Gilman Springs Mine

TRAFFIC IMPACT ANALYSIS

COUNTY OF RIVERSIDE

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CA MUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CMP	Congestion Management Program
DIF	Development Impact Fee
E+P	Existing Plus Project
EAP	Existing Plus Ambient Growth Plus Project
EAPC	Existing Plus Ambient Growth Plus Project Plus Cumulative
HCM	Highway Capacity Manual
HCS	Highway Capacity Software
ITE	Institute of Transportation Engineers
LOS	Level of Service
MTPY	Million Tons Per Year
PCE	Passenger Car Equivalents
PeMS	Performance Measurement System
PHF	Peak Hour Factor
Project	Gilman Springs Mine
RTA	Riverside Transit Authority
RTP	Regional Transportation Plan
SCAG	Southern California Association of Governments
SCS	Sustainable Communities Strategy
SHS	State Highway System
TIA	Traffic Impact Analysis
TPD	Tons Per Day
TPY	Tons Per Year
TUMF	Transportation Uniform Mitigation Fee
WRCOG	Western Riverside Council of Governments

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1 INTRODUCTION

This report presents the results of the traffic impact analysis (TIA) for the proposed Gilman Springs Mine ("Project") located on the northeast side of Gilman Springs Road and south of Bridge Street in unincorporated County of Riverside as shown on Exhibit 1-1.

The purpose of this TIA is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project and recommend improvements to achieve acceptable circulation system operational conditions. This TIA has been prepared in accordance with the County of Riverside Transportation Department Traffic Impact Analysis Preparation Guide (April 2008), the California Department of Transportation (Caltrans) Guide for the Preparation of Traffic Impact Studies (December 2002), and consultation with County of Riverside staff during the scoping process. (1) (2) The approved Project Traffic Study Scoping agreement is provided in Appendix 1.1 of this TIA.

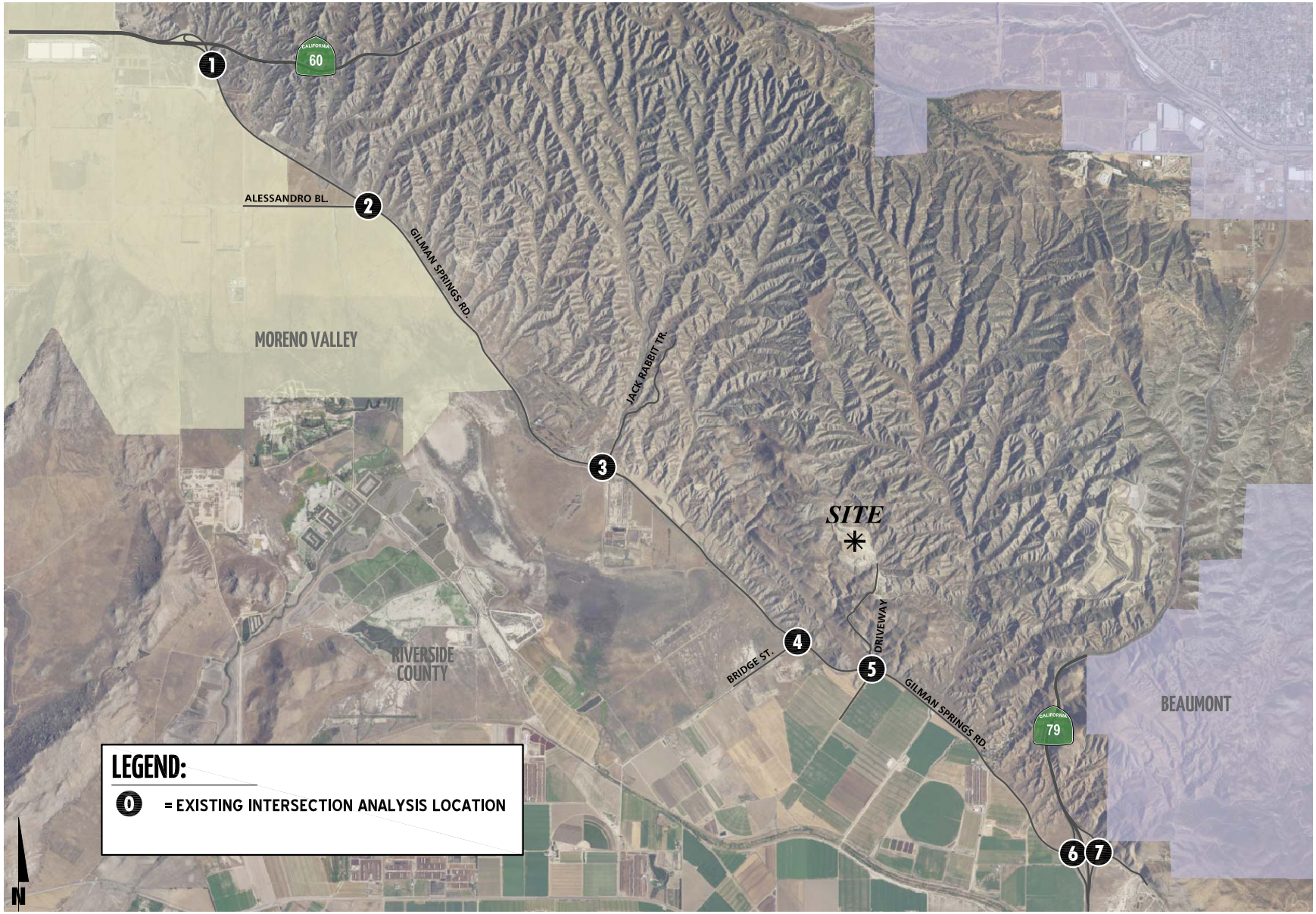
1.1 PROJECT OVERVIEW

The historic tonnage average is 377,765 tons per year (TPY) based on a 15-year average of historical data. The Project is proposing a permit that would continue to allow up to 1,000,000 TPY. For impact calculations that rely on annual tonnage, the net increase over the baseline (i.e., 377,765 TPY) will be evaluated as part of the analysis. When compared to the proposed permitted maximum annual production quantity of the 1.0 million tons per year (MTPY) results in a net increase of 622,235 TPY, or a 62.22% share of the total permitted annual production quantity. As such, the high-end estimate of daily tonnage at the site is approximately 4,000 tons per day (TPD), with approximately 1,511 TPD associated with the mine's existing operations (i.e., baseline) and 2,489 TPD attributable to the proposed Project (62.22% of 4,000 TPD). The Project is anticipated to be in operation by the end of 2018.

The Project is proposed to have access on Gilman Springs Road via a private road extending from Gilman Springs Road (located south of Bridge Street). All Project access points are assumed to allow full-access. Regional access to the project site is provided via the SR-79 Freeway at Gilman Springs Road interchange and the SR-60 Freeway at Gilman Springs Road interchange.

As the proposed Project's land use is rather unique and not comparable to any current Institute of Transportation Engineers (ITE) Trip Generation Manual rates, the traffic generating potential of the proposed Project has been estimated based on the increase in permitted annual production above the Project's historical baseline. Annual production information was obtained for a 15-year period from 2003-2017. The project is anticipated to generate a net total of approximately 990 passenger car equivalent (PCE) trip-ends per day with 145 PCE AM peak hour and 133 PCE PM peak hour trips. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

EXHIBIT 1-1: LOCATION MAP



1.2 ANALYSIS SCENARIOS

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

- Existing (2018)
- Existing plus Project (E+P)
- Existing plus Ambient Growth plus Project (EAP) (2018)
- Existing plus Ambient Growth plus Project plus Cumulative (EAPC) (2018)

1.2.1 EXISTING (2018) CONDITIONS

Information for Existing (2018) conditions is disclosed to represent the baseline traffic conditions as they existed at the time the Project's Notice of Preparation was distributed for public review.

1.2.2 EXISTING PLUS PROJECT CONDITIONS

The Existing plus Project (E+P) analysis determines circulation system deficiencies that would occur on the existing roadway system in the scenario of the Project being placed upon Existing conditions. The E+P scenario has been provided for information purposes.

1.2.3 EXISTING PLUS AMBIENT GROWTH PLUS PROJECT (2018) CONDITIONS

The Existing plus Ambient Growth plus Project (EAP) (2018) conditions analysis determines the significant traffic impacts based on a comparison of the EAP traffic conditions to Existing conditions (i.e., baseline conditions). Although the Project's opening year is the same as the baseline traffic condition, an ambient growth of 2% (2 percent per year over one year) has conservatively been included for EAP traffic conditions to account for background traffic growth for the purposes of this analysis. Cumulative development projects are not included as part of the EAP analysis. For the purposes of this traffic analysis, the EAP scenario has been utilized to discern significant Project impacts consistent with the County of Riverside traffic study guidelines.

1.2.4 EXISTING PLUS AMBIENT GROWTH PLUS PROJECT PLUS CUMULATIVE (2018) CONDITIONS

The Existing plus Ambient Growth plus Project plus Cumulative (2018) (EAPC) conditions analysis will be utilized to determine if improvements funded through regional transportation mitigation fee programs, such as the Transportation Uniform Mitigation Fee (TUMF) and County Development Impact Fee (DIF) programs, or other approved funding mechanism can accommodate the near-term cumulative traffic at the target level of service (LOS) identified in the County of Riverside General Plan. (3) If the "funded" improvements can provide the target LOS, then the Project's payment into TUMF and/or DIF will be considered as near-term cumulative mitigation through the conditions of approval. Other improvements needed beyond the "funded" improvements (such as localized improvements to non-TUMF facilities) are identified as such. To account for background traffic, other known cumulative development projects in the study area were included in addition to 2% of ambient growth for EAPC traffic

conditions in conjunction with traffic associated with the proposed Project. Although it is unlikely that these cumulative projects would be fully built and occupied by 2018, they have been included in an effort to conduct a conservative analysis and overstate and opposed to understate potential traffic impacts.

The currently adopted Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (April 2016) growth forecasts for the unincorporated areas of the County of Riverside identifies projected growth in population of 359,000 in 2012 to 499,200 in 2040, or a 139.1 percent increase over the 28-year period. (4) The change in population equates to roughly a 1.18 percent growth rate compounded annually. Similarly, growth over the same 28-year period in households is projected to increase by 145.1 percent, or 1.34 percent annual growth rate. Finally, growth in employment over the same 28-year period is projected to increase by 222.1 percent, or a 2.89 percent annual growth rate.

Based on a comparison of Existing traffic volumes to the EAPC (2018) forecasts, the average growth rate is estimated at approximately 12.31 percent compounded annually between Existing and EAPC (2018) traffic conditions. The annual growth rate at each individual intersection is not lower than 6.62 percent compounded annually to as high as 16.48 percent compounded annually over the same period. Therefore, the annual growth rate utilized for the purposes of this analysis would appear to conservatively approximate the anticipated regional growth in traffic volumes in the County of Riverside for EAPC traffic conditions, especially when considered along with the addition of project-related traffic. As such, the growth in traffic volumes assumed in this traffic impact analysis would tend to overstate as opposed to understate the potential impacts to traffic and circulation.

1.3 STUDY AREA

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

1.3.1 INTERSECTIONS

The Project study area was defined in coordination with the County of Riverside. Consistent with County of Riverside traffic study guidelines, the study area includes 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. Exhibit 1-1 and Table 1-1 presents the study area and intersection analysis locations.

The "50 peak hour trip" criteria generally represents a minimum number of trips at which a typical intersection would have the potential to be substantively impacted by a given development proposal. Although each intersection may have unique operating characteristics,

this traffic engineering rule of thumb is a widely utilized tool for estimating a potential area of impact (i.e., study area).

To ensure that this TIA satisfies the needs of the County of Riverside, Urban Crossroads, Inc. prepared a Project specific traffic study scoping agreement for review by County staff prior to the preparation of this TIA. The agreement provides an outline of the study area, trip generation, trip distribution, and analysis methodology. The agreement approved by the County of Riverside is included in Appendix 1.1.

The Congestion Management Program (CMP) study area intersections are anticipated to operate at LOS E or better with the implementation of planned improvements or improvements recommended in this traffic study. There are no CMP intersections within the study area.

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

ID	Intersection Location	Jurisdiction	CMP?
1	Gilman Springs Road & SR-60 Eastbound Ramps	County of Riverside	No
2	Gilman Springs Road & Alessandro Boulevard	County of Riverside	No
3	Jack Rabbit Trail & Gilman Springs Road	County of Riverside	No
4	Bridge Street & Gilman Springs Road	County of Riverside	No
5	Driveway & Gilman Springs Road	County of Riverside	No
6	SR-79 Southbound Ramps & Gilman Springs Road	Caltrans, County of Riverside	No
7	SR-79 Northbound Ramps & Gilman Springs Road	Caltrans, County of Riverside	No

1.3.2 FREEWAY MAINLINE SEGMENTS

Standard Caltrans guidance related to the geographic scope of the study area for the State Highway System (SHS) suggests the traffic study should include as a minimum all State highway facilities where the project will add over 100 peak hour trips. Because impacts to freeway segments dissipate with distance from the point of entry, quantitative study of freeway segments beyond those immediately adjacent to the point of entry is not being proposed. As such, the traffic study has evaluated the segments shown on Table 1-2.

TABLE 1-2: FREEWAY MAINLINE SEGMENT ANALYSIS LOCATIONS

ID	Freeway Mainline Segments
1	SR-60 Freeway Westbound – West of Gilman Springs Road
2	SR-60 Freeway Westbound – East of Gilman Springs Road
3	SR-60 Freeway Eastbound – West of Gilman Springs Road
4	SR-60 Freeway Eastbound – East of Gilman Springs Road
5	SR-79 Freeway Southbound – North of Gilman Springs Road
6	SR-79 Freeway Southbound – South of Gilman Springs Road
7	SR-79 Freeway Northbound – North of Gilman Springs Road
8	SR-79 Freeway Northbound – South of Gilman Springs Road

1.3.3 FREEWAY MERGE/DIVERGE RAMP JUNCTIONS

The study area freeway merge/diverge ramp junction analysis locations (i.e., the location where the ramp meets the freeway mainline) include the following SR-60 Freeway and SR-79 Freeway ramp merge/diverge areas for the southbound and northbound directions of flow as shown on Table 1-3:

TABLE 1-3: FREEWAY MERGE/DIVERGE RAMP JUNCTION ANALYSIS LOCATIONS

ID	Freeway Merge/Diverge Ramp Junctions
1	SR-60 Freeway - On-Ramp at Gilman Springs Road (Merge)
2	SR-60 Freeway - Off-Ramp at Gilman Springs Road (Diverge)
3	SR-60 Freeway - Off-Ramp at Gilman Springs Road (Diverge)
4	SR-60 Freeway - On-Ramp at Gilman Springs Road (Merge)
5	SR-79 Freeway - Off-Ramp at Gilman Springs Road (Diverge)
6	SR-79 Freeway - On-Ramp at Gilman Springs Road (Merge)
7	SR-79 Freeway - On-Ramp at Gilman Springs Road (Merge)
8	SR-79 Freeway - Off-Ramp at Gilman Springs Road (Diverge)

1.4 ANALYSIS FINDINGS

This section provides a summary of the analysis results for Existing (2018), E+P, EAP (2018), and EAPC (2018) traffic conditions.

1.4.1 INTERSECTIONS

Existing (2018) Conditions

For Existing (2018) traffic conditions, the study area intersections are currently operating at an acceptable level of service (LOS) (i.e., LOS D or better) during one or both of the peak hours, with the exception of the following intersections:

- Bridge St. & Gilman Springs Rd. (#4) – LOS F AM and PM peak hours
- Gilman Springs Rd. & Driveway (#5) – LOS E AM peak hour; LOS F PM peak hour
- SR-79 Northbound Ramps & Gilman Springs Rd. (#7) – LOS F AM and PM peak hours

E+P Conditions

The intersection analysis results indicate that the addition of Project traffic is not anticipated to result in any additional LOS deficiencies, in addition to those previously identified under Existing (2018) traffic conditions.

EAP (2018) Conditions

The intersection analysis results indicate that there are no additional study area intersections anticipated to operate at an unacceptable LOS under EAP (2018) traffic conditions, in addition to the location previously identified under Existing (2018) and E+P traffic conditions.

EAPC (2018) Conditions

The intersection analysis results indicate that the following study area intersection is anticipated to operate at an unacceptable LOS under EAPC (2018) traffic conditions, in addition to the location previously identified under Existing (2018), E+P, and EAP (2018) traffic conditions:

- Gilman Springs Rd. & Alessandro Bl. (#2) – LOS E PM peak hour only
- Jack Rabbit Trail & Gilman Springs Rd. (#3) – LOS E PM peak hour only

1.4.2 FREEWAY FACILITIES

Existing (2018) Conditions

The following freeway mainline segments are currently operating an unacceptable LOS (i.e., LOS E or worse) under Existing (2018) traffic conditions:

- SR-60 Freeway Westbound – West of Gilman Springs Road (#1) – LOS E AM and PM peak hours
- SR-60 Freeway Eastbound – East of Gilman Springs Road (#3) – LOS F AM peak hour only

The following ramp merge/diverge areas are currently operating at an unacceptable LOS (i.e., LOS E or worse) under Existing (2018) traffic conditions:

- SR-60 Freeway – On-Ramp at Gilman Springs Road (#1) – LOS E AM and PM peak hours
- SR-60 Freeway – Off-Ramp at Gilman Springs Road (#2) – LOS E PM peak hour only
- SR-60 Freeway – Off-Ramp at Gilman Springs Road (#3)- LOS E AM peak hour; LOS F PM peak hour

E+P Conditions

The freeway mainline segment analysis indicates that the addition of Project traffic is not anticipated to result in any new LOS deficiencies, in addition to those identified under Existing (2018) conditions.

The freeway ramp merge/diverge analysis indicates that the addition of Project traffic is not anticipated to result in any new LOS deficiencies, in addition to those identified under Existing (2018) conditions.

EAP (2018) Conditions

The freeway mainline segment analysis indicates that no new LOS deficiencies are anticipated for EAP (2018) traffic conditions, in addition to those identified under Existing (2018) conditions.

The freeway ramp merge/diverge analysis indicates that no new LOS deficiencies are anticipated for EAP (2018) traffic conditions, in addition to those identified under Existing (2018) conditions.

EAPC (2018) Conditions

The freeway mainline segment analysis indicates that no new LOS deficiencies are anticipated for EAPC (2018) traffic conditions, in addition to those identified under Existing (2018) conditions.

The freeway ramp merge/diverge analysis indicates that no new LOS deficiencies are anticipated for EAPC (2018) traffic conditions, in addition to those identified under Existing (2018) conditions.

1.5 CIRCULATION SYSTEM DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

1.5.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

A summary of the operationally deficient study area intersections and recommended improvements required to achieve acceptable circulation system performance are described in detail within Section 3 *Existing Conditions*, Section 5 *E+P Traffic Analysis*, Section 6 *EAP Traffic Analysis*, and Section 7 *EAPC Traffic Analysis* of this report.

A summary of off-site improvements needed to address intersection operational deficiencies for each analysis scenario is included in Table 1-4. These recommended improvements are consistent with or less than the geometrics assumed in the County of Riverside General Plan Circulation Element. Improvements found to be included in the Western Riverside Council of Governments (WRCOG) TUMF and County of Riverside's (lead agency) DIF program have been identified as such. (3) For improvements that do not appear to be in the TUMF or DIF, a fair share financial contribution based on the Project's fair share impact may be imposed in order to mitigate the Project's share of impacts in lieu of construction. These fees (both to the County of Riverside, TUMF, and as determined, to surrounding agencies as fair-share contributions) are collected as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected vehicle trip increases. Additional information related to these various fee programs are contained in Section 1.6 *Local and Regional Funding Mechanisms* of this report.

1.6 LOCAL AND REGIONAL FUNDING MECHANISMS

1.6.1 TRANSPORTATION UNIFORM MITIGATION FEE (TUMF) PROGRAM

The TUMF program is administered by the WRCOG based upon a regional Nexus Study most recently updated in 2017 to address major changes in right of way acquisition and improvement cost factors. (3) This regional program was put into place to ensure that development pays its fair share and that funding is in place for construction of facilities needed to maintain the requisite level of service and critical to mobility in the region. TUMF is a truly regional mitigation fee program and is imposed and implemented in every jurisdiction in Western Riverside County, except the City of Beaumont.

