	50.2	26.5	0.1	89.0	41.2	22.4
Queue Length 50th (ft)	98	276	0	18	234	13	88	0	61	152	35
Queue Length 95th (ft)	157	317	7	47	305	31	152	0	#153	250	109
Internal Link Dist (ft)		661			502		5439			589	
Turn Bay Length (ft)	205			95		240		325	275		340
Base Capacity (vph)	251	915	855	114	791	233	1368	704	149	1579	790
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.48	0.11	0.23	0.46	0.17	0.26	0.03	0.67	0.31	0.17

Intersection Summary

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

Queues
12: Hillrose Lane/Nason Street & Iris Avenue

Village at Moreno Valley
Project Completion (2023) NP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	247	771	24	902	143	13	56	126	52	411
v/c Ratio	0.48	0.39	0.17	0.75	0.26	0.09	0.10	0.56	0.06	0.37
Control Delay	44.9	24.9	41.9	36.9	1.3	40.2	21.7	45.7	18.2	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.9	24.9	41.9	36.9	1.3	40.2	21.7	45.7	18.2	4.7
Queue Length 50th (ft)	74	138	13	175	0	7	16	68	15	35
Queue Length 95th (ft)	m108	171	38	222	2	25	51	119	49	111
Internal Link Dist (ft)		4542		882			142		5439	
Turn Bay Length (ft)	260		170		160			210		
Base Capacity (vph)	704	1954	140	1198	554	140	547	302	846	1119
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.39	0.17	0.75	0.26	0.09	0.10	0.42	0.06	0.37

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
1: Lasselle Street & Iris Avenue

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	165	917	657	811	435	703	507	140	675
v/c Ratio	0.23	0.77	0.83	0.65	1.40	0.71	0.53	0.51	0.71
Control Delay	31.6	32.0	34.5	21.3	231.2	34.3	11.9	46.8	33.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.6	32.0	34.5	21.3	231.2	34.3	11.9	46.8	33.9
Queue Length 50th (ft)	39	148	104	76	-172	193	127	40	180
Queue Length 95th (ft)	72	195	#171	81	#265	257	215	70	243
Internal Link Dist (ft)		580		4542		530			400
Turn Bay Length (ft)	200		220		200		200	200	
Base Capacity (vph)	718	1235	817	1886	311	997	960	274	954
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.74	0.80	0.43	1.40	0.71	0.53	0.51	0.71

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.

Intersection: 2: Morrison Street & Fir Avenue

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	71	96	118	30	68	44	25	43
Average Queue (ft)	44	48	72	13	36	24	10	21
95th Queue (ft)	71	67	112	37	63	37	30	47
Link Distance (ft)	85		2145		910	910		453
Upstream Blk Time (%)	0	1						
Queuing Penalty (veh)	0	0						
Storage Bay Dist (ft)		100		100			100	
Storage Blk Time (%)	0	1	1					
Queuing Penalty (veh)	0	1	0					

Queues
3: Morrison Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	74	575	50	351	75	101	139	6	208
v/c Ratio	0.41	0.55	0.27	0.33	0.41	0.13	0.14	0.03	0.19
Control Delay	36.8	23.4	33.3	21.6	36.9	15.0	2.4	29.0	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.8	23.4	33.3	21.6	36.9	15.0	2.4	29.0	10.7
Queue Length 50th (ft)	31	110	20	65	31	24	0	2	17
Queue Length 95th (ft)	54	121	40	77	54	53	14	10	29
Internal Link Dist (ft)		992		2544		621			276
Turn Bay Length (ft)	150		155		155			105	
Base Capacity (vph)	183	1049	183	1054	183	787	995	180	1123
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.55	0.27	0.33	0.41	0.13	0.14	0.03	0.19
Intersection Summary									

Queues

4: Nason Street & Elder Avenue/SR-60 Westbound Ramp

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	7	51	307	149	28	42	185	425	616	41	584
v/c Ratio	0.09	0.43	0.58	0.71	0.08	0.08	0.71	0.19	0.44	0.39	0.31
Control Delay	59.8	66.5	18.4	70.8	39.8	2.6	60.3	4.8	8.4	66.3	20.4
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	59.8	66.5	18.4	70.8	39.8	2.6	60.3	4.8	8.4	66.3	20.4
Queue Length 50th (ft)	6	40	77	118	18	0	112	54	375	33	145
Queue Length 95th (ft)	19	73	121	162	41	5	m148	98	461	62	201
Internal Link Dist (ft)		278			273			818			577
Turn Bay Length (ft)	120		120			165	360		150	95	
Base Capacity (vph)	288	364	536	288	399	614	270	2233	1432	216	1857
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.14	0.57	0.52	0.07	0.07	0.69	0.19	0.43	0.19	0.31