Table 1-4

Summary of Intersection Improvements

#	Intersection Location	Jurisdiction	Recommended Improvements[1]				Improvements in TUMF or DIF[2]?
			Existing (2018)	E+P	EAP (2018)	EAPC (2018)	
2	Gilman Springs Rd. / Alessandro Bl.	Riverside County	None	None	None	Traffic Signal	Yes (TUMF)
3	Jack Rabbit Trail / Gilman Springs Rd.	Riverside County	None	None	None	Traffic Signal	No
4	Bridge St. / Gilman Springs Rd.	Riverside County	Traffic Signal	Same	Same	Same	Yes (TUMF)
5	Driveway / Gilman Springs Rd.	Riverside County	Traffic Signal	Same	Same	Same	No
7	SR-79 NB Ramps / Gilman Springs Rd.	Riverside County, Caltrans	Traffic Signal[3]	Same	Same	Same	Yes (TUMF)

[1] All recommended improvements are consistent with the general plan designations of the respective jurisdictions in which they are located.

[2] Improvements are identified as being included in the Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF) program and/or County of Riverside DIF.

[3] Recommended improvements are consistent with the proposed Phase 5 SR-79 Freeway and Gilman Springs Road Interchange Improvements. These improvements are anticipated to be completed in April 2018.

TUMF fees are imposed on new residential, industrial, and commercial development through application of the TUMF fee ordinance and fees are collected at the building or occupancy permit stage. In addition, an annual inflation adjustment is considered each year in February. In this way, TUMF fees are adjusted upwards on a regular basis to ensure that the development impact fees collected keep pace with construction and labor costs, etc.

1.6.2 DEVELOPMENT IMPACT FEE (DIF) PROGRAM

The Project is located within the County's San Jacinto Valley Area Plan and therefore will be subject to County of Riverside DIF in an effort by the County to address development throughout its unincorporated area. The DIF program consists of two separate transportation components: the Roads, Bridges and Major Improvements component and the Traffic Signals component. Eligible facilities for funding by the County DIF program are identified on the County's Public Needs List, which currently extends through the year 2010. (5) A comprehensive review of the DIF program is now planned in order to update the nexus study. This will result in development of a revised "needs list" extending the program time horizon from 2010 to 2030.

The cost of signalizing DIF network intersections is identified under the Traffic Signals component of the DIF program. County staff generally defines DIF eligible intersections as those consisting of two intersecting general plan roadways. If the intersection meets this requirement, it is potentially eligible for up to $235,000 of credit, which is subject to negotiations with the County.

1.6.3 FAIR SHARE CONTRIBUTION

Project mitigation may include a combination of fee payments to established programs (e.g., TUMF and/or DIF), construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the County of Riverside's discretion).

When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. Improvements included in a defined program and constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate.

2 METHODOLOGIES

This section documents the methodologies and assumptions used to perform this traffic assessment.

2.1 LEVEL OF SERVICE

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

2.2 INTERSECTION CAPACITY ANALYSIS

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

2.2.1 SIGNALIZED INTERSECTIONS

County of Riverside

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

California Department of Transportation (Caltrans)

Per the Caltrans Guide for the Preparation of Traffic Impact Studies, the traffic modeling and signal timing optimization software package Synchro (Version 10) has been utilized to analyze signalized intersections under Caltrans' jurisdiction, which include interchange to arterial ramps (i.e. SR-79 Freeway ramps at Gilman Springs Road). (2) Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM 6th Edition. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections.

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

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

Source: HCM 6th Edition

Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network. Signal timing for the freeway arterial-to-ramp intersections have been obtained from Caltrans District 8 and were utilized for the purposes of this analysis. All signalized study area intersections with the County of Riverside have also utilized the Synchro software.

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g. PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM 6th Edition, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (6)

2.2.2 UNSIGNALIZED INTERSECTIONS

The County of Riverside requires the operations of unsignalized intersections be evaluated using the methodology described the HCM. (6) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2).

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

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

Source: HCM 6th Edition

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, LOS is computed for the intersection as a whole.

2.3 FREEWAY OFF-RAMP QUEUING ANALYSIS

The study area for this TIA includes the freeway-to-arterial interchange of the SR-79 Freeway at Gilman Springs Road. Consistent with Caltrans requirements, the 95th percentile queuing of vehicles has been assessed at the off-ramps to determine potential queuing issues at the freeway ramp intersections on Gilman Springs Road. Specifically, the queuing analysis is utilized to identify any potential queuing and "spill back" onto the SR-79 Freeway mainline from the off-ramps.

The traffic progression analysis tool and HCM intersection analysis program, Synchro, has been used to assess the potential issues/needs of the intersections with traffic added from the proposed Project. Storage (turn-pocket) length recommendations at the ramps have been based upon the 95th percentile queue resulting from the Synchro progression analysis. A vehicle is considered queued whenever it is traveling at less than 10 feet/second. A vehicle will only become queued when it is either at the stop bar or behind another queued vehicle. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The queue length reported is for the lane with the highest queue in the lane group. In other words, if traffic were observed for 100 cycles, the 95th percentile queue would be the queue experienced with the 95th busiest cycle (or 5% of the time).

A footnote on the Synchro outputs indicates if the 95th percentile cycle exceeds capacity. Traffic is simulated for two complete cycles of the 95th percentile traffic in Synchro in order to account for the effects of spillover between cycles. In practice, the 95th percentile queue shown will rarely be exceeded and the queues shown with the footnote are acceptable for the design of storage bays.

2.4 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

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

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

Future intersections that do not currently exist have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets.

Traffic signal warrant analyses were performed for all of the study area intersections, with the exception of the following locations as shown on Table 2-3, which are currently signalized:

TABLE 2-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

ID	Intersection Location	Jurisdiction	CMP?
2	Gilman Springs Road & Alessandro Boulevard	County of Riverside	No
3	Jack Rabbit Trail & Gilman Springs Road	County of Riverside	No
4	Bridge Street & Gilman Springs Road	County of Riverside	No
5	Driveway & Gilman Springs Road	County of Riverside	No
7	SR-79 Northbound Ramps & Gilman Springs Road	Caltrans, County of Riverside	No

The Existing conditions traffic signal warrant analysis is presented in the subsequent section, Section 3 *Existing Conditions* of this report. The traffic signal warrant analysis for future conditions is presented in Section 5 *E+P Traffic Conditions*, Section 6 *EAP (2018) Traffic Conditions*, and Section 7 *EAPC (2018) Traffic Conditions*.

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

may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.5 FREEWAY MAINLINE SEGMENT ANALYSIS

The freeway system in the study area has been broken into segments defined by the freeway-to-arterial interchange locations. The freeway segments have been evaluated in this TIA based upon peak hour directional volumes. The freeway segment analysis is based on the methodology described in the HCM (6th Edition) and performed using Highway Capacity Software (HCS) 7 software. The performance measure preferred by Caltrans to calculate LOS is density. Density is expressed in terms of passenger cars per mile per lane. Table 2-4 illustrates the freeway segment LOS descriptions for each density range utilized for this analysis.

TABLE 2-4: DESCRIPTION OF FREEWAY MAINLINE LOS

Level of Service	Description	Density Range (pc/mi/ln)[1]
A	Free-flow operations in which vehicles are relatively unimpeded in their ability to maneuver within the traffic stream. Effects of incidents are easily absorbed.	0.0 – 11.0
B	Relative free-flow operations in which vehicle maneuvers within the traffic stream are slightly restricted. Effects of minor incidents are easily absorbed.	11.1 – 18.0
C	Travel is still at relative free-flow speeds, but freedom to maneuver within the traffic stream is noticeably restricted. Minor incidents may be absorbed, but local deterioration in service will be substantial. Queues begin to form behind significant blockages.	18.1 – 26.0
D	Speeds begin to decline slightly, and flows and densities begin to increase more quickly. Freedom to maneuver is noticeably limited. Minor incidents can be expected to create queuing as the traffic stream has little space to absorb disruptions.	26.1 – 35.0
E	Operation at capacity. Vehicles are closely spaced with little room to maneuver. Any disruption in the traffic stream can establish a disruption wave that propagates throughout the upstream traffic flow. Any incident can be expected to produce a serious disruption in traffic flow and extensive queuing.	35.1 – 45.0
F	Breakdown in vehicle flow.	>45.0

[1] pc/mi/ln = passenger cars per mile per lane. Source: HCM (6th Edition)

The number of lanes for existing baseline conditions has been obtained from field observations conducted by Urban Crossroads in February 2018. These existing freeway geometrics have been utilized for all analysis scenarios. The SR-60 Freeway mainline volume data was obtained from the Caltrans Performance Measurement System (PeMS) website for the segments of the SR-60 Freeway interchange at Gilman Springs Road. The data was obtained from February 2018. The SR-79 Freeway mainline volume data was obtained from the Caltrans 2016 Traffic Volumes for the segments of the SR-79 Freeway interchange at Gilman Springs Road. The data was obtained from 2016 plus 4.04% to reflect 2018 traffic conditions. (8) In an effort to conduct a conservative analysis, the maximum value observed within the three-day period was utilized for the weekday morning (AM) and weekday evening (PM) peak hours. In addition, truck traffic, represented as a percentage of total traffic, has been utilized for the purposes of

this analysis in an effort to not overstate traffic volumes and peak hour deficiencies. As such, actual vehicles (as opposed to passenger-car-equivalent (PCE) volumes) have been utilized for the purposes of the basic freeway segment analysis.

2.6 FREEWAY MERGE/DIVERGE RAMP JUNCTION ANALYSIS

The freeway system in the study area has been broken into segments defined by freeway-to-arterial interchange locations resulting in two existing on and off ramp locations. Although the HCM (6th Edition) indicates the influence area for a merge/diverge junction is 1,500 feet, the analysis presented in this traffic study has been performed at the Gilman Springs Road ramp locations with respect to the nearest on or off ramp at each interchange in an effort to be consistent with Caltrans guidance/comments on other projects Urban Crossroads has worked on along the SR-60 and SR-79 corridor.

The merge/diverge analysis is based on the HCM Ramps and Ramp Junctions analysis method and performed using HCS 7 software. The measure of effectiveness (reported in passenger car/mile/lane) is calculated based on the existing number of travel lanes, number of lanes at the on and off ramps both at the analysis junction and at upstream and downstream locations (if applicable) and acceleration/deceleration lengths at each merge/diverge point. Table 2-5 presents the merge/diverge area level of service descriptions for each density range utilized for this analysis.

TABLE 2-5: DESCRIPTION OF FREEWAY MERGE AND DIVERGE LOS

Level of Service	Density Range (pc/mi/ln)[1]
A	≤10.0
B	10.0 – 20.0
C	20.0 – 28.0
D	28.0 – 35.0
E	>35.0
F	Demand Exceeds Capacity

[1] pc/mi/ln = passenger cars per mile per lane. Source: HCM (6th Edition)

The ramp data (per the count data presented in Appendix 3.1) were utilized to flow conserve the mainline volumes to determine the SR-60 Freeway mainline volumes east of Gilman Springs Road and SR-79 Freeway mainline volumes north of Gilman Springs Road. Similar to the basic freeway segment analysis, actual vehicles (as opposed to passenger-car-equivalent volumes) have been utilized for the purposes of the freeway ramp junction (merge/diverge) analysis.

2.7 MINIMUM LEVEL OF SERVICE (LOS)

The definition of an intersection deficiency has been obtained from each of the applicable surrounding jurisdictions.

2.7.1 COUNTY OF RIVERSIDE

Riverside County General Plan Policy C 2.1 states that the County will maintain the following County-wide target LOS: LOS C on all County-maintained roads and conventional State Highways. As an exception, LOS D may be allowed in Community Development areas at intersections of any combination of Secondary Highways, Major Highways, Arterial Highways, Urban Arterial Highways, Expressways or conventional State Highways. LOS E may be allowed in designated Community Centers to the extent that it would support transit-oriented development and pedestrian communities. As such, LOS D has been considered acceptable at any intersection within the County of Riverside because all of the study area intersections are classified as Secondary Highways or a higher classification.

2.7.2 CITY OF MORENO VALLEY

The definition of an intersection deficiency in the City of Moreno Valley is based on the City of Moreno Valley General Plan Circulation Element. The City of Moreno Valley General Plan states that target LOS C or LOS D be maintained along City roads (including intersections) wherever possible. Exhibit 2-1 depicts the level of service standards within the City.

2.7.3 CALTRANS

Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State Highway System (SHS) facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. Consistent with the County of Riverside minimum LOS of LOS D, LOS D will be used as the target LOS for both arterial-to-freeway ramps and freeway mainline segments and ramp junctions.

2.8 DEFICIENCY CRITERIA

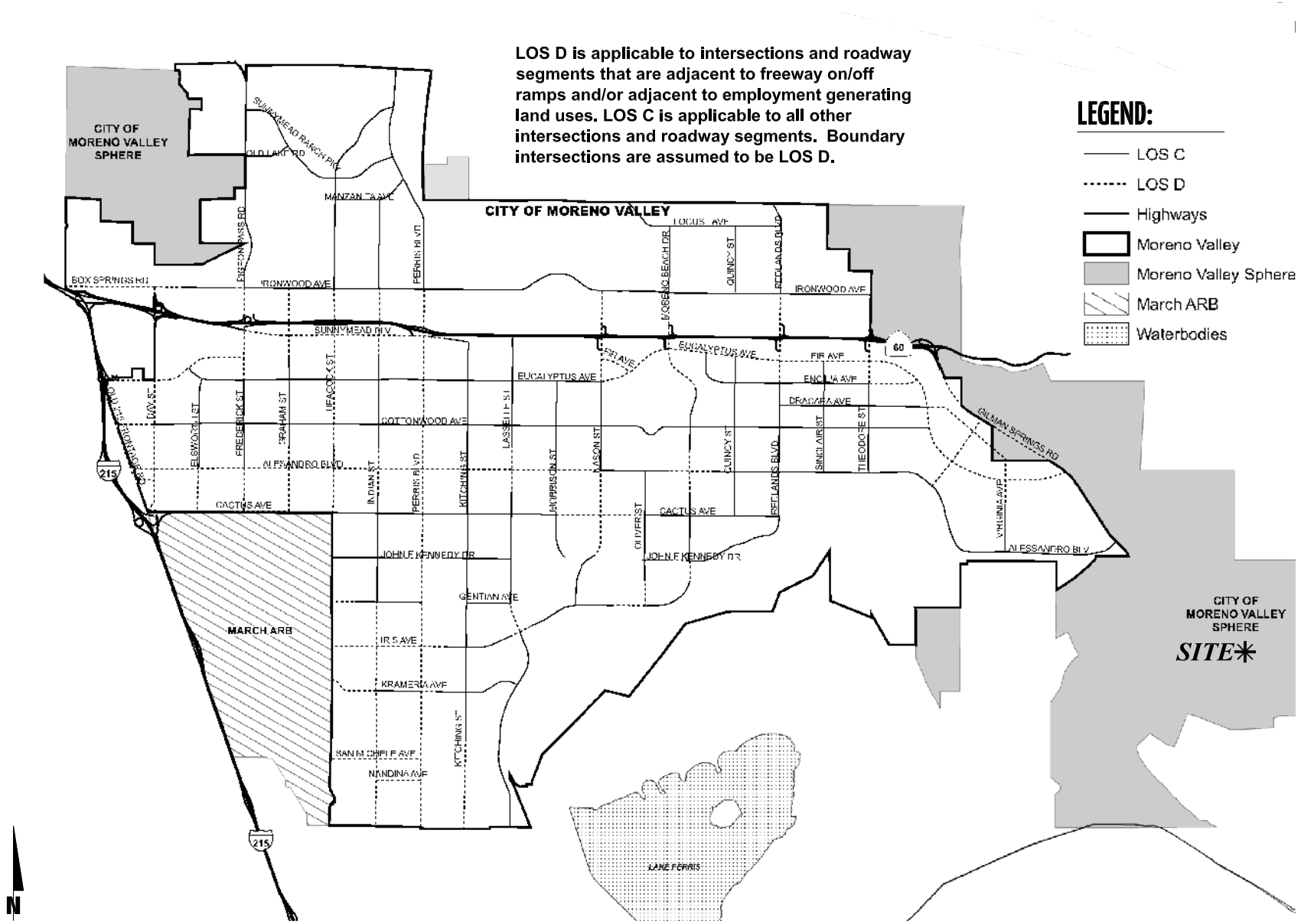
This section outlines the methodology used in this analysis related to identifying circulation system deficiencies.

2.8.1 INTERSECTIONS

To determine whether the addition of project traffic at a study intersection would result in a deficiency, the following will be utilized:

- A deficiency occurs at study area intersections if the pre-Project condition is at or better than LOS D (i.e., acceptable LOS), and the addition of project trips causes the peak hour LOS of the study area intersection to operate at unacceptable LOS (i.e., LOS E or F). Per the County of Riverside traffic study guidelines, for intersections currently operating at unacceptable LOS (LOS E or F), a deficiency would occur if the Project contributes 50 or more peak hour trips to pre-project traffic conditions.

EXHIBIT 2-1: CITY OF MORENO VALLEY LEVEL OF SERVICE (LOS) STANDARDS



URBAN CROSSROADS

2.8.2 CALTRANS FACILITIES

To determine whether the addition of project traffic to the SHS freeway segments would result in a deficiency, the following will be utilized:

- The traffic study finds that the LOS of a segment will degrade from D or better to E or F.
- The traffic study finds that the project will exacerbate an already deficient condition (i.e., contributing 50 or more peak hour trips). A segment that is operating at or near capacity is deemed to be deficient.

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3 AREA CONDITIONS

This section provides a summary of the existing circulation network, the County of Riverside General Plan Circulation Network, and a review of existing peak hour intersection operations and traffic signal warrant analyses.

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the agreement with County of Riverside staff (Appendix 1.1), the study area includes a total of 7 existing intersections as shown previously on Exhibit 1-2 where the Project is anticipated to contribute 50 or more peak hour trips. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 COUNTY OF RIVERSIDE GENERAL PLAN CIRCULATION ELEMENT

3.2.1 COUNTY OF RIVERSIDE

Exhibit 3-2 shows the adopted County of Riverside General Plan Roadway Network. Exhibit 3-3 illustrates the adopted County of Riverside General Plan roadway cross-sections.

3.2.2 CITY OF MORENO VALLEY

Exhibit 3-4 shows the City of Moreno Valley General Plan Circulation Element, and Exhibit 3-5 illustrates the City of Moreno Valley General Plan roadway cross-sections.