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
5: Nason Street & SR-60 Eastbound Ramp

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	44	513	505	1403	66	974
v/c Ratio	0.08	0.95	0.94	0.77	0.51	0.44
Control Delay	31.1	61.2	58.8	29.6	67.6	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.1	61.2	58.8	29.6	67.6	20.5
Queue Length 50th (ft)	25	335	327	494	54	264
Queue Length 95th (ft)	48	#418	#398	516	91	295
Internal Link Dist (ft)		344		461		818
Turn Bay Length (ft)			250		245	
Base Capacity (vph)	563	563	561	1820	216	2196
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	0.08	0.91	0.90	0.77	0.31	0.44

Intersection Summary

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

Queues
6: Nason Street & Fir Avenue

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	323	270	76	124	76	258	936	192	1337	206
v/c Ratio	0.81	0.55	0.46	0.58	0.18	0.68	0.62	1.38	1.27	0.37
Control Delay	56.3	34.2	55.5	56.4	0.9	44.5	18.8	248.7	164.3	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.3	34.2	55.5	56.4	0.9	44.5	18.8	248.7	164.3	11.3
Queue Length 50th (ft)	216	144	52	84	0	177	277	~180	~635	28
Queue Length 95th (ft)	275	195	90	129	0	m#299	m298	#295	#693	74
Internal Link Dist (ft)		171		456			1250		502	
Turn Bay Length (ft)			165			230		505		260
Base Capacity (vph)	492	497	352	310	424	380	1516	139	1051	558
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.54	0.22	0.40	0.18	0.68	0.62	1.38	1.27	0.37

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.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues
7: Nason Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	288	234	297	140	145	55	79	960	162	39	1535	118
v/c Ratio	1.22	0.50	0.77	0.64	0.34	0.17	0.44	0.47	0.18	0.33	0.84	0.14
Control Delay	170.4	47.6	24.4	60.5	45.4	1.2	37.2	7.2	0.6	73.6	11.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	170.4	47.6	24.4	60.5	45.4	1.2	37.2	7.2	0.6	73.6	11.0	0.0
Queue Length 50th (ft)	~249	82	41	95	50	0	58	105	1	28	90	0
Queue Length 95th (ft)	#333	96	78	138	66	0	m76	80	2	m25	m62	m0
Internal Link Dist (ft)		2544			704			1224			1250	
Turn Bay Length (ft)	200		220	200		100	275		155	250		205
Base Capacity (vph)	237	676	458	218	590	382	196	2033	924	117	1831	816
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.22	0.35	0.65	0.64	0.25	0.14	0.40	0.47	0.18	0.33	0.84	0.14

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.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues
9: Nason Street & Cottonwood Avenue

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



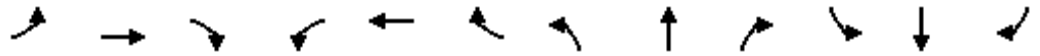
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	148	59	33	7	212	35	1029	7	36	1324	173
v/c Ratio	0.68	0.14	0.07	0.06	0.55	0.29	0.47	0.01	0.27	0.60	0.16
Control Delay	62.2	35.5	0.3	49.8	24.3	70.4	26.4	0.0	68.0	4.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.2	35.5	0.3	49.8	24.3	70.4	26.4	0.0	68.0	4.3	0.3
Queue Length 50th (ft)	101	33	0	5	27	26	375	0	23	32	1
Queue Length 95th (ft)	136	60	0	16	44	50	356	m0	m32	50	0
Internal Link Dist (ft)	1005			1051			2198			1235	
Turn Bay Length (ft)	90		55	300		200		160	240		295
Base Capacity (vph)	254	469	511	114	646	123	2184	1035	132	2210	1055
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.13	0.06	0.06	0.33	0.28	0.47	0.01	0.27	0.60	0.16

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
10: Nason Street & Alessandro Boulevard

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	99	167	132	173	413	171	110	699	39	71	1035	155
v/c Ratio	0.36	0.16	0.23	0.73	0.78	0.30	0.61	0.49	0.05	0.38	0.53	0.22
Control Delay	51.4	27.5	3.8	68.4	46.3	5.2	41.3	28.0	2.6	44.1	24.8	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.4	27.5	3.8	68.4	46.3	5.2	41.3	28.0	2.6	44.1	24.8	7.0
Queue Length 50th (ft)	35	46	0	62	269	0	78	266	1	36	93	11
Queue Length 95th (ft)	55	56	21	#94	297	32	m#132	302	m11	m67	149	50
Internal Link Dist (ft)		755			555			1910				275
Turn Bay Length (ft)	250		125	245		245	285		285	255		320
Base Capacity (vph)	274	1444	735	238	768	755	186	1427	728	205	1958	706
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.12	0.18	0.73	0.54	0.23	0.59	0.49	0.05	0.35	0.53	0.22

Intersection Summary

- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues
11: Nason Street & Cactus Avenue

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	139	379	95	15	593	149	555	12	87	459	262
v/c Ratio	0.68	0.42	0.11	0.13	0.87	0.58	0.51	0.02	0.61	0.45	0.41
Control Delay	63.7	20.1	0.8	51.4	45.5	58.9	37.0	0.1	87.2	56.0	28.2
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	63.7	20.1	0.8	51.4	45.5	58.9	37.0	0.1	87.2	56.0	28.2
Queue Length 50th (ft)	94	146	0	10	373	52	182	0	66	181	89
Queue Length 95th (ft)	145	216	1	29	416	79	229	0	m107	215	171
Internal Link Dist (ft)		661			502		5439			589	
Turn Bay Length (ft)	205			95		240		325	275		340
Base Capacity (vph)	226	940	874	114	790	259	1083	588	149	1025	646
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.40	0.11	0.13	0.75	0.58	0.51	0.02	0.58	0.45	0.41

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
12: Hillrose Lane/Nason Street & Iris Avenue

Village at Moreno Valley
Project Completion (2023) WP - AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	453	1054	11	813	115	19	70	158	17	367
v/c Ratio	0.72	0.47	0.08	0.68	0.21	0.14	0.15	0.63	0.02	0.34
Control Delay	49.9	25.8	39.2	34.9	0.8	41.1	27.2	47.7	21.6	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.9	25.8	39.2	34.9	0.8	41.1	27.2	47.7	21.6	5.1
Queue Length 50th (ft)	134	187	6	154	0	10	28	85	5	29
Queue Length 95th (ft)	158	205	19	167	0	28	56	123	19	67
Internal Link Dist (ft)		4542		882			142		5439	
Turn Bay Length (ft)	260		170		160			210		
Base Capacity (vph)	704	2238	168	1198	554	140	469	302	735	1060
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.47	0.07	0.68	0.21	0.14	0.15	0.52	0.02	0.35
Intersection Summary										

Intersection: 13: Fir Avenue & Project Driveway 1

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (ft)	31	197
Average Queue (ft)	17	119
95th Queue (ft)	42	195
Link Distance (ft)		182
Upstream Blk Time (%)		3
Queuing Penalty (veh)		0
Storage Bay Dist (ft)	75	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Fir Avenue & Project Driveway 2

Movement	EB	SB
Directions Served	T	R
Maximum Queue (ft)	92	54
Average Queue (ft)	33	16
95th Queue (ft)	97	49
Link Distance (ft)	124	189
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Nason Street & Project Driveway 3

Movement	EB
Directions Served	R
Maximum Queue (ft)	78
Average Queue (ft)	48
95th Queue (ft)	75
Link Distance (ft)	155
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queues
1: Lasselle Street & Iris Avenue

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	209	823	697	823	254	700	551	240	926
v/c Ratio	0.30	0.72	0.84	0.65	0.93	0.73	0.58	0.76	0.93
Control Delay	32.3	29.7	36.7	26.3	83.1	35.9	13.0	57.7	48.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.3	29.7	36.7	26.3	83.1	35.9	13.0	57.7	48.7
Queue Length 50th (ft)	51	123	117	90	75	195	149	70	~280
Queue Length 95th (ft)	88	166	#187	97	#148	260	248	#138	#421
Internal Link Dist (ft)		580		4542		530			400
Turn Bay Length (ft)	200		220		200		200	200	
Base Capacity (vph)	699	1245	856	1944	272	961	961	316	1000
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.66	0.81	0.42	0.93	0.73	0.57	0.76	0.93

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.