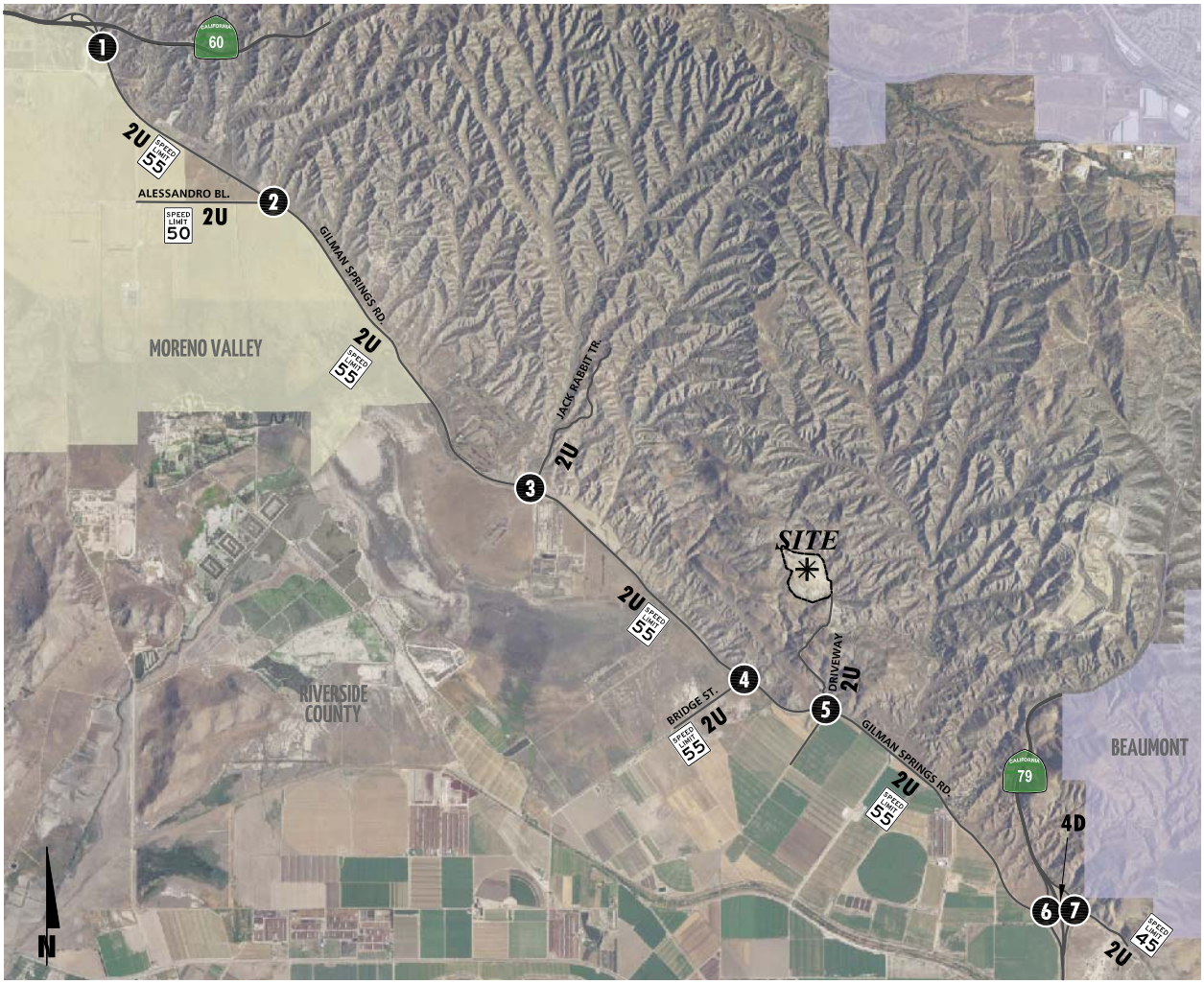
3.3 TRUCK ROUTES

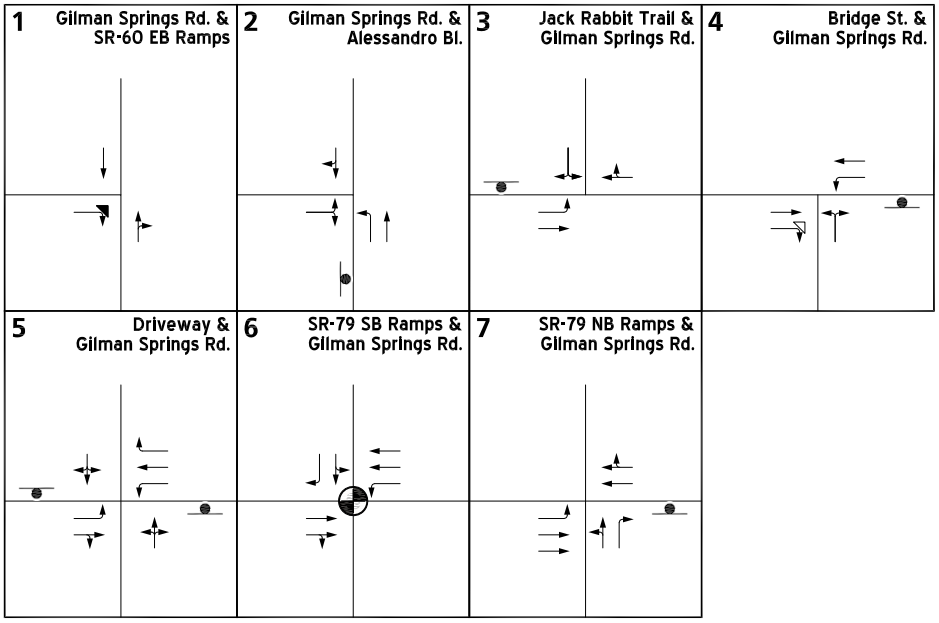
While the County of Riverside's General Plan recognizes the trucking industry and the importance of the region's role in the movement of goods, there are no truck routes defined within the County. However, the City of Moreno Valley has a designated truck route map, which identifies Gilman Springs Road and Alessandro Boulevard as designated City of Moreno Valley truck routes. The City of Moreno Valley's existing truck routes are shown on Exhibit 3-6.

3.4 BICYCLE & PEDESTRIAN FACILITIES

The Riverside County Trails and Bikeway System is shown on Exhibit 3-7. There are proposed Regional Trails along Gilman Springs Road and the Bridge Street alignment within the study area. The Master Plan of Trails and Bike Plan for the City of Moreno Valley are shown on Exhibits 3-8 and 3-9, respectively. There is a planned Class II bike lane planned along the future Eucalyptus Avenue, west of Gilman Springs Road. Field observations conducted in February 2018 indicate no pedestrian and bicycle activity within the study area. Existing pedestrian facilities currently do not exist along Gilman Springs Road.

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





LEGEND:

- = TRAFFIC SIGNAL
- = STOP SIGN
- 4 = NUMBER OF LANES
- D = DIVIDED
- U = UNDIVIDED
- = FREE RIGHT TURN
- = CHANNELIZED YIELD
- DEF = DEFACTO RIGHT TURN
- SPEED LIMIT 25 = SPEED LIMIT (MPH)

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EXHIBIT 3-2: RIVERSIDE COUNTY GENERAL PLAN CIRCULATION ELEMENT

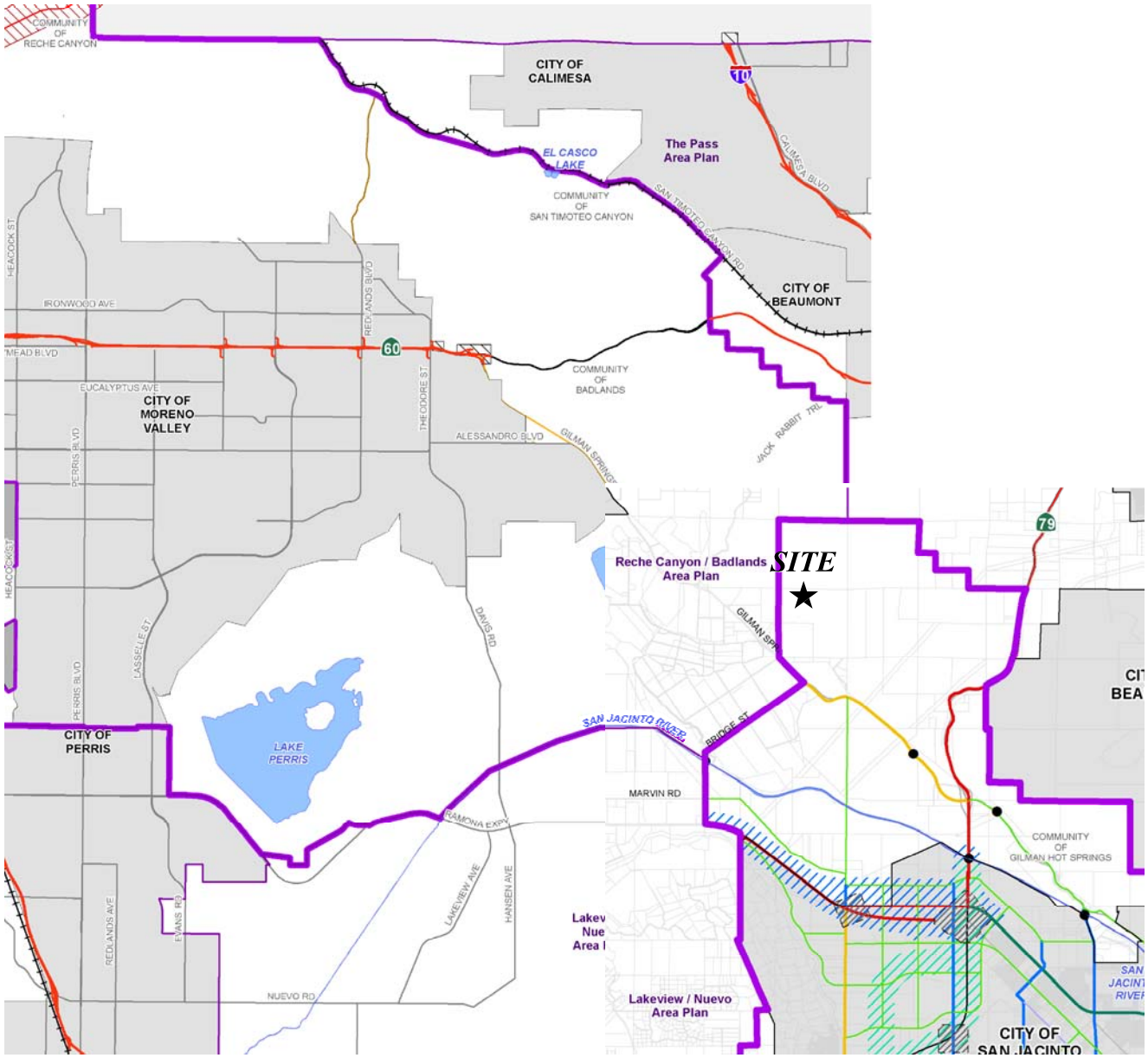
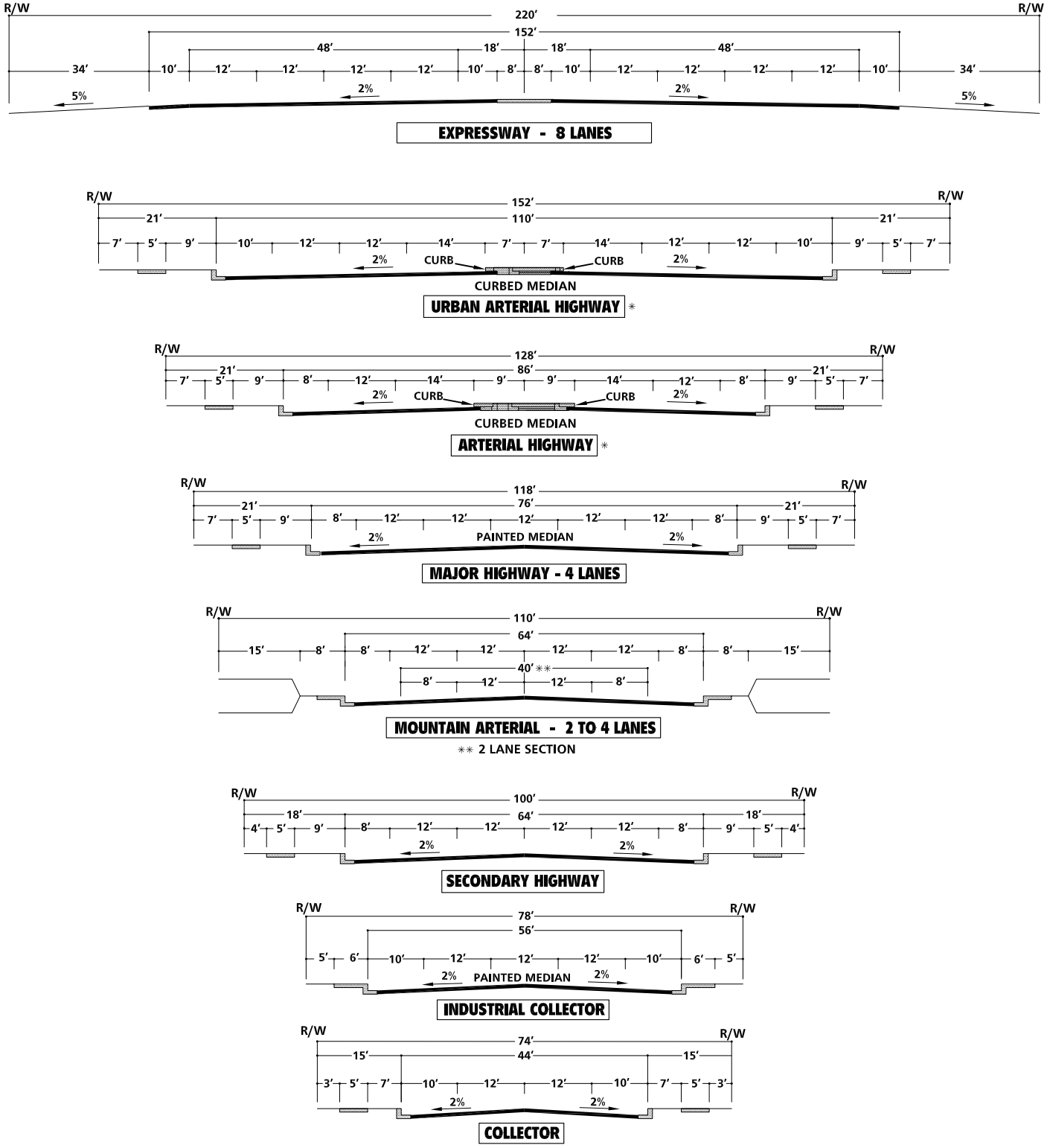


EXHIBIT 3-3: RIVERSIDE COUNTY GENERAL PLAN ROADWAY CROSS-SECTIONS

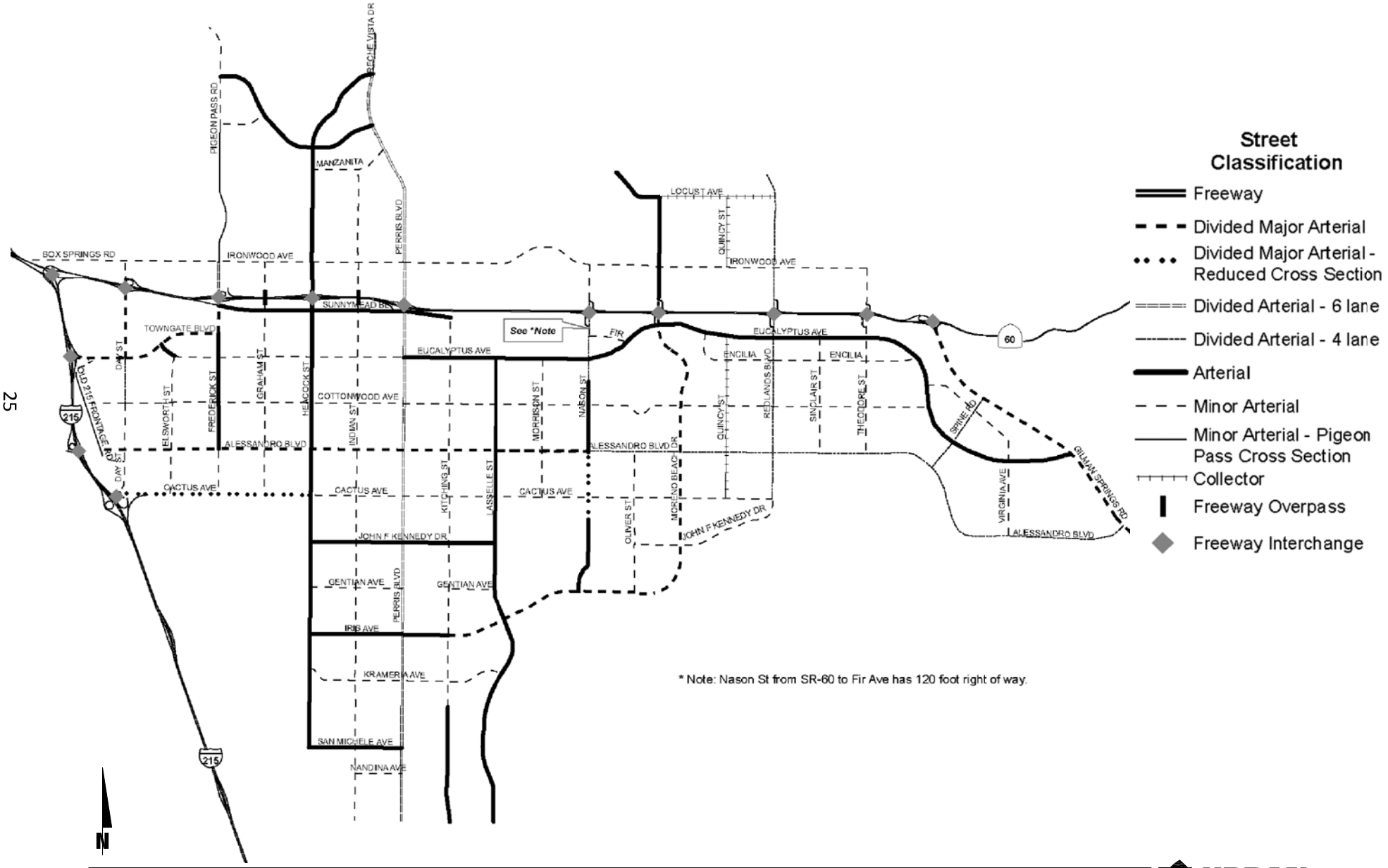


✳ *IMPROVEMENTS MAY BE RECONFIGURED TO ACCOMMODATE EXCLUSIVE TRANSIT LANES OR ALTERNATIVE LANE ARRANGEMENTS ADDITIONAL RIGHT OF WAY MAY BE REQUIRED AT INTERSECTIONS TO ACCOMMODATE ULTIMATE IMPROVEMENTS FOR STATE HIGHWAYS SHALL CONFORM TO CALTRANS DESIGN STANDARDS.*