Intersection: 2: Morrison Street & Fir Avenue

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	LT	R	L	TR	L	TR
Maximum Queue (ft)	54	29	75	31	25	45	25	20
Average Queue (ft)	37	20	50	5	17	22	11	9
95th Queue (ft)	61	42	73	23	34	43	31	25
Link Distance (ft)	85		2145		910	910		453
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		100		100			100	
Storage Blk Time (%)								
Queuing Penalty (veh)								

Queues
3: Morrison Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	26	219	51	236	16	41	56	1	95
v/c Ratio	0.14	0.21	0.28	0.18	0.09	0.05	0.06	0.01	0.07
Control Delay	30.8	19.5	33.5	17.3	29.9	14.7	1.3	28.0	9.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.8	19.5	33.5	17.3	29.9	14.7	1.3	28.0	9.5
Queue Length 50th (ft)	10	36	21	31	6	10	0	0	6
Queue Length 95th (ft)	32	63	52	68	23	34	8	5	25
Internal Link Dist (ft)		992		2544		621			276
Turn Bay Length (ft)	150		155		155			105	
Base Capacity (vph)	183	1050	183	1288	183	787	976	180	1421
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.21	0.28	0.18	0.09	0.05	0.06	0.01	0.07
Intersection Summary									

Queues

4: Nason Street & Elder Avenue/SR-60 Westbound Ramp

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	8	27	140	163	34	24	193	318	659	30	347
v/c Ratio	0.10	0.28	0.31	0.74	0.11	0.06	0.70	0.14	0.45	0.31	0.18
Control Delay	60.1	63.6	7.0	72.4	42.5	0.3	53.0	8.6	8.5	64.7	17.8
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	60.1	63.6	7.0	72.4	42.5	0.3	53.0	8.6	8.5	64.7	17.8
Queue Length 50th (ft)	6	21	0	129	22	0	152	82	190	24	80
Queue Length 95th (ft)	24	52	47	198	54	0	185	80	508	56	130
Internal Link Dist (ft)		278			273			818			577
Turn Bay Length (ft)	120		120			165	360		150	95	
Base Capacity (vph)	288	364	463	288	392	511	280	2340	1469	216	1918
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.07	0.30	0.57	0.09	0.05	0.69	0.14	0.45	0.14	0.18

Intersection Summary

Queues
5: Nason Street & SR-60 Eastbound Ramp

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	126	412	404	1273	63	609
v/c Ratio	0.42	0.86	0.85	0.56	0.50	0.23
Control Delay	47.9	33.5	31.6	16.6	69.3	11.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.9	33.5	31.6	16.6	69.3	11.2
Queue Length 50th (ft)	93	124	115	288	51	110
Queue Length 95th (ft)	133	227	217	512	m97	193
Internal Link Dist (ft)		344		461		818
Turn Bay Length (ft)			250		245	
Base Capacity (vph)	563	660	658	2269	216	2658
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.62	0.61	0.56	0.29	0.23

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
6: Nason Street & Fir Avenue

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	218	212	160	175	142	158	910	287	823	200
v/c Ratio	0.72	0.66	0.67	0.69	0.28	0.68	0.55	2.33	0.56	0.27
Control Delay	56.3	46.9	58.9	59.0	6.7	44.7	14.3	648.7	29.6	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.3	46.9	58.9	59.0	6.7	44.7	14.3	648.7	29.6	5.1
Queue Length 50th (ft)	147	125	109	119	0	84	306	~332	236	0
Queue Length 95th (ft)	215	193	173	187	47	152	333	#500	358	54
Internal Link Dist (ft)		171		456			1250		502	
Turn Bay Length (ft)			165			230		505		260
Base Capacity (vph)	443	448	303	310	500	266	1649	123	1458	752
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.47	0.53	0.56	0.28	0.59	0.55	2.33	0.56	0.27

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
7: Nason Street & Eucalyptus Avenue

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	80	157	73	178	156	31	37	1017	232	23	982	121
v/c Ratio	0.47	0.47	0.26	0.62	0.24	0.08	0.32	0.49	0.23	0.19	0.48	0.13
Control Delay	55.8	51.8	2.2	52.2	40.3	0.4	40.2	8.5	1.6	47.8	12.5	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.8	51.8	2.2	52.2	40.3	0.4	40.2	8.5	1.6	47.8	12.5	1.7
Queue Length 50th (ft)	55	56	0	118	51	0	28	91	0	12	285	17
Queue Length 95th (ft)	101	88	0	185	81	0	m45	102	2	m23	388	9
Internal Link Dist (ft)		2544			704			1224			1250	
Turn Bay Length (ft)	200		220	200		100	275		155	250		205
Base Capacity (vph)	305	810	471	289	656	407	114	2088	994	122	2029	941
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.19	0.15	0.62	0.24	0.08	0.32	0.49	0.23	0.19	0.48	0.13

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
9: Nason Street & Cottonwood Avenue

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	94	29	47	2	74	35	1061	9	32	823	119
v/c Ratio	0.52	0.09	0.12	0.02	0.29	0.29	0.43	0.01	0.25	0.33	0.10
Control Delay	56.5	37.8	0.6	48.5	34.5	76.2	25.7	0.0	63.4	2.9	0.9
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	56.5	37.8	0.6	48.5	34.5	76.2	25.7	0.0	63.4	2.9	0.9
Queue Length 50th (ft)	64	17	0	1	16	22	354	0	20	58	0
Queue Length 95th (ft)	114	45	0	10	40	m55	486	m0	m46	71	3
Internal Link Dist (ft)	1005			1051			2198			1235	
Turn Bay Length (ft)	90		55	300		200		160	240		295
Base Capacity (vph)	254	457	502	114	580	123	2481	1156	129	2501	1164
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.06	0.09	0.02	0.13	0.28	0.43	0.01	0.25	0.33	0.10

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
10: Nason Street & Alessandro Boulevard

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	162	360	92	30	230	79	91	874	109	62	721	100
v/c Ratio	0.48	0.40	0.18	0.13	0.70	0.20	0.51	0.50	0.13	0.33	0.28	0.12
Control Delay	51.6	35.9	1.6	49.9	53.5	1.1	46.3	26.4	4.4	32.5	10.9	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	0.0
Total Delay	51.6	35.9	1.6	49.9	53.5	1.1	46.3	26.4	4.4	32.5	10.9	0.8
Queue Length 50th (ft)	56	118	0	10	155	0	63	289	5	38	38	0
Queue Length 95th (ft)	89	147	8	26	220	0	m115	378	m48	69	69	11
Internal Link Dist (ft)		755			555			1910			275	
Turn Bay Length (ft)	250		125	245		245	285		285	255		320
Base Capacity (vph)	337	1444	735	238	768	742	188	1745	858	205	2531	864
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.25	0.13	0.13	0.30	0.11	0.48	0.50	0.13	0.30	0.28	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues
11: Nason Street & Cactus Avenue

Village at Moreno Valley
 Project Completion (2023) WP - PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	154	438	94	26	370	40	378	23	107	516	142
v/c Ratio	0.63	0.63	0.14	0.23	0.78	0.17	0.30	0.03	0.62	0.34	0.18
Control Delay	56.3	32.9	1.0	54.1	48.6	50.2	28.8	0.1	83.7	43.3	24.2
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	56.3	32.9	1.0	54.1	48.6	50.2	28.8	0.1	83.7	43.3	24.2
Queue Length 50th (ft)	104	271	0	18	238	13	100	0	65	160	38
Queue Length 95th (ft)	165	309	7	47	309	31	170	0	#149	261	118
Internal Link Dist (ft)		661			502		5439			589	
Turn Bay Length (ft)	205			95		240		325	275		340
Base Capacity (vph)	258	915	855	114	790	233	1281	669	172	1538	773
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.48	0.11	0.23	0.47	0.17	0.30	0.03	0.62	0.34	0.18

Intersection Summary

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

Queues
12: Hillrose Lane/Nason Street & Iris Avenue

Village at Moreno Valley
Project Completion (2023) WP - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	272	771	24	902	143	13	58	126	54	434
v/c Ratio	0.52	0.40	0.16	0.75	0.26	0.09	0.11	0.56	0.06	0.39
Control Delay	45.5	25.0	40.9	36.9	1.3	40.2	21.8	45.7	18.1	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.5	25.0	40.9	36.9	1.3	40.2	21.8	45.7	18.1	5.1
Queue Length 50th (ft)	81	136	13	175	0	7	17	68	16	40
Queue Length 95th (ft)	m118	173	37	222	2	25	52	119	50	124
Internal Link Dist (ft)		4542		882			142		5439	
Turn Bay Length (ft)	260		170		160			210		
Base Capacity (vph)	704	1942	168	1198	554	140	545	302	843	1109
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.40	0.14	0.75	0.26	0.09	0.11	0.42	0.06	0.39

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Intersection: 13: Fir Avenue & Project Driveway 1

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (ft)	54	172
Average Queue (ft)	12	76
95th Queue (ft)	44	139
Link Distance (ft)		182
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)	75	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Fir Avenue & Project Driveway 2

Movement	EB	EB	WB	SB
Directions Served	T	T	TR	R
Maximum Queue (ft)	72	52	30	54
Average Queue (ft)	7	2	1	28
95th Queue (ft)	38	20	12	51
Link Distance (ft)	124	124	163	189
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 15: Nason Street & Project Driveway 3

Movement	EB	SB	SB
Directions Served	R	T	TR
Maximum Queue (ft)	53	336	304
Average Queue (ft)	38	118	112
95th Queue (ft)	53	345	340
Link Distance (ft)	155	469	469
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

APPENDIX G:

VEHICLE MILES TRAVELED SCREENING RESULTS

VMT per Employee Screening Results (WRCOG Screening Tool)