NOT TO SCALE

SOURCE: COUNTY OF RIVERSIDE

EXHIBIT 3-4: CITY OF MORENO VALLEY GENERAL PLAN CIRCULATION ELEMENT



URBAN CROSSROADS

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

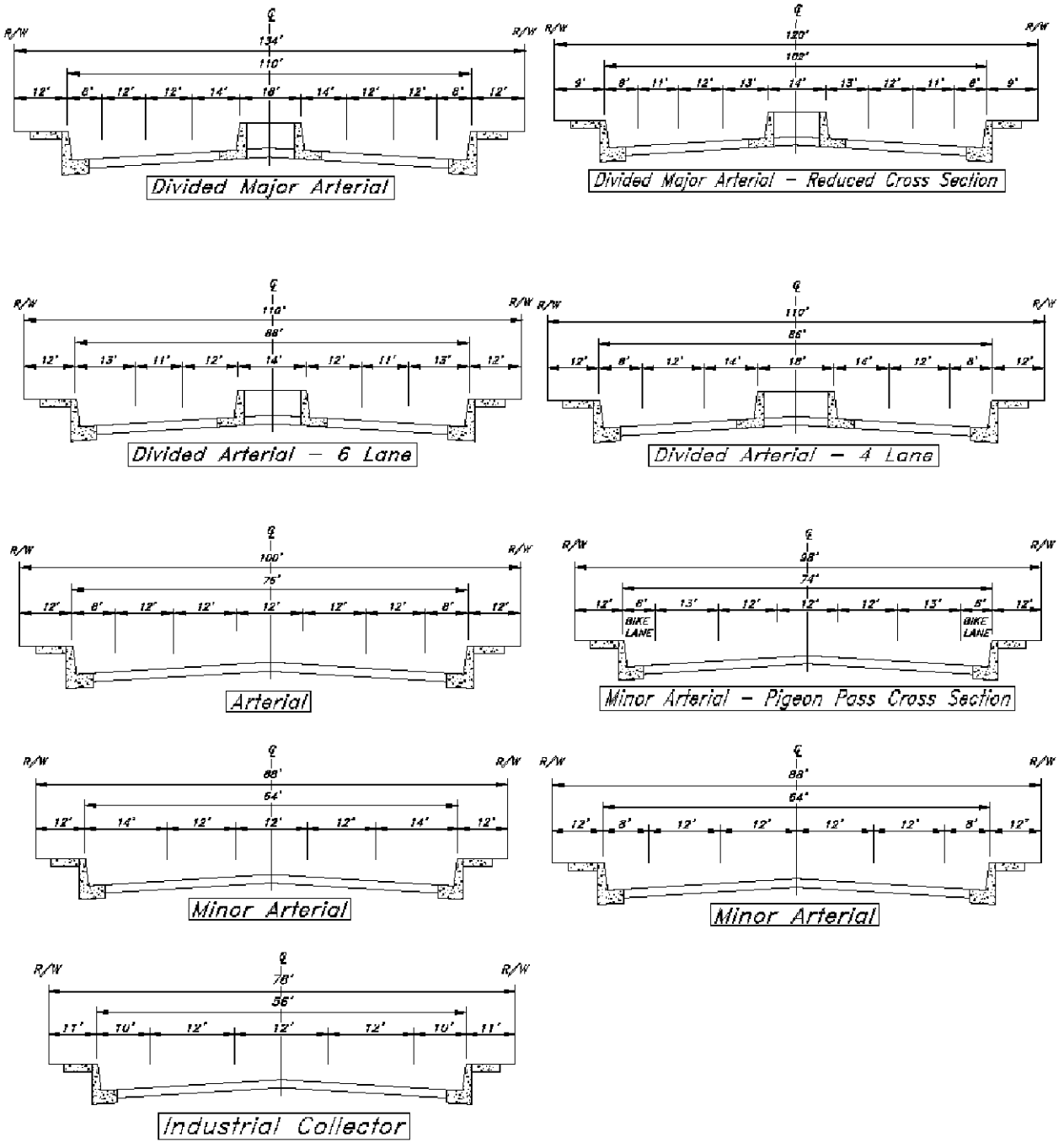


EXHIBIT 3-6: EXISTING TRUCK ROUTES

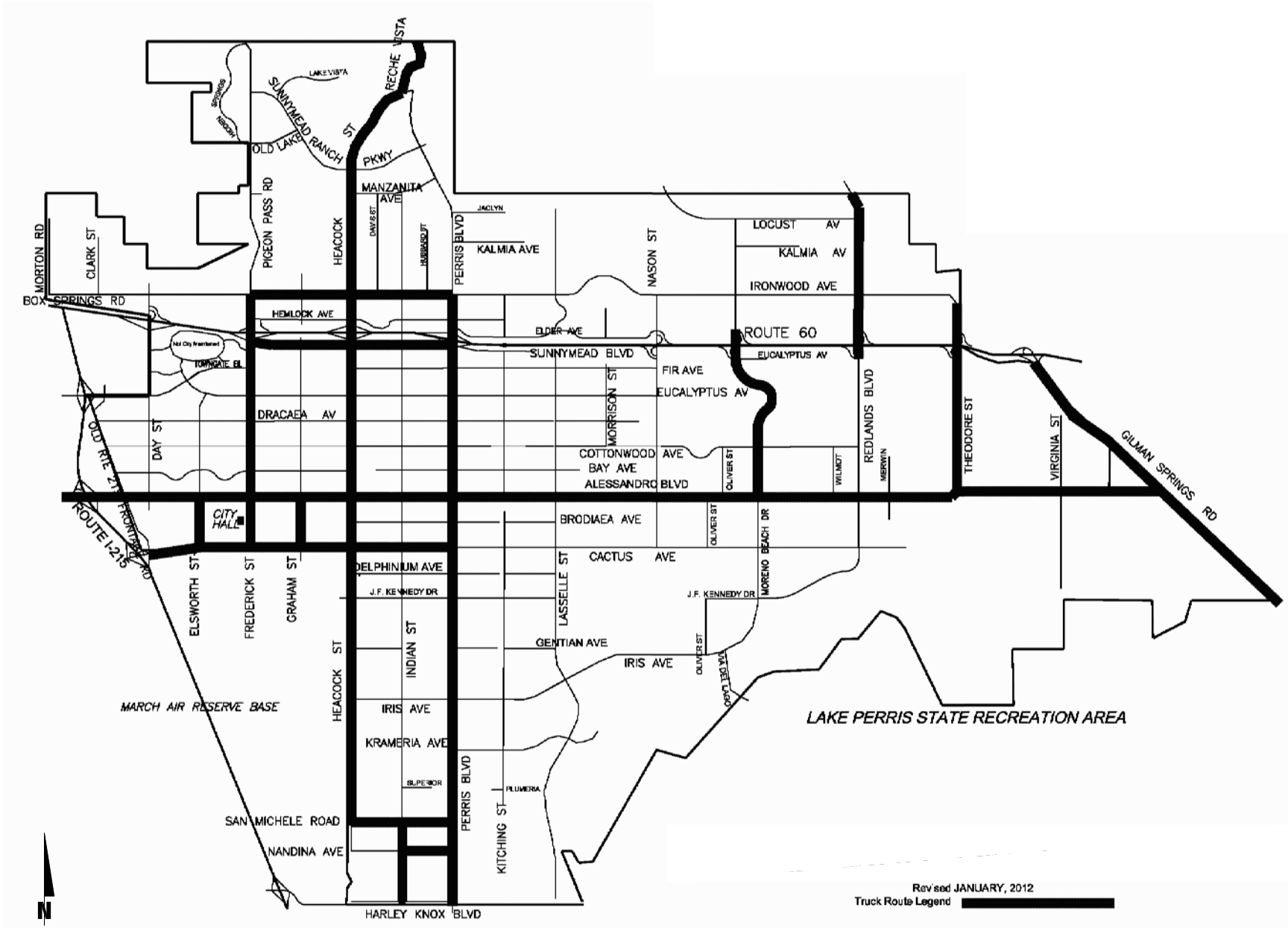
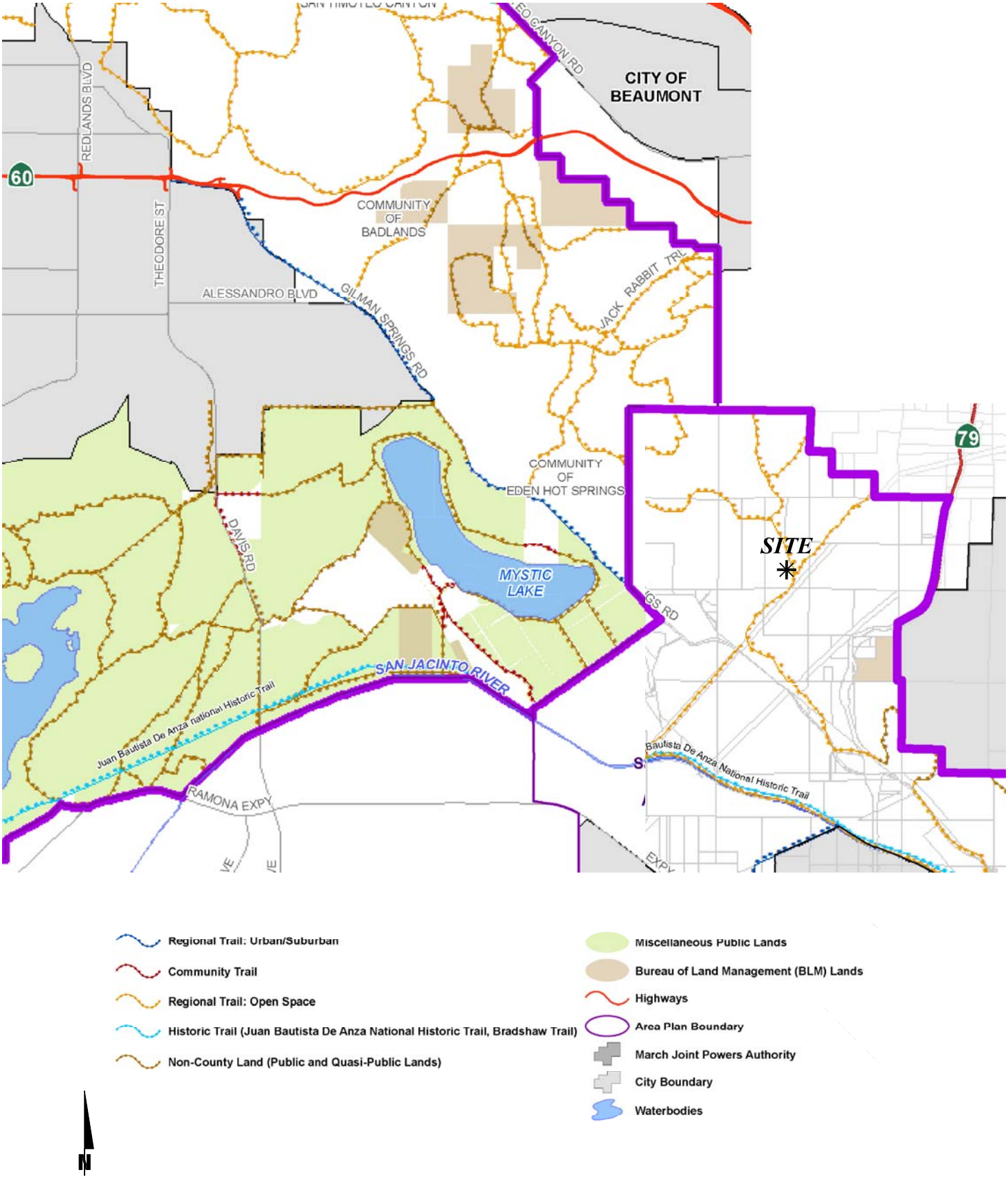
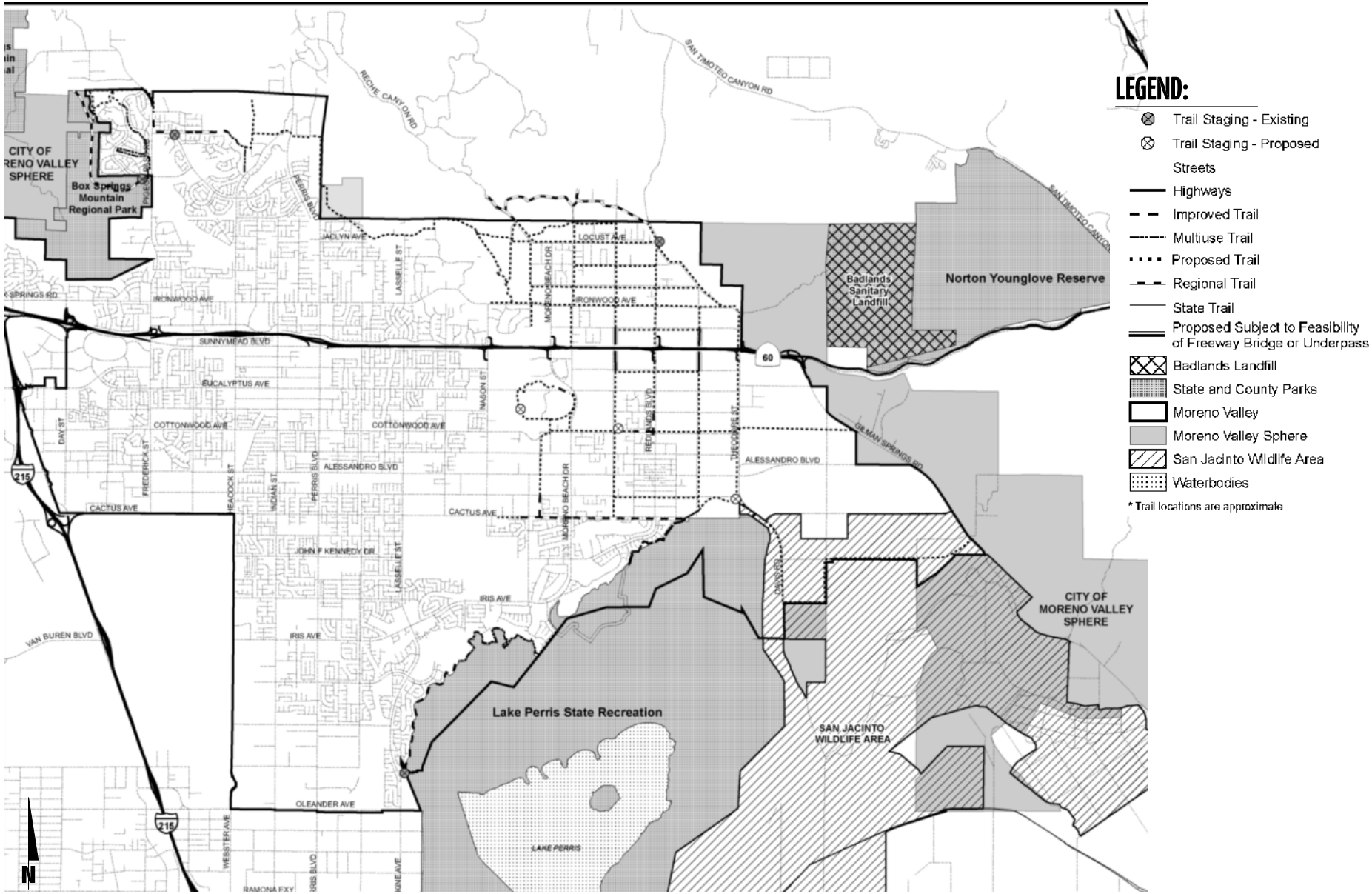


EXHIBIT 3-7: RIVERSIDE COUNTY TRAILS AND BIKEWAY SYSTEM



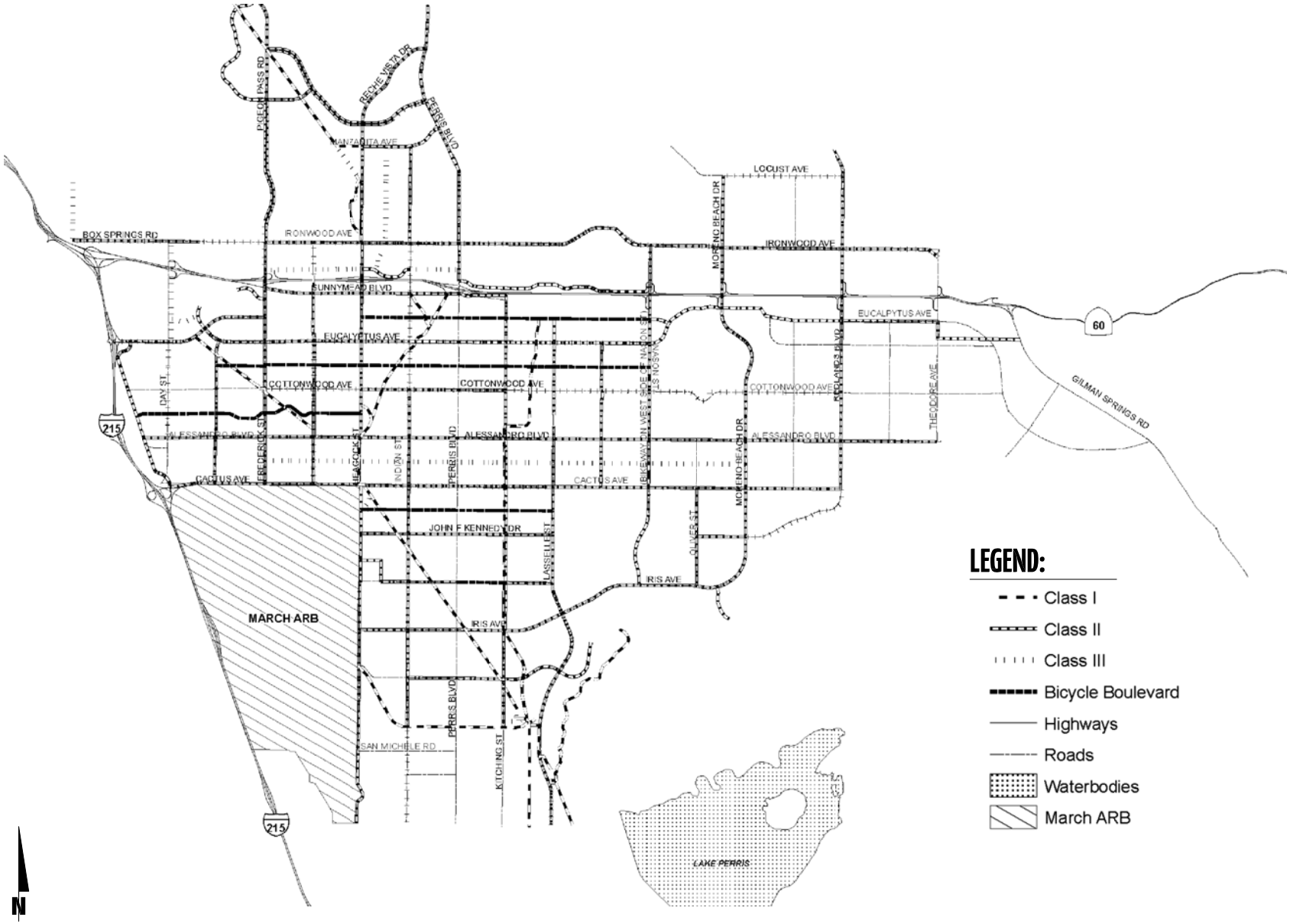
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EXHIBIT 3-8: CITY OF MORENO VALLEY MASTER PLAN OF TRAILS



URBAN CROSSROADS

EXHIBIT 3-9: CITY OF MORENO VALLEY BIKE PLAN



3.5 TRANSIT SERVICE

The study area is currently served by the Riverside Transit Authority (RTA), a public transit agency serving the unincorporated Riverside County region. There are currently no existing bus routes that serve the roadways within the study area in close proximity to the proposed Project. Transit service is reviewed and updated by RTA periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. The Project does not propose a change of land use and would be unlikely to cause RTA to adjust existing bus routes in the area.

3.6 EXISTING (2018) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in February 2018. The following peak hours were selected for analysis:

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

The weekday AM and weekday PM peak hour count data are representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and near-by schools were in session and operating on normal schedules. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1. These raw turning volumes have been flow conserved between intersections with limited access, no access and where there are currently no uses generating traffic (e.g., between ramp-to-arterial intersections, etc.). The traffic counts collected in February 2018 include the vehicle classifications as shown below:

- Passenger Cars
- 2-Axle Trucks
- 3-Axle Trucks
- 4 or More Axle Trucks

To represent the impact large trucks, buses and recreational vehicles have on traffic flow; all trucks were converted into PCEs. By their size alone, these vehicles occupy the same space as two or more passenger cars. In addition, the time it takes for them to accelerate and slow-down is also much longer than for passenger cars and varies depending on the type of vehicle and number of axles. For the purpose of this analysis, a PCE factor of 1.5 has been applied to 2-axle trucks, 2.0 for 3-axle trucks and 3.0 for 4+-axle trucks to estimate each turning movement. These factors are consistent with the values recommended for use in the San Bernardino County CMP and are in excess of the factor recommended for use in the County of Riverside traffic study guidelines. (8) Although the County of Riverside has a recommended PCE factor of 2.0, the San Bernardino County CMP PCE factors have been utilized in an effort to conduct a more conservative analysis.

Existing weekday average daily traffic (ADT) volumes on arterial highways throughout the study area are shown on Exhibit 3-10. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 16.8029 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 5.95 percent. As such, the above equation utilizing a factor of 16.8029 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 5.95 percent (i.e., 1/0.0595 = 16.8029) and was assumed to sufficiently estimate ADT volumes for planning-level analyses. Existing weekday AM and weekday PM peak hour intersection volumes (in PCE) are also shown on Exhibit 3-10.

3.7 INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized in Table 3-1 which indicates that the following existing study area intersections are currently operating at an unacceptable LOS during the peak hours (i.e., LOS E or worse):

- Bridge St. & Gilman Springs Rd. (#4) – LOS F AM and PM peak hours
- Gilman Springs Rd. & Driveway (#5) – LOS E AM peak hour; LOS F PM peak hour
- SR-79 NB Ramps & Gilman Springs Rd. (#7) – LOS F AM and PM peak hours

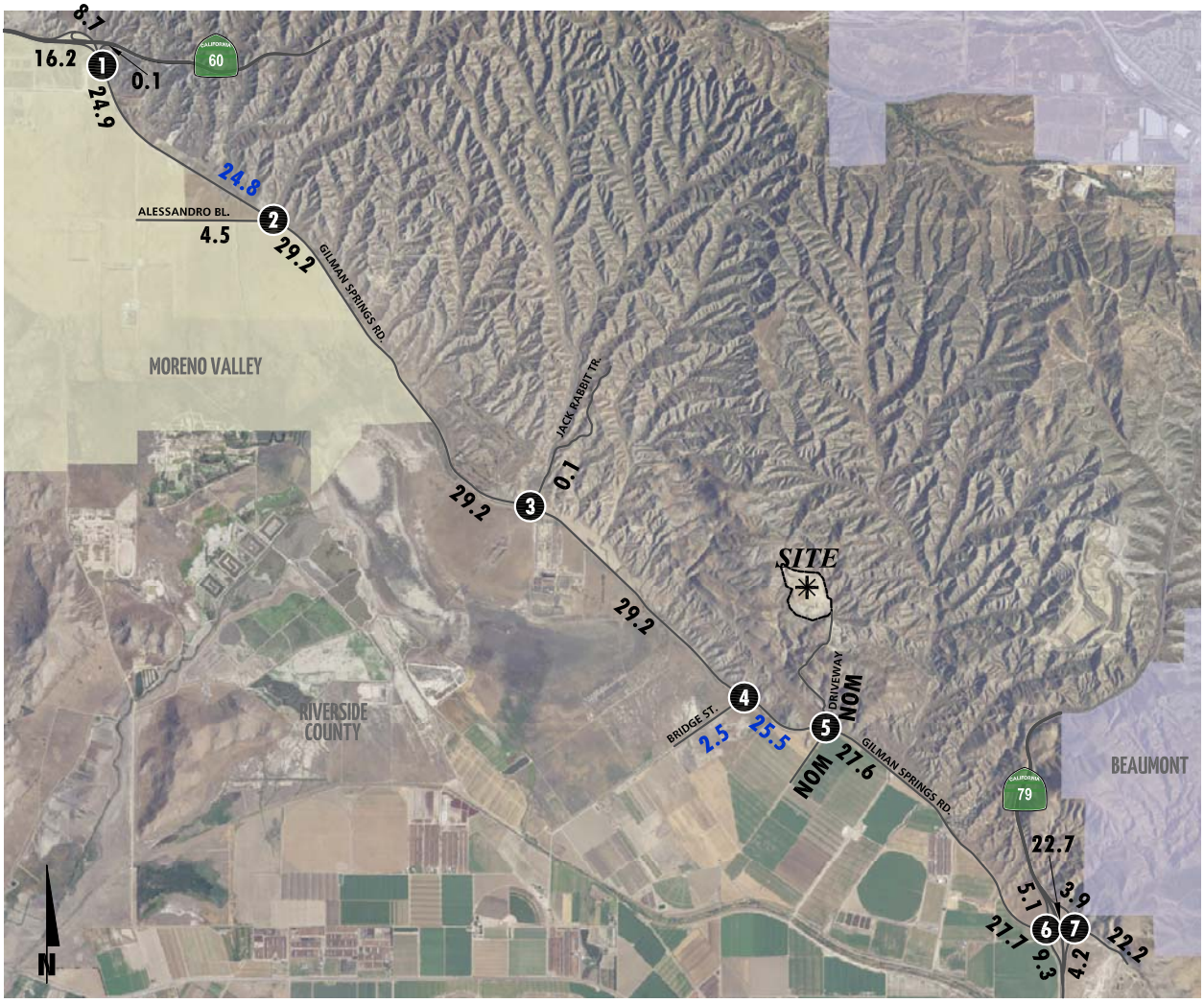
Consistent with Table 3-1, a summary of the peak hour intersection LOS for Existing conditions are shown on Exhibit 3-11. The intersection operations analysis worksheets are included in Appendix 3.2 of this TIA.