The screenshot displays the WRCOG VMT Screening Tool interface. The main map shows a residential area with parcel boundaries. A search bar at the top left contains the text "Find address or place". A "VMT Impact Screening" dialog box is open, showing an "Input" tab with a dropdown menu and an "Execute" button. A data popup window is visible over a parcel, displaying the following information:

home-based VMT per capita = 12.79
 Project TAZ 2012 daily residential home-based VMT per capita = 14.59

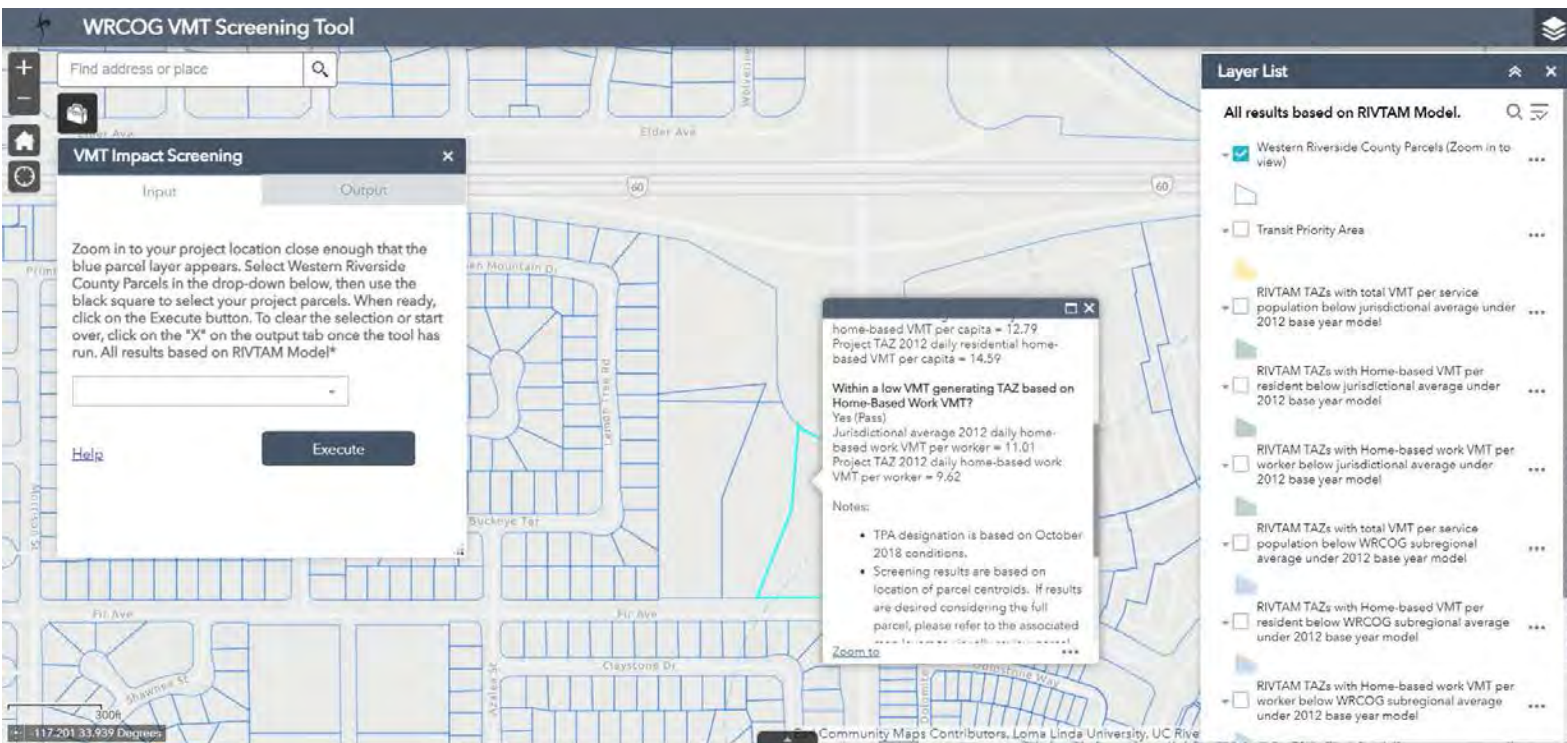
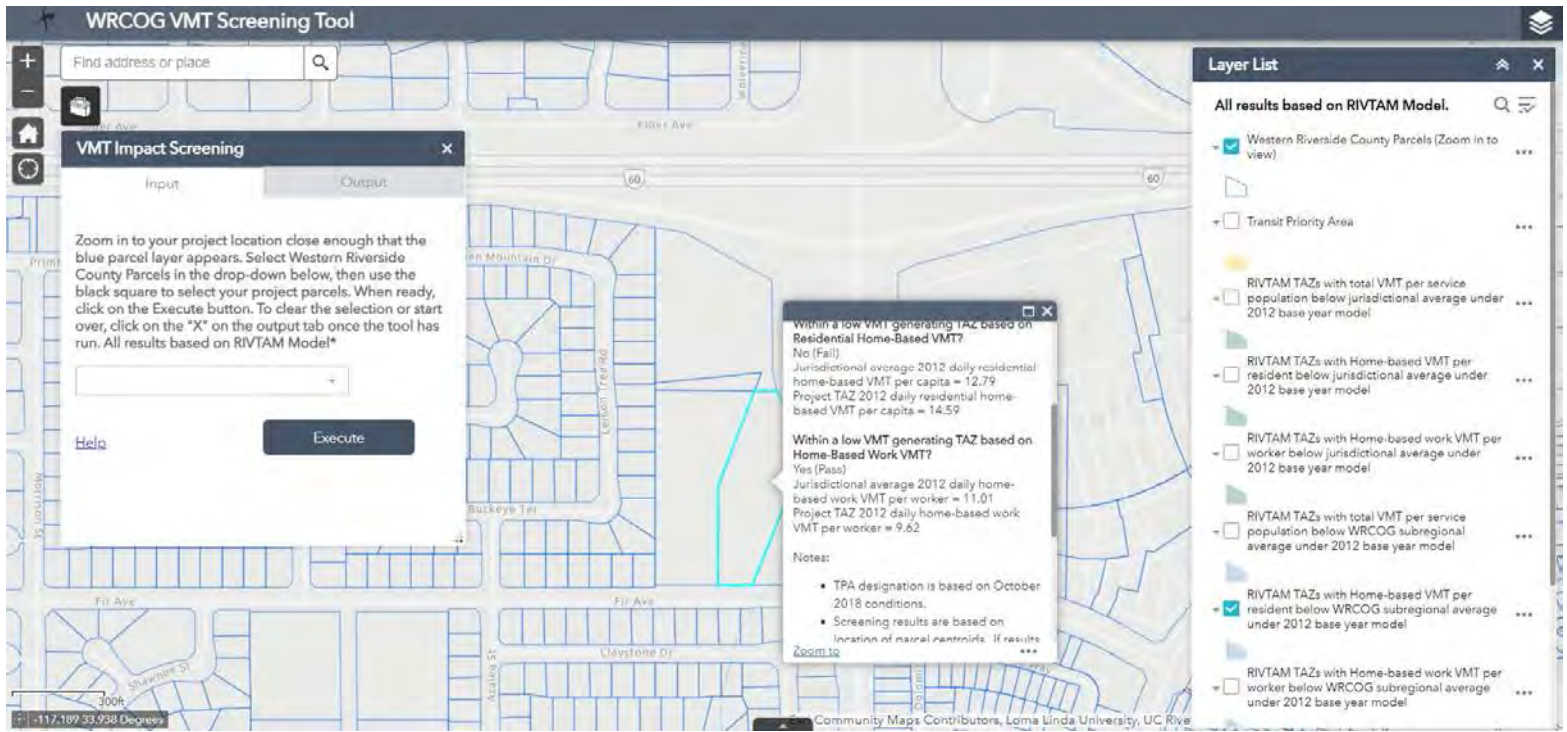
Within a low VMT generating TAZ based on Home-Based Work VMT?
 Yes (Pass)
 Jurisdictional average 2012 daily home-based work VMT per worker = 11.01
 Project TAZ 2012 daily home-based work VMT per worker = 9.62

Notes:

- TPA designation is based on October 2018 conditions.
- Screening results are based on location of parcel centroids. If results are desired considering the full parcel, please refer to the associated

The "Layer List" on the right side of the interface includes the following layers:

- Transit Priority Area
- RIVTAM TAZs with total VMT per service population below jurisdictional average under 2012 base year model
- RIVTAM TAZs with Home-based VMT per resident below jurisdictional average under 2012 base year model
- RIVTAM TAZs with Home-based work VMT per worker below jurisdictional average under 2012 base year model
- RIVTAM TAZs with total VMT per service population below WRCOG subregional average under 2012 base year model
- RIVTAM TAZs with Home-based VMT per resident below WRCOG subregional average under 2012 base year model
- RIVTAM TAZs with Home-based work VMT per worker below WRCOG subregional average under 2012 base year model
- City Boundaries
- TUMF Zone Boundaries



Total VMT Screening Results (WRCOG Screening Tool)

WRCOG VMT Screening Tool

Find address or place

VMT Impact Screening

Input Output

Zoom in to your project location close enough that the blue parcel layer appears. Select Western Riverside County Parcels in the drop-down below, then use the black square to select your project parcels. When ready, click on the Execute button. To clear the selection or start over, click on the "X" on the output tab once the tool has run. All results based on RIVTAM Model!