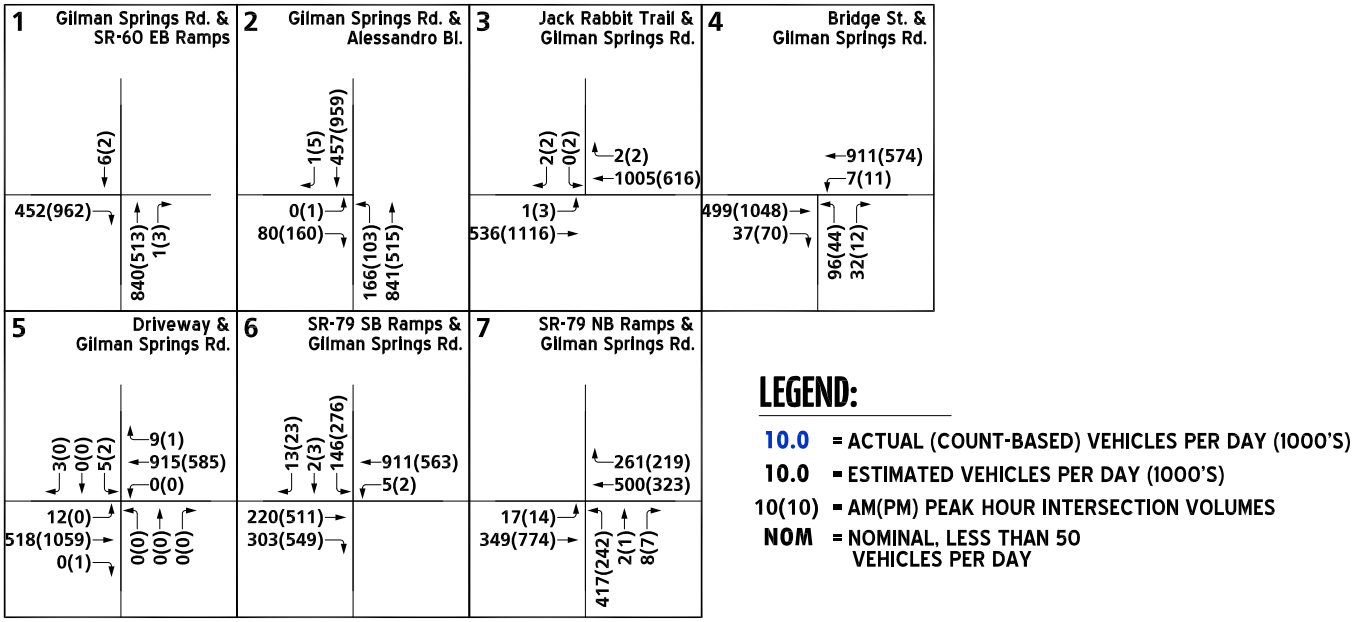
3.8 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. For Existing traffic conditions, a traffic signal appears to currently be warranted at the following unsignalized study area intersections (see Appendix 3.3):

- Gilman Springs Rd. & Alessandro Bl. (#2)
- Bridge St. & Gilman Springs Rd. (#4)
- SR-79 NB Ramps & Gilman Springs Rd. (#7)

EXHIBIT 3-10: EXISTING (2018) TRAFFIC VOLUMES (IN PCE)

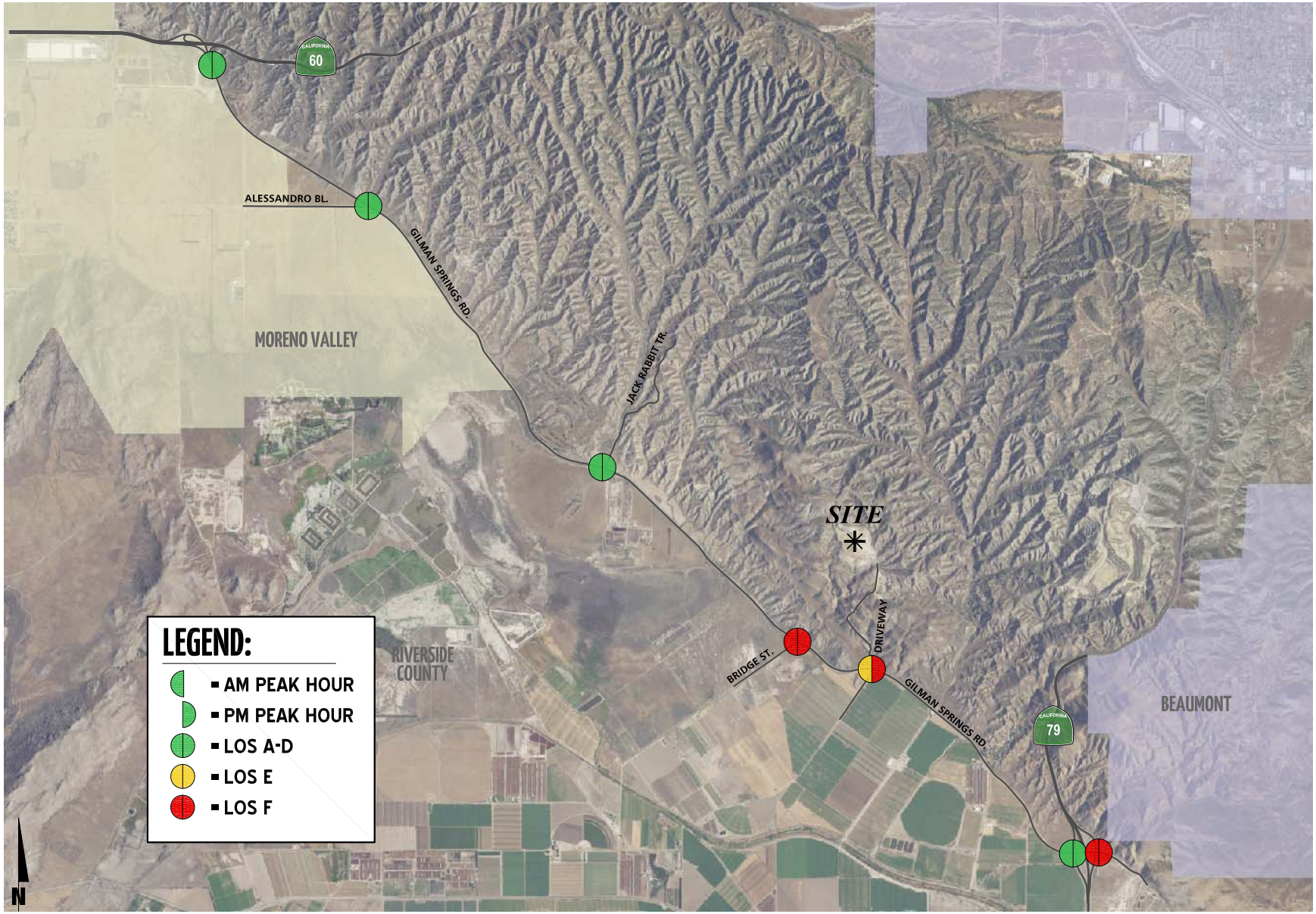




LEGEND:

- 10.0 = ACTUAL (COUNT-BASED) VEHICLES PER DAY (1000'S)
- 10.0 = ESTIMATED VEHICLES PER DAY (1000'S)
- 10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES
- NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

EXHIBIT 3-11: EXISTING (2018) SUMMARY OF LOS



URBAN CROSSROADS

Table 3-1

Intersection Analysis for Existing (2018) Conditions

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Gilman Springs Rd. / SR-60 EB Ramps	UC	0	1	0	0	1	0	0	0	1>>	0	0	0	0.0	0.0	A	A
2	Gilman Springs Rd. / Alessandro Bl.	CSS	1	1	0	0	1	0	0	1	0	0	0	0	11.8	29.0	B	D
3	Jack Rabbit Trail / Gilman Springs Rd.	CSS	0	0	0	0	1	0	1	1	0	0	1	0	18.6	30.2	C	D
4	Bridge St. / Gilman Springs Rd.	CSS	0	1	0	0	0	0	0	1	1	1	1	0	**>100.0**	**65.8**	**F**	**F**
5	Driveway / Gilman Springs Rd.	CSS	0	1	0	0	1	0	1	1	0	1	1	1	**36.7**	**61.4**	**E**	**F**
6	SR-79 SB Ramps / Gilman Springs Rd.	TS	0	0	0	0	1	1	0	2	0	1	2	0	7.4	12.3	A	B
7	SR-79 NB Ramps / Gilman Springs Rd.	CSS	0	1	1	0	0	0	1	2	0	0	2	0	**>100.0**	**>100.0**	**F**	**F**

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

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

L = Left; T = Through; R = Right; >> = Free-Right Turn Lane

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

[3] UC = Uncontrolled; CSS = Cross-street Stop; TS = Traffic Signal

3.9 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the SR-79 Freeway and Gilman Springs interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the SR-79 Freeway. Queuing analysis findings are presented in Table 3-2 for Existing traffic conditions. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline.

As shown on Table 3-2, there are no movements that are currently experiencing queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows for Existing traffic conditions. Worksheets for Existing traffic conditions off-ramp queuing analysis are provided in Appendix 3.4.

3.10 EXISTING CONDITIONS BASIC FREEWAY SEGMENT ANALYSIS

Existing mainline directional volumes for the weekday AM and PM peak hours are provided on Exhibit 3-12. As shown on Table 3-3, SR-60 and SR-79 Freeway segments analyzed for this study are found to operate at an acceptable LOS (i.e., LOS D or better) during the peak hours, with the exception of the following segments:

- SR-60 Freeway Westbound – West of Gilman Springs Road (#1) – LOS E AM and PM peak hours
- SR-60 Freeway Eastbound – East of Gilman Springs Road (#3) – LOS F AM peak hour only

Existing basic freeway segment analysis worksheets are provided in Appendix 3.5.

3.11 EXISTING CONDITIONS FREEWAY MERGE/DIVERGE ANALYSIS

Ramp merge and diverge operations were also evaluated for Existing (2018) conditions and the results of this analysis are presented in Table 3-4. As shown in Table 3-4, the SR-60 and SR-79 Freeway ramp merge and diverge areas at Gilman Springs Road are anticipated to operate at LOS D or better, with the exception of the following ramp junctions:

- SR-60 Freeway – On-Ramp at Gilman Springs Road (#1) – LOS E AM and PM peak hours
- SR-60 Freeway – Off-Ramp at Gilman Springs Road (#2) – LOS E PM peak hour only
- SR-60 Freeway – Off-Ramp at Gilman Springs Road (#3)- LOS E AM peak hour; LOS F PM peak hour

Existing (2018) freeway ramp junction operations analysis worksheets are provided in Appendix 3.6.

Table 3-2

Peak Hour Freeway Off-Ramp Queuing Summary for Existing (2018) Conditions

Intersection	Movement	Available Stacking Distance (Feet)	95th Percentile Queue (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM
SR-79 SB Ramps / Gilman Springs Road	SBL/T	1,890	90	204	Yes	Yes
	SBR	235	0	0	Yes	Yes
SR-79 NB Ramps / Gilman Springs Road	NBL/T	1,600	425	325	Yes	Yes
	NBR	435	0	0	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

Table 3-3

Basic Freeway Segment Analysis for Existing (2018) Conditions

Freeway	Direction	Mainline Segment	Lanes[1]	Volume[2]		Density[3]		LOS[4]	
				AM	PM	AM	PM	AM	PM
SR-60 Freeway	Westbound	West of Gilman Springs Road	2	3,930	4,052	**36.3**	**38.4**	**E**	**E**
		East of Gilman Springs Road	2	3,131	3,569	25.7	31.0	C	D
	Eastbound	West of Gilman Springs Road	2	3,540	4,514	31.0	--[5]	D	**F**
		East of Gilman Springs Road	2	3,131	3,569	25.7	31.0	C	D
SR-79 Freeway	Southbound	North of Gilman Springs Road	2	1,348	1,730	10.6	13.6	A	B
		South of Gilman Springs Road	2	1,479	1,986	11.7	15.6	B	B
	Northbound	North of Gilman Springs Road	2	1,096	1,209	8.7	9.5	A	A
		South of Gilman Springs Road	2	1,239	1,221	9.7	9.6	A	A

BOLD = LOS does not meet Caltrans requirements (i.e., unacceptable LOS or LOS E/F).

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Directional volumes based on current PeMS data.

[3] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[4] LOS = Level of Service

[5] HCS7 does not report density for freeway facilities operating at LOS F.

Table 3-4

Freeway Ramp Merge/Diverge Analysis for Existing (2018) Conditions

Freeway	Direction	Ramp Junction	Lanes on Freeway	AM Peak Hour		PM Peak Hour	
				Density[1]	LOS[2]	Density[1]	LOS[2]
SR-60 Freeway	Westbound	On-Ramp at Gilman Springs Road	2	**40.6**	**E**	**42.8**	**E**
		Off-Ramp at Gilman Springs Road	2	27.9	D	**31.8**	**E**
	Eastbound	Off-Ramp at Gilman Springs Road	2	**32.5**	**E**	--[3]	**F**
		On-Ramp at Gilman Springs Road	2	29.4	D	34.8	D
SR-79 Freeway	Southbound	Off-Ramp at Gilman Springs Road	2	12.1	B	15.6	B
		On-Ramp at Gilman Springs Road	2	13.4	B	17.9	B
	Northbound	On-Ramp at Gilman Springs Road	2	9.8	B	10.8	B
		Off-Ramp at Gilman Springs Road	2	11.2	B	11.0	B

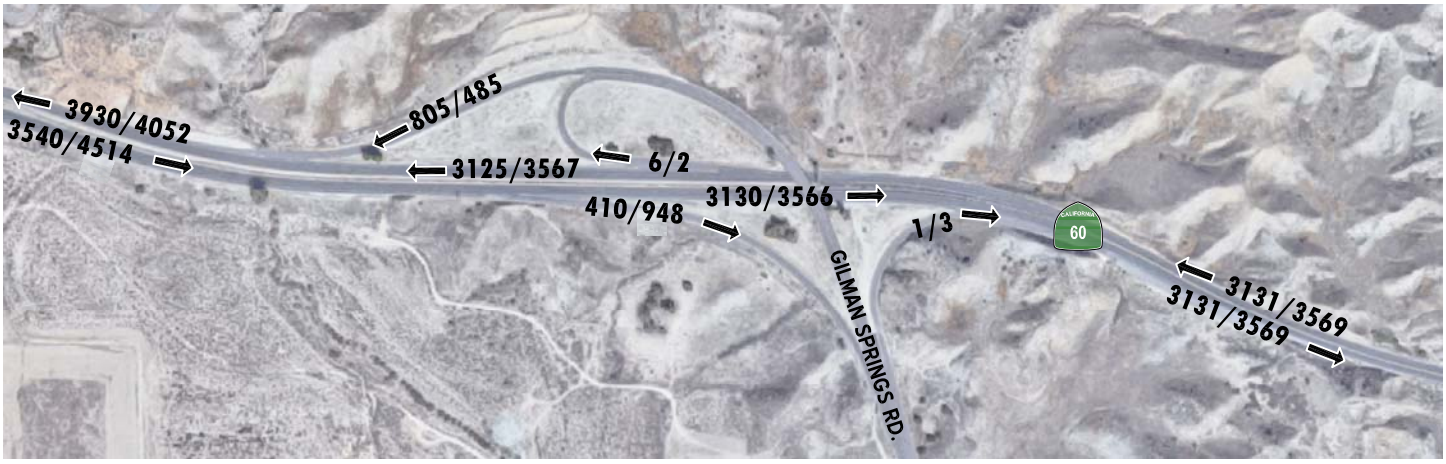
BOLD = LOS does not meet Caltrans requirements (i.e., unacceptable LOS or LOS E/F).

[1] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[2] LOS = Level of Service

[3] HCS7 does not report density for freeway facilities operating at LOS F.

EXHIBIT 3-12: EXISTING (2018) FREEWAY MAINLINE VOLUMES





LEGEND:

100/200 = AM/PM PEAK HOUR VOLUMES

NOTE: VOLUMES IN ACTUAL VEHICLES (NOT PCE)

3.12 RECOMMENDED IMPROVEMENTS

3.12.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient to reduce each location's peak hour delay and improve the associated LOS grade to an acceptable LOS (LOS D or better). The effectiveness of the proposed recommended improvements is presented in Table 3-5 for Existing traffic conditions. Recommended improvements to address deficiencies for Existing traffic conditions are described below.

Recommended Improvement – Bridge St. & Gilman Springs Rd. (#4)

- Install a traffic signal

Recommended Improvement – Driveway & Gilman Springs Rd. (#5)

- Install a traffic signal

Recommended Improvement – SR-79 Northbound Ramps & Gilman Springs Rd. (#7)

- Install a traffic signal

The intersection operations analysis worksheets, with improvements, are included in Appendix 3.7 of this TIA.

Although Table 3-2 had shown there are currently no movements experiencing queuing issues during the weekday AM and PM peak hours, Table 3-6 shows the queuing results for the SR-79 Ramps at Gilman Springs Road with the implementation of the recommended intersection improvements discussed above and shown on Table 3-5. Worksheets for Existing traffic conditions, with improvements, off-ramp queuing analysis are provided in Appendix 3.8.

3.12.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT FREEWAY FACILITIES

At this time, Caltrans has no fee programs or other improvement programs in place to address the deficiencies caused by development projects in the County of Riverside (or other neighboring jurisdictions) on the SHS roadway segments. As such, no improvements have been recommended to address the Existing deficiencies on the SHS.

Table 3-5

Intersection Analysis for Existing (2018) Conditions With Improvements

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
4	Bridge St. / Gilman Springs Rd.																	
	- Without Improvements	CSS	0	1	0	0	0	0	0	1	1	1	1	0	**>100.0**	**65.8**	**F**	**F**
	- With Improvements	**TS**	0	1	0	0	0	0	0	1	1	1	1	0	11.5	12.8	B	B
5	Driveway / Gilman Springs Rd.																	
	- Without Improvements	CSS	0	1	0	0	1	0	1	1	0	1	1	1	**36.7**	**61.4**	**E**	**F**
	- With Improvements	**TS**	0	1	0	0	1	0	1	1	0	1	1	1	10.0	7.9	B	A
7	SR-79 NB Ramps / Gilman Springs Rd.																	
	- Without Improvements	CSS	0	1	1	0	0	0	1	2	0	0	2	0	**>100.0**	**>100.0**	**F**	**F**
	- With Improvements	**TS**	0	1	1	0	0	0	1	2	0	0	2	0	16.2	10.3	B	B

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

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

L = Left; T = Through; R = Right

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

[3] CSS = Cross-street Stop; TS = Traffic Signal; **TS** = Improvements

Table 3-6

Peak Hour Freeway Off-Ramp Queuing Summary for Existing (2018) Conditions With Improvements

Intersection	Movement	Available Stacking Distance (Feet)	95th Percentile Queue (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM
SR-79 SB Ramps / Gilman Springs Road	SBL/T	1,890	90	204	Yes	Yes
	SBR	235	0	0	Yes	Yes
SR-79 NB Ramps / Gilman Springs Road	NBL/T	1,600	364 [2]	153	Yes	Yes
	NBR	435	0	0	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

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

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4 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network. The historic tonnage average is 377,765 TPY based on a 15-year average of historical data. The Project is proposing a permit that would continue to allow up to 1,000,000 TPY. For impact calculations that rely on annual tonnage, the net increase over the baseline (i.e., 377,765 TPY) will be evaluated as part of the analysis. When compared to the proposed permitted maximum annual production quantity of the 1.0 MTPY results in a net increase of 622,235 TPY, or a 62.22% share of the total permitted annual production quantity. As such, the high-end estimate of daily tonnage at the site is approximately 4,000 TPD, with approximately 1,511 TPD associated with the mine's existing operations (i.e., baseline) and 2,489 TPD attributable to the proposed Project (62.22% of 4,000 TPD). The Project is anticipated to be in operation by the end of 2018.

The Project is proposed to have access on Gilman Springs Road via a private road extending from Gilman Springs Road. All Project access points are assumed to allow full-access. Regional access to the project site is provided via the SR-60 Freeway at Gilman Springs Road interchange and SR-79 at Gilman Springs Road interchange.

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development. The ITE Trip Generation Manual is a nationally recognized source for estimating site specific trip generation. ITE recently released an updated edition of the Trip Generation Manual (10th Edition) in September 2017. (9) As the proposed Project's land use is rather unique and not comparable to any current ITE Trip Generation Manual rates, the traffic generating potential of the proposed Project has been estimated based on the increase in permitted annual production above the Project's historical baseline. Annual production information was obtained for a 15-year period from 2003-2017.

Table 4-1 presents the 15-year average production quantity or historical baseline for the proposed Project. As shown in Table 4-1, the historical baseline has been calculated as 377,765 TPY, which when compared to the proposed permitted maximum annual production quantity of the 1.0 MTPY results in a net increase of 622,235 TPY, or a 62.22% share of the total permitted annual production quantity.

An estimated daily production quantity of 4,000 TPD has been determined to be a reasonable high-end and conservative estimate for purposes of evaluating potential impacts. Table 4-2 demonstrates why the assumption of 4,000 TPD is conservative. As shown in Table 4-2, based on an operations schedule of 365 days (7 days a week) the mine could not operate at the conservatively estimated 4,000 TPD production level each day and stay within the proposed permitted annual limit of 1.0 MTPY. Based on the proposed operation schedule the actual average daily tonnage for the Project would be substantially less than 4,000 TPD.

Table 4-1

Summary of Historic Data

A. Average Historic Annual Tonnage (2003-2017):	377,765 TPY[1]
B. Proposed Project:	1,000,000 TPY
C. Project Increase (B. - A.)	622,235 TPY
D. Project Share of Total Tonnage (C. / B.):	62.22%

[1] TPY = Tons Per Year

Table 4-2

Data to Support 4,000 Tons Per Day Assumption

Annual Tonnage at 4,000 TPD	
A. Proposed Annual Tonnage for Traffic Study (TPD):	4,000 TPD[1]
B. Working Days Per Year (7-Days Per Week):	365 Days
C. Total Annual Tonnage at 4,000 TPD (A. X B.):	1,460,000 TPY[2]
D. Percent Increase over Project's Proposed Annual Tonnage (C. / 1,000,000 TPY):	146.00%

Operating Days to Achieve 1,000,000 TPY[2] at 4,000 TPD	
E. Proposed Daily Tonnage for Traffic Study (TPD):	4,000 TPY
F. Maximum Annual Tonnage Allowed as Proposed:	1,000,000 TPY
G. Number of Mining Days to Reach 622,235 TPY at 4,000 TPD (F. / E.):	250 Days

[1] TPD = Tons Per Day

[2] TPY = Tons Per Year

Table 4-3 illustrates the breakdown of truck trips associated with the conservative estimate of 4,000 TPD. As indicated in Table 4-3, the proposed Project is estimated to generate 184 net additional daily truck trips above the historical baseline.

Table 4-4 illustrates the number of daily truck trips per day for the existing site. This data indicates the typical operational characteristics of mining operation where truck activity is heaviest in the late morning hours (at 9 AM, at the end of the typical morning peak hour of 7-9 AM), then remains relatively steady during the early afternoon hours, and finally tapers off the mid to late afternoon hours. In an effort to conduct a conservative analysis, the percentage of overall daily truck trips shown at 9 AM and 11 AM have been utilized for the typical commute hours of 7-9 AM and 4-6 PM, respectively.

Table 4-5 illustrates the daily and peak hour trip generation of the proposed Project. A PCE factor has been applied to the trip generation rates for heavy trucks. PCE factors allow the typical "real-world" mix of vehicle types to be represented as a single standardized unit, such as the passenger car, for the purposes of capacity and level of service analysis. A PCE factor of 3.0 has been applied to large 4+ axle trucks that are typically used to haul aggregate. As shown in Table 4-5, the project is anticipated to generate a net total of approximately 990 PCE trip-ends per day with 145 PCE AM peak hour and 133 PCE PM peak hour trips.

4.2 PROJECT TRIP DISTRIBUTION

Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute.

The Project trip distribution was developed based on anticipated travel patterns to and from the Project site for both passenger cars and truck traffic. The truck trip distribution patterns have been developed based on the anticipated travel patterns for the heavy trucks associated with the mining operations. The Project trip distribution patterns for both passenger cars and trucks were developed based on an understanding of existing travel patterns in the area, the geographical location of the site, and the site's proximity to the regional arterial and state highway system.

The Project passenger car trip distribution patterns is graphically depicted on Exhibit 4-1 and the Project truck trip distribution patterns is graphically depicted on Exhibit 4-2.

4.3 MODAL SPLIT

The traffic reducing potential of public transit, walking or bicycling have not been considered in this TIA. Essentially, the traffic projections are "conservative" in that these alternative travel modes might be able to reduce the forecasted traffic volumes (employee trips only).

Table 4-3

Total and Project Daily Truck Trips

A. Proposed Daily Tonnage for Traffic Study (TPD):	4,000 TPD
B. Average Tons Per Truck:	25 Tons
C. One-Way Trucks Per Day (A. / B.):	160 Trucks
D. Total Two-Way Total Trucks Per Day Based on 4,000 TPD (C. X 2-trips)[1]:	320 Trucks[1]
E. Total New Project Trucks Trips Per Day (D. X D. from Table 1 or 62.22% of 360)[2]:	199 Trucks[2]

[1] Total trucks based on 4,000 TPD. Total trucks per day multiplied by 2.0 to represent two-way trip ends (one inbound trip and one outbound trip).

[2] Truck trips associated with proposed Project, or net increase of 2,489 TPD (e.g., 62.22% from Table 4-1 of 4,000 TPD) from the existing 1,511 TPD.

Table 4-4

Peak Hour Trips as a Percentage of Total ADT

Time	Average Hourly Trips	Total Trips	Hourly %
12:00 AM			
1:00 AM			
2:00 AM			
3:00 AM			
4:00 AM			
5:00 AM			
6:00 AM	6	390	11.0%
7:00 AM	6	374	10.6%
8:00 AM	7	415	11.7%
9:00 AM	8	495	14.0%
10:00 AM	7	446	12.6%
11:00 AM	7	453	12.8%
12:00 PM	7	452	12.8%
1:00 PM	5	310	8.7%
2:00 PM	3	188	5.3%
3:00 PM	1	21	0.6%
4:00 PM			
5:00 PM			
6:00 PM			
7:00 PM			
8:00 PM			
9:00 PM			
10:00 PM			
11:00 PM			
Total Tickets:	57	3544	100.0%

* Data supplied by Project Applicant for the existing mine site.

Table 4-5

Average Daily and Peak Hour Project Trip Generation Summary

Proposed Project Trip Generation Summary									
			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
Gilman Mine	1.000	MTPY							
Passenger Cars			6	4	10	4	6	10	30
Truck Trips[2]			23	22	45	20	21	41	320
Project Trips (PCE)[3]			**75**	**70**	**145**	**64**	**69**	**133**	**990**

[1] MTPY = Million Tons Per Year

[2] Total project truck trips based on typical peak operating day of 4,000 tons per day.

[3] Based on passenger car equivalent (PCE) factor of 3.0 PCE per truck.

EXHIBIT 4-1: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION

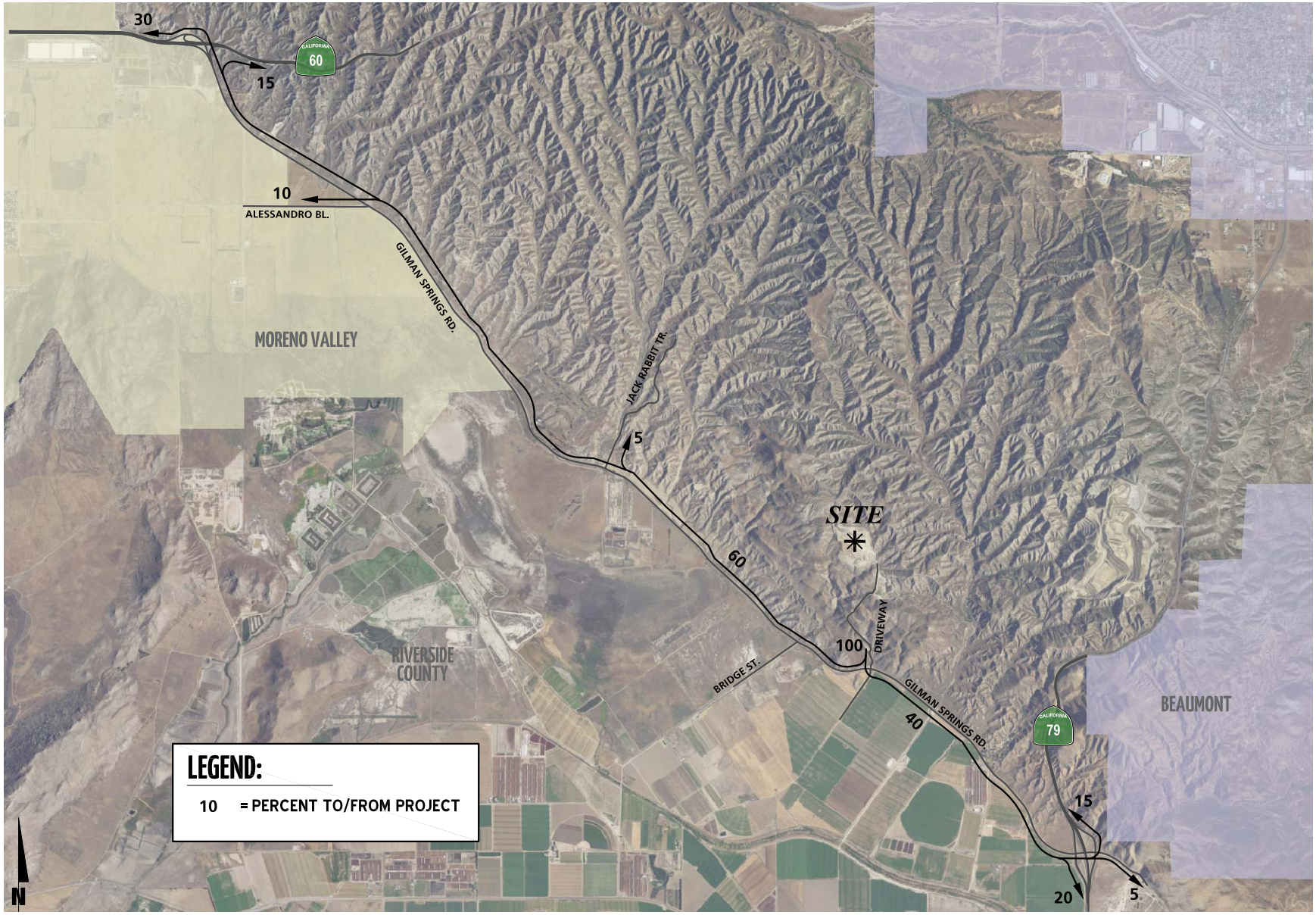
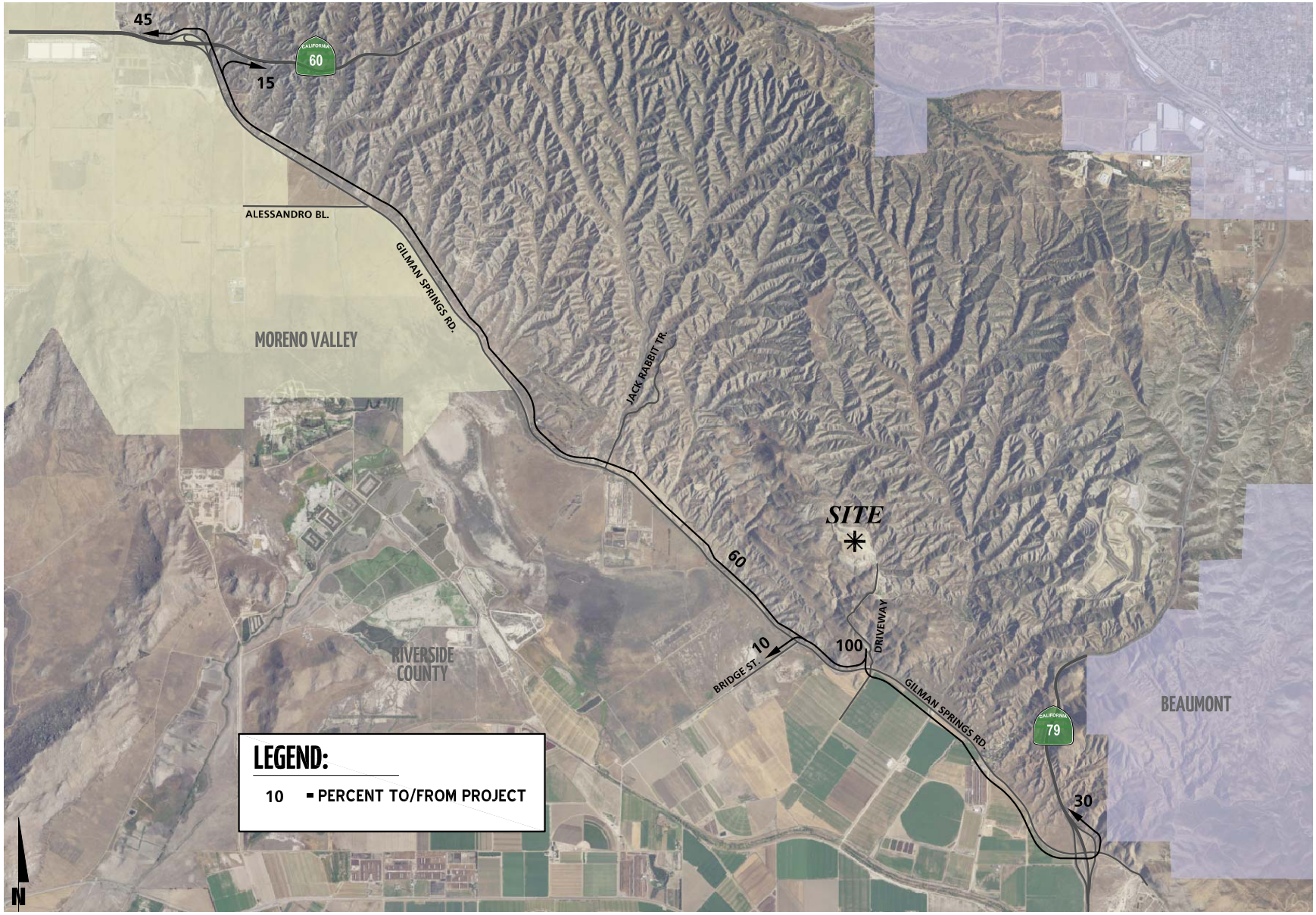


EXHIBIT 4-2: PROJECT (TRUCK) TRIP DISTRIBUTION



URBAN CROSSROADS

4.4 PROJECT TRIP ASSIGNMENT

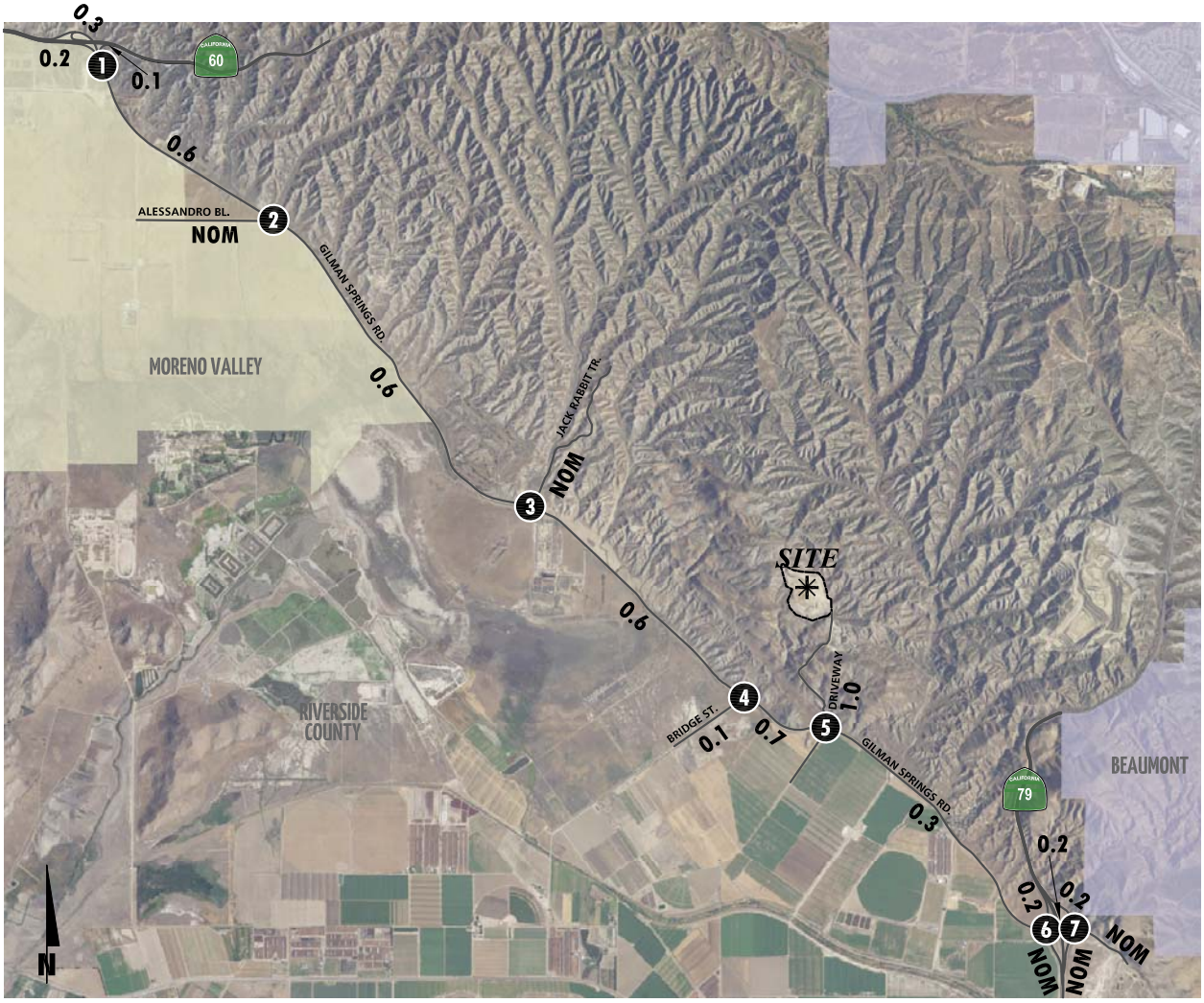
The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project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

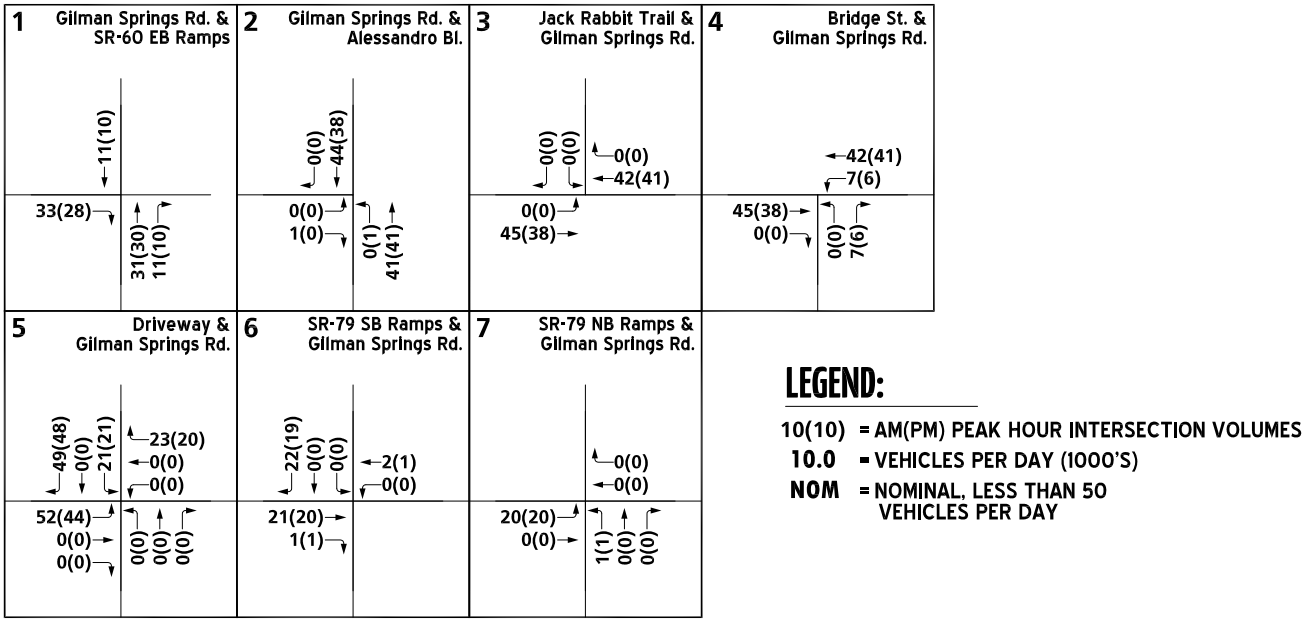
4.5 BACKGROUND TRAFFIC

Future year traffic forecasts have been based upon background (ambient) growth at 2% per year for 2018 traffic conditions. The ambient growth factor is intended to approximate regional traffic growth. This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies. The currently adopted SCAG 2016 RTP/SCS (April 2016) growth forecasts for the unincorporated areas of the County of Riverside identifies projected growth in population of 359,000 in 2012 to 499,200 in 2040, or a 139.1 percent increase over the 28-year period. (4) The change in population equates to roughly a 1.18 percent growth rate compounded annually. Similarly, growth over the same 28-year period in households is projected to increase by 145.1 percent, or 1.34 percent annual growth rate. Finally, growth in employment over the same 28-year period is projected to increase by 222.1 percent, or a 2.89 percent annual growth rate.