Execute

APN:487250006; TAZ:3,872

Within a Transit Priority Area (TPA)?
No (Fail)

Within a low VMT generating TAZ based on Total VMT?
Yes (Pass)
Jurisdictional average 2012 daily total VMT per service population = 24.49
Project TAZ 2012 daily total VMT per service population = 22.49

Within a low VMT generating TAZ based on Residential Home-Based VMT?
No (Fail)
Jurisdictional average 2012 daily residential home-based VMT per capita = 12.79
Project TAZ 2012 daily residential home-based VMT per capita = 14.59

Layer List

All results based on RIVTAM Model.

- Western Riverside County Parcels (Zoom in to view)
- Transit Priority Area
- RIVTAM TAZs with total VMT per service population below jurisdictional average under 2012 base year model
- RIVTAM TAZs with Home-based VMT per resident below jurisdictional average under 2012 base year model
- RIVTAM TAZs with Home-based work VMT per worker below jurisdictional average under 2012 base year model
- RIVTAM TAZs with total VMT per service population below WRCOG subregional average under 2012 base year model
- RIVTAM TAZs with Home-based VMT per resident below WRCOG subregional average under 2012 base year model
- RIVTAM TAZs with Home-based work VMT per worker below WRCOG subregional average under 2012 base year model

Community Maps Contributors, Loma Linda University, UC Rive

WRCOG VMT Screening Tool

Find address or place

VMT Impact Screening

Input Output

Zoom in to your project location close enough that the blue parcel layer appears. Select Western Riverside County Parcels in the drop-down below, then use the black square to select your project parcels. When ready, click on the Execute button. To clear the selection or start over, click on the "X" on the output tab once the tool has run. All results based on RIVTAM Model*

Help **Execute**

APN:487250007; TAZ:3,872

Within a Transit Priority Area (TPA)?
No (Fail)

Within a low VMT generating TAZ based on Total VMT?
Yes (Pass)
Jurisdictional average 2012 daily total VMT per service population = 24.49
Project TAZ 2012 daily total VMT per service population = 22.49

Within a low VMT generating TAZ based on Residential Home-Based VMT?
No (Fail)
Jurisdictional average 2012 daily residential home-based VMT per capita = 12.79
Project TAZ 2012 daily residential home-based VMT per capita = 14.59

Zoom to

Layer List

All results based on RIVTAM Model.

- Western Riverside County Parcels (Zoom in to view)
- Transit Priority Area
- RIVTAM TAZs with total VMT per service population below jurisdictional average under 2012 base year model
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- RIVTAM TAZs with Home-based work VMT per worker below jurisdictional average under 2012 base year model
- RIVTAM TAZs with total VMT per service population below WRCOG subregional average under 2012 base year model
- RIVTAM TAZs with Home-based VMT per resident below WRCOG subregional average under 2012 base year model
- RIVTAM TAZs with Home-based work VMT per worker below WRCOG subregional average under 2012 base year model

WRCOG VMT Screening Tool

Find address or place

VMT Impact Screening

Input Output

Zoom in to your project location close enough that the blue parcel layer appears. Select Western Riverside County Parcels in the drop-down below, then use the black square to select your project parcels. When ready, click on the Execute button. To clear the selection or start over, click on the "X" on the output tab once the tool has run. All results based on RIVTAM Model*

Help **Execute**

APN:487250010; TAZ:3,872

Within a Transit Priority Area (TPA)?
No (Fail)

Within a low VMT generating TAZ based on Total VMT?
Yes (Pass)
Jurisdictional average 2012 daily total VMT per service population = 24.49
Project TAZ 2012 daily total VMT per service population = 22.49

Within a low VMT generating TAZ based on Residential Home-Based VMT?
No (Fail)
Jurisdictional average 2012 daily residential home-based VMT per capita = 12.79
Project TAZ 2012 daily residential home-based VMT per capita = 14.59

Zoom to

Layer List

All results based on RIVTAM Model.

- Western Riverside County Parcels (Zoom in to view)
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- RIVTAM TAZs with total VMT per service population below WRCOG subregional average under 2012 base year model
- RIVTAM TAZs with Home-based VMT per resident below WRCOG subregional average under 2012 base year model
- RIVTAM TAZs with Home-based work VMT per worker below WRCOG subregional average under 2012 base year model