Based on a comparison of Existing traffic volumes to the EAPC (2018) forecasts, the average growth rate is estimated at approximately 12.31 percent compounded annually between Existing and EAPC (2018) traffic conditions. The annual growth rate at each individual intersection is not lower than 6.62 percent compounded annually to as high as 16.48 percent compounded annually over the same period. Therefore, the annual growth rate utilized for the purposes of this analysis would appear to conservatively approximate the anticipated regional growth in traffic volumes in the County of Riverside for EAPC traffic conditions, especially when considered along with the addition of project-related traffic. As such, the growth in traffic volumes assumed in this traffic impact analysis would tend to overstate as opposed to understate the potential impacts to traffic and circulation.

EXHIBIT 4-3: PROJECT ONLY TRAFFIC VOLUMES (IN PCE)





LEGEND:

10(10)	= AM(PM) PEAK HOUR INTERSECTION VOLUMES
10.0	= VEHICLES PER DAY (1000'S)
NOM	= NOMINAL, LESS THAN 50 VEHICLES PER DAY

4.6 CUMULATIVE DEVELOPMENT TRAFFIC

California Environmental Quality Act (CEQA) guidelines require that other reasonably foreseeable development projects which are either approved or being processed concurrently in the study area also be included as part of a cumulative analysis scenario. A cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the County of Riverside, City of Moreno Valley, City of San Jacinto, and City of Beaumont. The cumulative project list includes known and foreseeable projects that are anticipated to contribute traffic to the study area intersections. The cumulative projects provided by the County of Riverside, City of Moreno Valley, City of San Jacinto, and City of Beaumont are provided in Appendix 4.1.

Where applicable, cumulative projects anticipated to contribute measurable traffic (i.e. 50 or more peak hour trips) to study area intersections have been manually added to the study area network to generate EAPC forecasts. In other words, this list of cumulative development projects has been reviewed to determine which projects would likely contribute measurable traffic through the study area intersections (e.g., those cumulative projects in close proximity to the proposed Project). For the purposes of this analysis, the cumulative projects that were determined to affect one or more of the study area intersections are shown on Exhibit 4-4 and listed on Table 4-6. Any other cumulative projects that are not expected to contribute measurable traffic to study area intersections have not been included since the traffic would dissipate due to the distance from the Project site and study area intersections. Any additional traffic generated by other projects not on the cumulative projects list is accounted for through background ambient growth factors that have been applied to the peak hour volumes at study area intersections as discussed in Section 4.5 *Background Traffic*.

4.7 NEAR-TERM TRAFFIC FORECASTS

To provide a comprehensive assessment of potential transportation network deficiencies, a "buildup" analysis was performed in support of this work effort. The "buildup" method was used to approximate the EAP traffic forecasts includes background traffic, and is intended to identify the significant impacts on both the existing and planned near-term circulation system. The "buildup" method was also utilized to approximate the EAPC traffic forecasts, and is intended to identify the cumulative impacts on both the existing and planned near-term circulation system. The EAPC traffic forecasts include background traffic, traffic generated by other cumulative development projects within the study area, and the traffic generated by the proposed Project.

The "buildup" approach combines existing traffic counts with a background ambient growth factor to forecast the near-term 2018 traffic conditions. An ambient growth factor of 2% (2018) accounts for background (area-wide) traffic increases that occur over time, up to the year 2018 from the year 2018 (compounded two percent per year growth over a one-year period). Traffic volumes generated by the Project are then added to assess the EAP and EAPC traffic conditions. The 2018 roadway network is similar to the existing conditions roadway network.

EXHIBIT 4-4: CUMULATIVE DEVELOPMENT PROJECTS LOCATION MAP

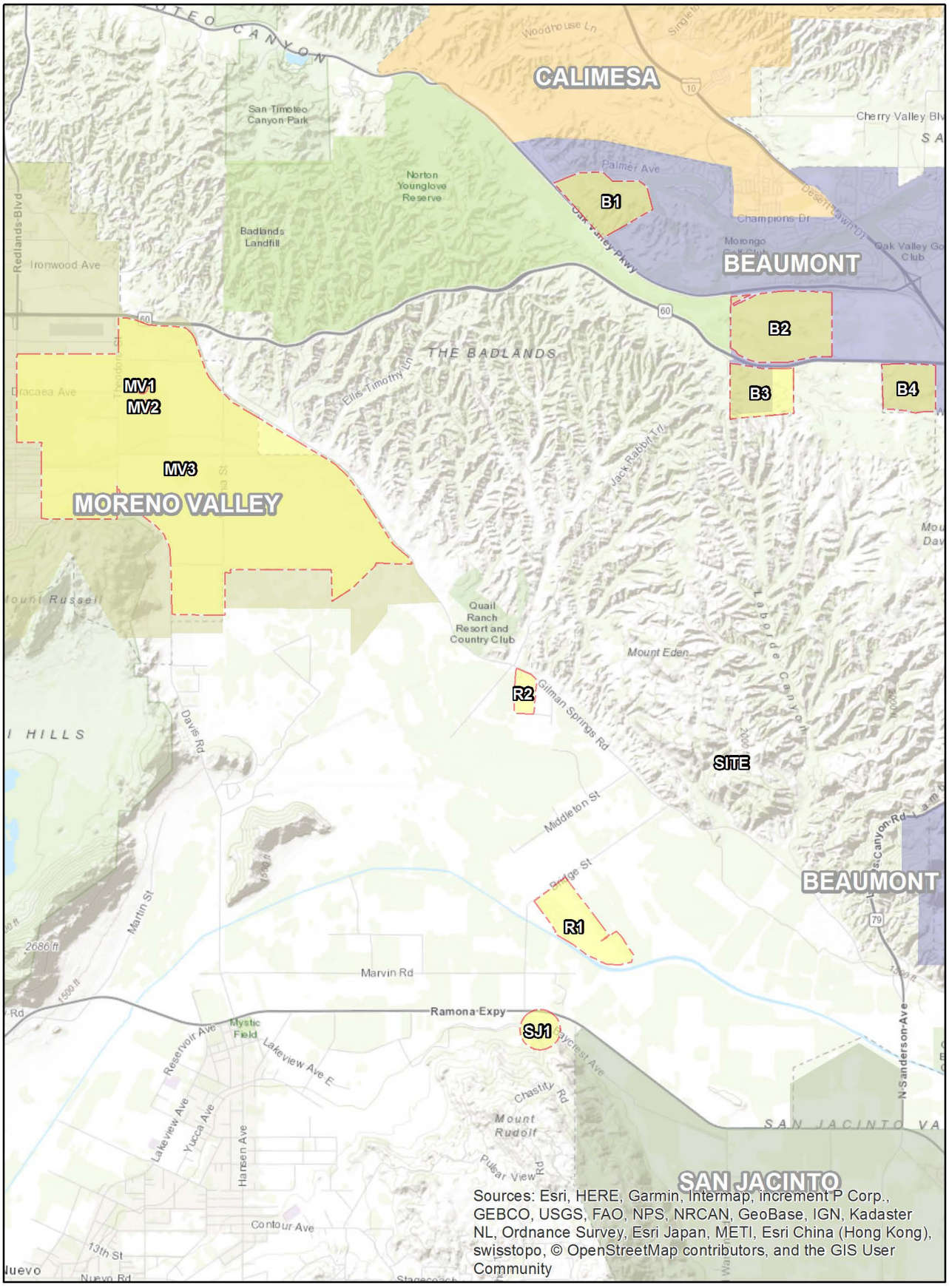


Table 4-6

Cumulative Development Land Use Summary

TAZ	Project	Land Use	Quantity [2]	
County of Riverside				
R1	CUP03600	Manufacturing	100.00	AC
R2	CUP03746	Manufacturing	35.00	AC
City of Beaumont				
B1	Fairway Canyon	Residential	3,300	DU
B2	Heartland	Residential	981	DU
B3	Hidden Canyon Industrial	Industrial	196.50	AC
B4	Rolling Hills Ranch Industrial Phase 2	Industrial	155.00	AC
City of San Jacinto				
SJ1	Bridge Commercial Center	Commercial	69.000	TSF
City of Moreno Valley				
MV1	TR36719	Single Family Detached Residential	34	DU
MV2	TR35377	Single Family Detached Residential	9	DU
MV3	World Logistics Center[1]	High-Cube Logistics Center	40,600.000	TSF
		Open Space	1,084.00	AC
		Public Facility	19.00	AC

[1] Source: The World Logistics Center TIA, Parsons Brinckerhoff, Inc., September 2014.

[2] TSF = Thousand Square Feet; AC = Acres; DU = Dwelling Units

As noted previously, an analysis of the proposed Project at various development tiers has been assessed for the purposes of this traffic study. The near-term traffic analysis includes the following traffic conditions, with the various traffic components:

- EAP (2018)
    - Existing 2018 counts
    - Ambient growth traffic (2%)
    - Project traffic
- EAPC (2018)
    - Existing 2018 counts
    - Ambient growth traffic (2%)
    - Cumulative Development Project traffic
    - Project traffic

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5 E+P TRAFFIC CONDITIONS

In an effort to satisfy the CEQA Guideline Section 15125(a), an analysis of existing traffic volumes plus traffic generated by the proposed Project (E+P) has been included in this report. This section discusses the traffic forecasts for Existing plus Project (E+P) conditions and the resulting intersection operations and traffic signal warrant analyses. This analysis scenario has been provided for informational purposes only as Project impacts have been discerned from a comparison of Existing (2018) to EAP (2018) (per the County's traffic study guidelines).

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for E+P conditions are consistent with those shown previously on Exhibit 3-1.

5.2 EXISTING PLUS PROJECT TRAFFIC VOLUME FORECASTS

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

5.3 INTERSECTION OPERATIONS ANALYSIS

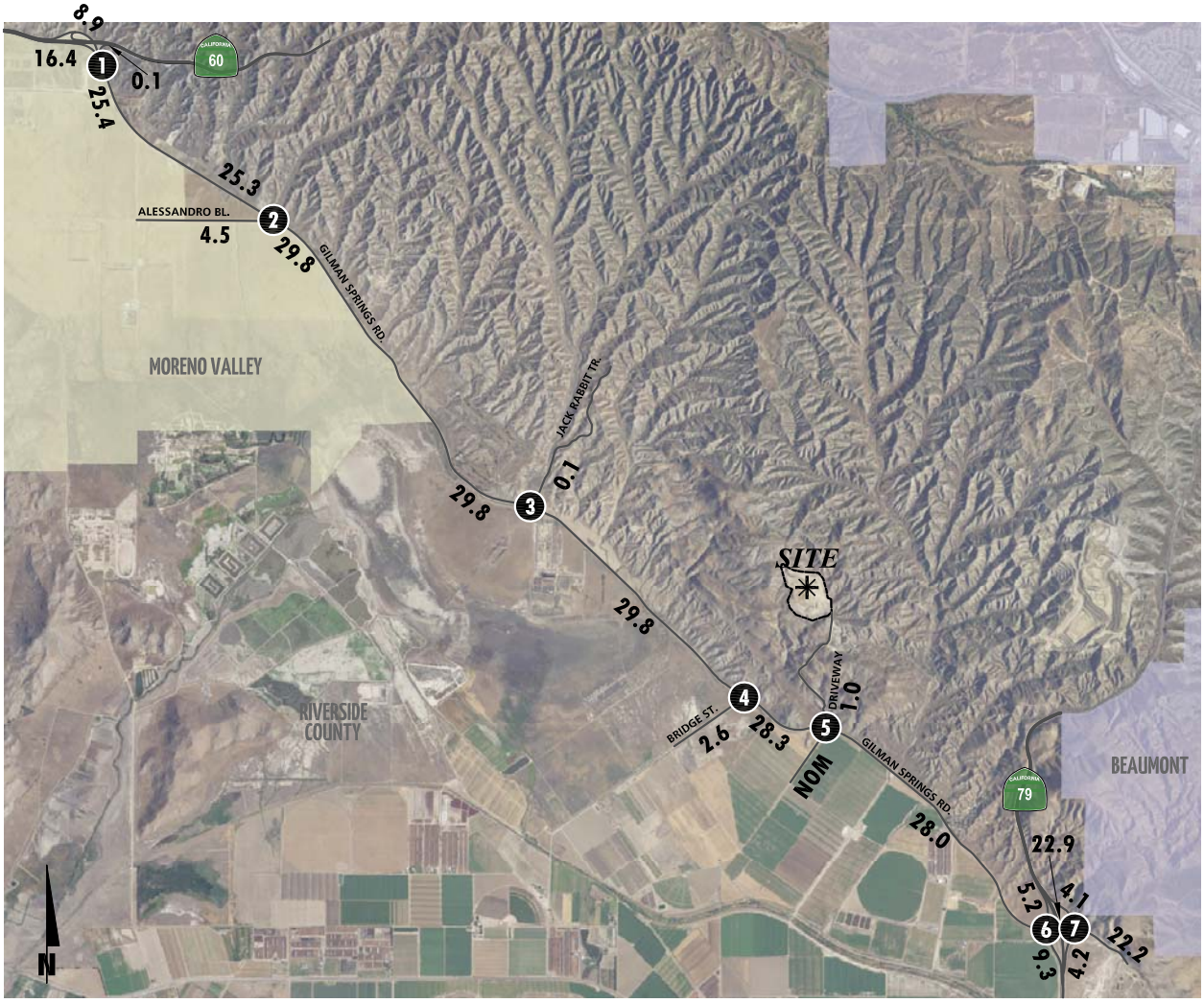
E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TIA. The intersection analysis results are summarized in Table 5-1, which indicates that there are no additional study area intersections anticipated to operate at an unacceptable LOS during one or more peak hours in addition to the locations previously identified for Existing (2018) traffic conditions.

Consistent with Table 5-1, a summary of the peak hour intersection LOS for E+P conditions is shown on Exhibit 5-2. The intersection operations analysis worksheets for E+P traffic conditions are included in Appendix 5.1 of this TIA.

5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants have been performed on unsignalized intersections for E+P traffic conditions, however, there are no additional study area intersections anticipated to warrant a traffic signal for E+P traffic conditions in addition to those previously warranted under Existing (2018) traffic conditions. Worksheets for E+P traffic conditions signal warrants are provided in Appendix 5.2.

EXHIBIT 5-1: E+P TRAFFIC VOLUMES (IN PCE)



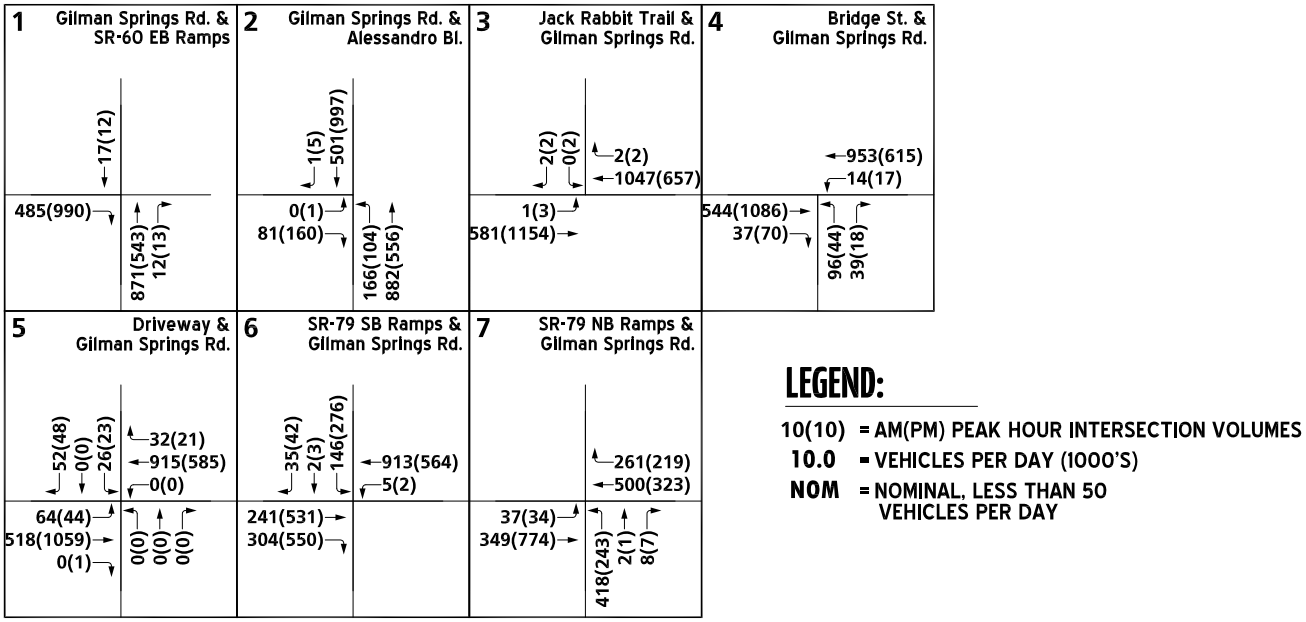


EXHIBIT 5-2: E+P SUMMARY OF LOS

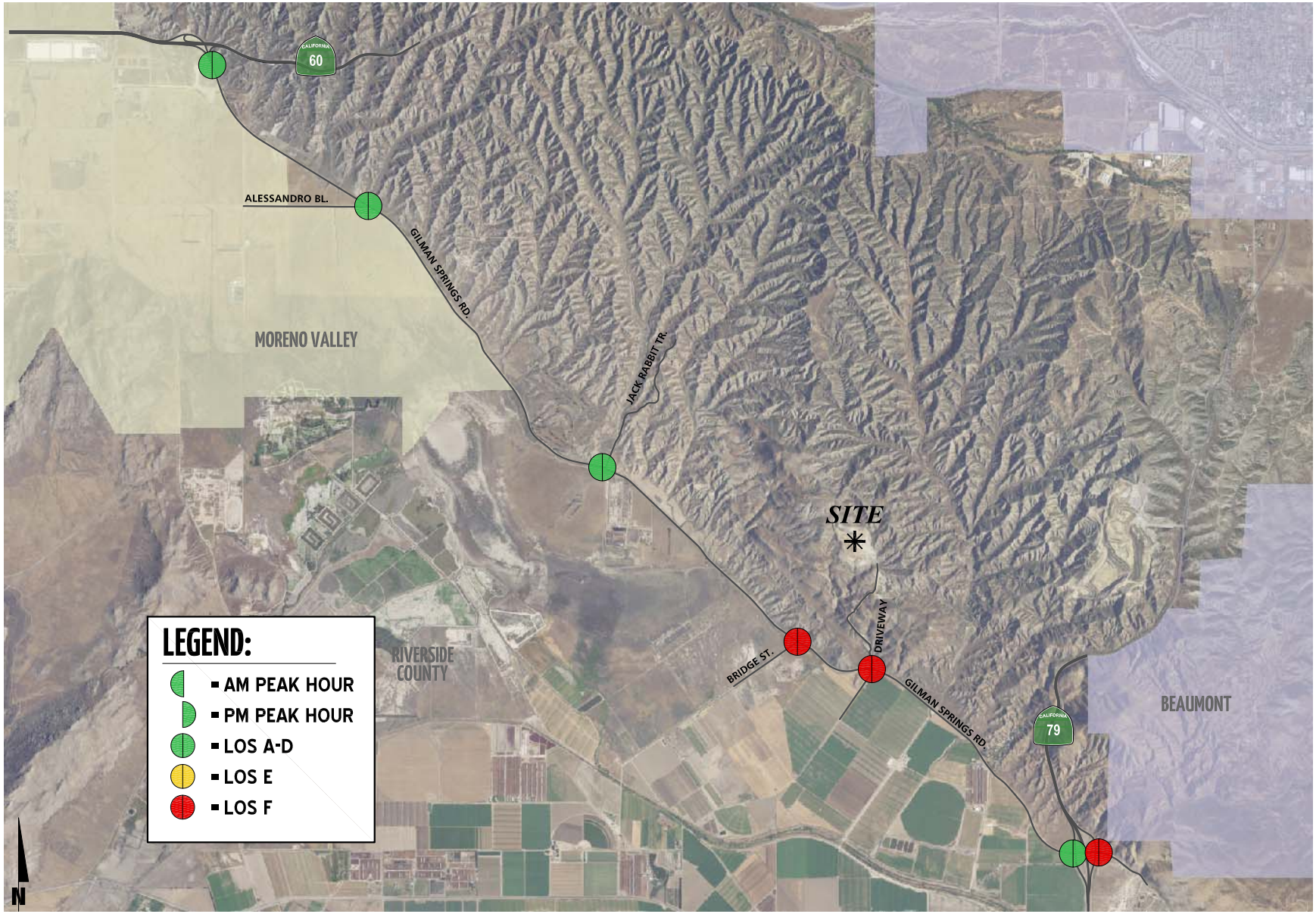


Table 5-1

Intersection Analysis for E+P Conditions

#	Intersection	Traffic Control[2]	Existing (2018)				E+P			
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Gilman Springs Rd. / SR-60 EB Ramps	UC	0.0	0.0	A	A	0.0	0.0	A	A
2	Gilman Springs Rd. / Alessandro Bl.	CSS	11.8	29.0	B	D	12.3	31.8	B	D
3	Jack Rabbit Trail / Gilman Springs Rd.	CSS	18.6	30.2	C	D	19.5	32.9	C	D
4	Bridge St. / Gilman Springs Rd.	CSS	**>100.0**	**65.8**	**F**	**F**	**>100.0**	**83.0**	**F**	**F**
5	Driveway / Gilman Springs Rd.	CSS	**36.7**	**61.4**	**E**	**F**	**60.1**	**61.7**	**F**	**F**
6	SR-79 SB Ramps / Gilman Springs Rd.	TS	7.4	12.3	A	B	7.6	12.4	A	B
7	SR-79 NB Ramps / Gilman Springs Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**

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

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

[2] UC = Uncontrolled; CSS = Cross-street Stop; TS = Traffic Signal

5.5 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the SR-79 Freeway and Gilman Springs interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the SR-79 Freeway. Queuing analysis findings are presented in Table 5-2 for E+P traffic conditions. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline.

As shown on Table 5-2, and consistent with Existing traffic conditions, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows for E+P traffic conditions. Worksheets for E+P traffic conditions off-ramp queuing analysis are provided in Appendix 5.3.

5.6 BASIC FREEWAY SEGMENT ANALYSIS

E+P peak hour mainline directional volumes are provided on Exhibits 5-3. As shown on Table 5-3, there are no additional freeway segments operating at an unacceptable LOS (i.e., LOS E or worse) during the peak hours for E+P traffic conditions in addition to those previously identified under Existing conditions. E+P conditions basic freeway segment analysis worksheets are provided in Appendix 5.4.

5.7 FREEWAY MERGE/DIVERGE ANALYSIS

Ramp merge and diverge operations were also evaluated for E+P conditions and the results of this analysis are presented in Table 5-4. As shown on Table 5-4, there are no additional freeway merge/diverge ramp junctions operating at an unacceptable LOS (i.e., LOS E or worse) during the peak hours for E+P traffic conditions in addition to those previously identified under Existing conditions. E+P conditions basic freeway segment analysis worksheets are provided in Appendix 5.5.

5.8 DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

5.8.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient to reduce each location's peak hour delay and improve the associated LOS grade to an acceptable LOS (LOS D or better). The effectiveness of the proposed recommended improvements is presented in Table 5-5 for E+P traffic conditions. Recommended improvements to address deficiencies for E+P traffic conditions are described below.

Recommended Improvement – Bridge St. & Gilman Springs Rd. (#4)

- Install a traffic signal (consistent with Existing conditions)

Recommended Improvement – Driveway & Gilman Springs Rd. (#5)

- Install a traffic signal (consistent with Existing conditions)

Table 5-2

Peak Hour Freeway Off-Ramp Queuing Summary for E+P Conditions

Intersection	Movement	Available Stacking Distance (Feet)	Existing (2018)				E+P			
			95th Percentile Queue (Feet)		Acceptable? [1]		95th Percentile Queue (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
SR-79 SB Ramps / Gilman Springs Road	SBL/T	1,890	90	204	Yes	Yes	90	204	Yes	Yes
	SBR	235	0	0	Yes	Yes	0	0	Yes	Yes
SR-79 NB Ramps / Gilman Springs Road	NBL/T	1,600	425	325	Yes	Yes	500	350	Yes	Yes
	NBR	435	0	0	Yes	Yes	0	0	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

Table 5-3

Basic Freeway Segment Analysis for E+P Conditions

Freeway	Direction	Mainline Segment	Lanes[1]	Existing				E+P			
				Density[3]		LOS[4]		Density[3]		LOS[4]	
				AM	PM	AM	PM	AM	PM	AM	PM
SR-60 Freeway	Westbound	West of Gilman Springs Road	2	**36.3**	**38.4**	**E**	**E**	**37.2**	**38.6**	**E**	**E**
		East of Gilman Springs Road	2	25.7	31.0	C	D	25.7	31.0	C	D
	Eastbound	West of Gilman Springs Road	2	31.0	--[5]	D	**F**	31.2	--[5]	D	**F**
		East of Gilman Springs Road	2	25.7	31.0	C	D	25.7	31.0	C	D
SR-79 Freeway	Southbound	North of Gilman Springs Road	2	10.6	13.6	A	B	10.7	13.8	A	B
		South of Gilman Springs Road	2	11.7	15.6	B	B	11.7	15.6	B	B
	Northbound	North of Gilman Springs Road	2	8.7	9.5	A	A	8.7	9.5	A	A
		South of Gilman Springs Road	2	9.7	9.6	A	A	9.7	9.6	A	A

BOLD = LOS does not meet Caltrans requirements (i.e., unacceptable LOS or LOS E/F).

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Directional volumes based on current PeMS data.

[3] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[4] LOS = Level of Service

[5] HCS7 does not report density for freeway facilities operating at LOS F.

Table 5-4

Freeway Ramp Merge/Diverge Analysis for E+P Conditions

Freeway	Direction	Ramp Junction	Lanes on Freeway	Existing				E+P			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Density[1]	LOS[2]	Density[1]	LOS[2]	Density[1]	LOS[2]	Density[1]	LOS[2]
SR-60 Freeway	Westbound	On-Ramp at Gilman Springs Road	2	**40.6**	**E**	**42.8**	**E**	**41.0**	**E**	**43.2**	**E**
		Off-Ramp at Gilman Springs Road	2	27.9	D	**31.8**	**E**	27.9	D	**31.8**	**E**
	Eastbound	Off-Ramp at Gilman Springs Road	2	**32.5**	**E**	--[3]	**F**	**32.6**	**E**	--[3]	**F**
		On-Ramp at Gilman Springs Road	2	29.4	D	34.8	D	29.5	D	34.9	D
SR-79 Freeway	Southbound	Off-Ramp at Gilman Springs Road	2	12.1	B	15.6	B	12.3	B	15.8	B
		On-Ramp at Gilman Springs Road	2	13.4	B	17.9	B	13.4	B	17.9	B
	Northbound	On-Ramp at Gilman Springs Road	2	9.8	B	10.8	B	9.9	B	10.9	B
		Off-Ramp at Gilman Springs Road	2	11.2	B	11.0	B	11.2	B	11.0	B

BOLD = LOS does not meet Caltrans requirements (i.e., unacceptable LOS or LOS E/F).

[1] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[2] LOS = Level of Service

[3] HCS7 does not report density for freeway facilities operating at LOS F.

Table 5-5

Intersection Analysis for E+P Conditions With Improvements

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
4	Bridge St. / Gilman Springs Rd.																	
	- Without Improvements	CSS	0	1	0	0	0	0	0	1	1	1	1	0	**>100.0**	**83.0**	**F**	**F**
	- With Improvements	**TS**	0	1	0	0	0	0	0	1	1	1	1	0	11.9	13.9	B	B
5	Driveway / Gilman Springs Rd.																	
	- Without Improvements	CSS	0	1	0	0	1	0	1	1	0	1	1	1	**60.1**	**61.7**	**F**	**F**
	- With Improvements	**TS**	0	1	0	0	1	0	1	1	0	1	1	1	12.9	10.8	B	B
7	SR-79 NB Ramps / Gilman Springs Rd.																	
	- Without Improvements	CSS	0	1	1	0	0	0	1	2	0	0	2	0	**>100.0**	**>100.0**	**F**	**F**
	- With Improvements	**TS**	0	1	1	0	0	0	1	2	0	0	2	0	17.2	10.8	B	B

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

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

L = Left; T = Through; R = Right

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

[3] CSS = Cross-street Stop; TS = Traffic Signal; **TS** = Improvements

EXHIBIT 5-3: E+P FREEWAY MAINLINE VOLUMES





LEGEND:

⟵ 100/200 = AM/PM PEAK HOUR VOLUMES

NOTE: VOLUMES IN ACTUAL VEHICLES (NOT PCE)

Recommended Improvement – SR-79 Northbound Ramps & Gilman Springs Rd. (#7)

- Install a traffic signal (consistent with Existing conditions)

Worksheets for E+P conditions, with improvements, HCM calculations are provided in Appendix 5.6.

Although Table 5-2 had shown there are no movements anticipated to experience queuing issues during the weekday AM and PM peak hours for E+P traffic conditions, Table 5-6 shows the queuing results for the SR-79 Ramps at Gilman Springs Road with the implementation of the recommended intersection improvements discussed above and shown on Table 5-5. Worksheets for E+P traffic conditions, with improvements, off-ramp queuing analysis are provided in Appendix 5.7.

5.8.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT FREEWAY SEGMENTS

At this time, Caltrans has no fee programs or other improvement programs in place to address the deficiencies caused by development projects in the County of Riverside (or other neighboring jurisdictions) on the SHS roadway segments. As such, no improvements have been recommended to address the E+P deficiencies on the SHS.

Table 5-6

Peak Hour Freeway Off-Ramp Queuing Summary for E+P Conditions With Improvements

Intersection	Movement	Available Stacking Distance (Feet)	Without Improvements				With Improvements			
			95th Percentile Queue (Feet)		Acceptable? [1]		95th Percentile Queue (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
SR-79 SB Ramps / Gilman Springs Road	SBL/T	1,890	90	204	Yes	Yes	90	204	Yes	Yes
	SBR	235	0	0	Yes	Yes	0	0	Yes	Yes
SR-79 NB Ramps / Gilman Springs Road	NBL/T	1,600	500	350	Yes	Yes	378 [2]	159	Yes	Yes
	NBR	435	0	0	Yes	Yes	0	0	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

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

6 EAP (2018) TRAFFIC CONDITIONS

This section discusses the methods used to develop Existing plus Ambient Growth plus Project (EAP) (2018) traffic forecasts, and the resulting intersection operations and traffic signal warrant analyses.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for EAP conditions are consistent with those shown previously on Exhibit 3-1.

6.2 EAP (2018) TRAFFIC VOLUME FORECASTS

To account for background traffic growth, an ambient growth from Existing conditions of 2% (2 percent per year over one-year) is included for EAP traffic conditions. Cumulative development projects are not included as part of the EAP analysis. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for EAP traffic conditions are shown on Exhibit 6-1.

6.3 INTERSECTION OPERATIONS ANALYSIS

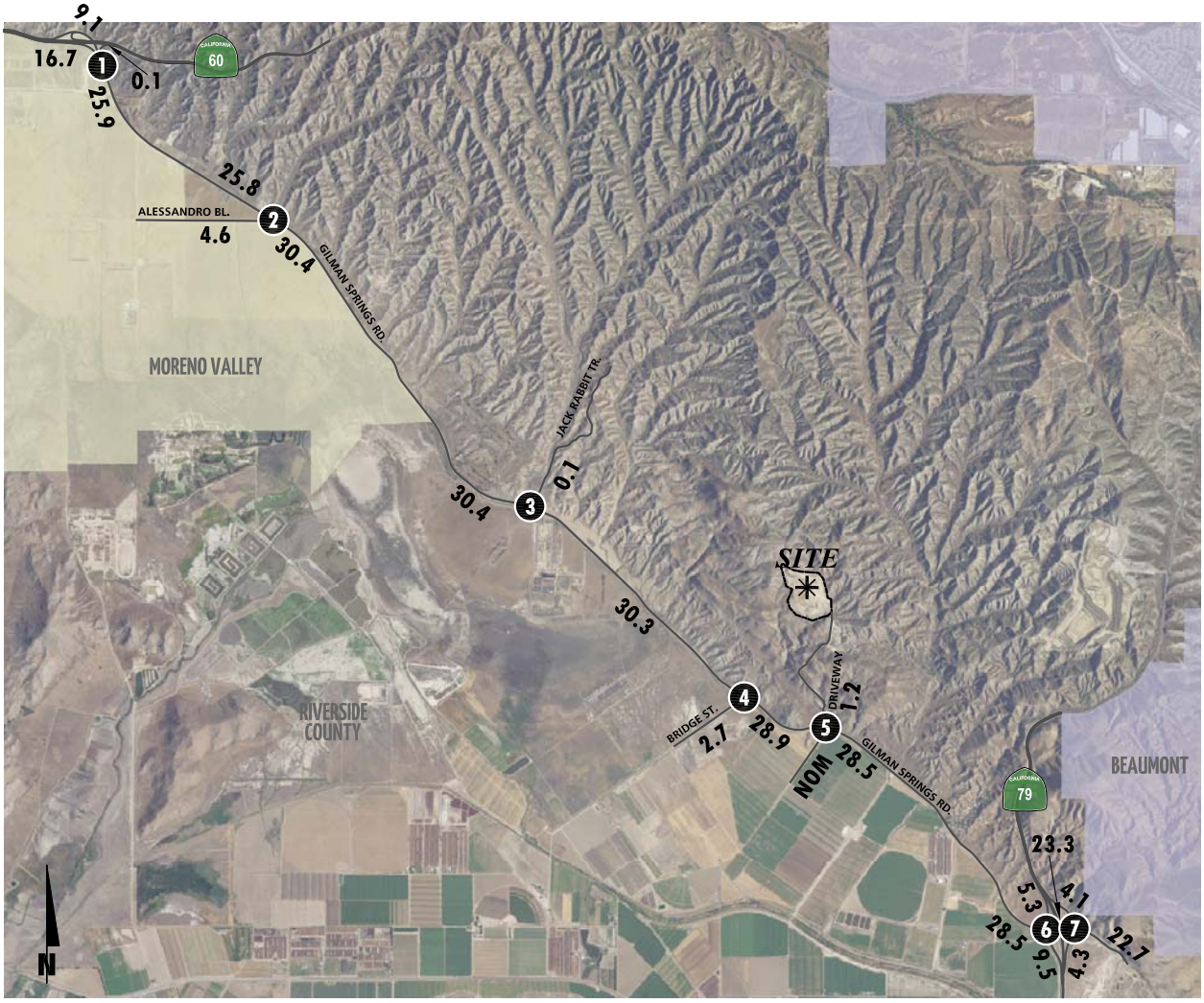
LOS calculations were conducted for the study intersections to evaluate their operations under EAP conditions with roadway and intersection geometrics consistent with Section 6.1 *Roadway Improvements*. As shown in Table 6-1, there are no additional study area intersections anticipated to operate at unacceptable LOS under EAP traffic conditions, in addition to the locations previously identified under Existing traffic conditions.

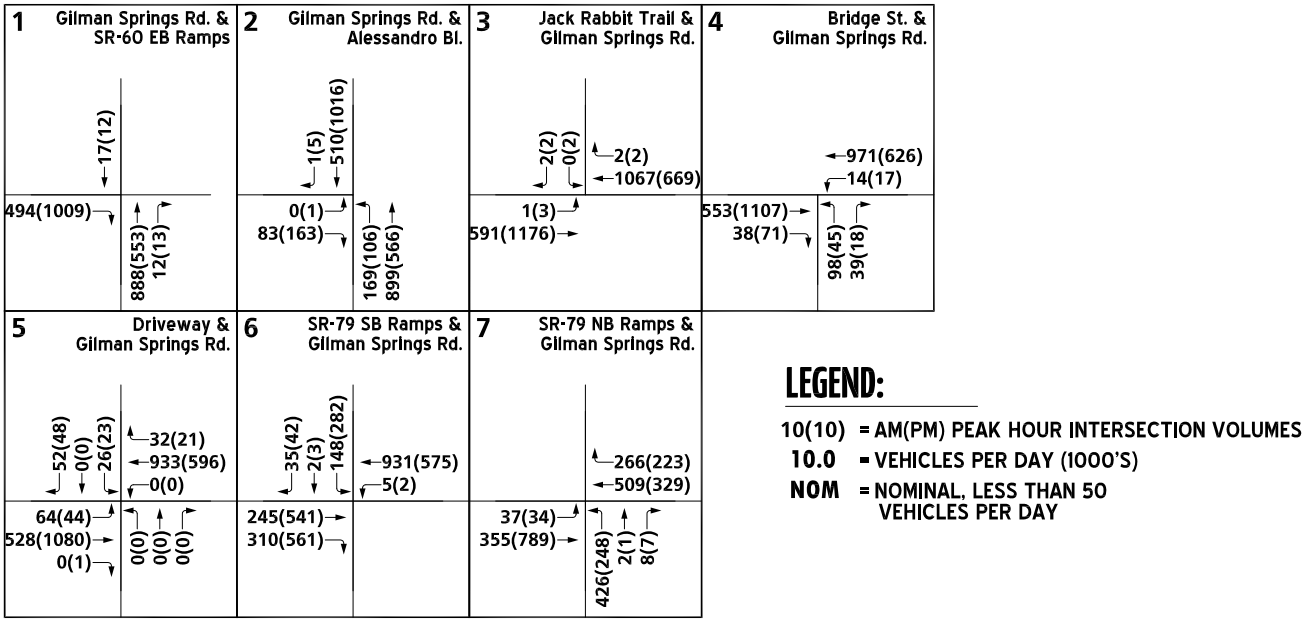
A summary of the peak hour intersection LOS for EAP traffic conditions are shown on Exhibit 6-2. The intersection operations analysis worksheets for EAP traffic conditions are included in Appendix 6.1 of this TIA.

6.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants have been performed on unsignalized intersections for EAP traffic conditions, which indicates the intersection of Gilman Springs Road and the Driveway is anticipated to warrant a traffic signal for EAP (2018) traffic conditions in addition to those previously warranted under Existing (2018) traffic conditions. Worksheets for EAP (2018) traffic conditions signal warrants are provided in Appendix 6.2.

EXHIBIT 6-1: EAP (2018) TRAFFIC VOLUMES (IN PCE)





LEGEND:

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES
10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

EXHIBIT 6-2: EAP (2018) SUMMARY OF LOS

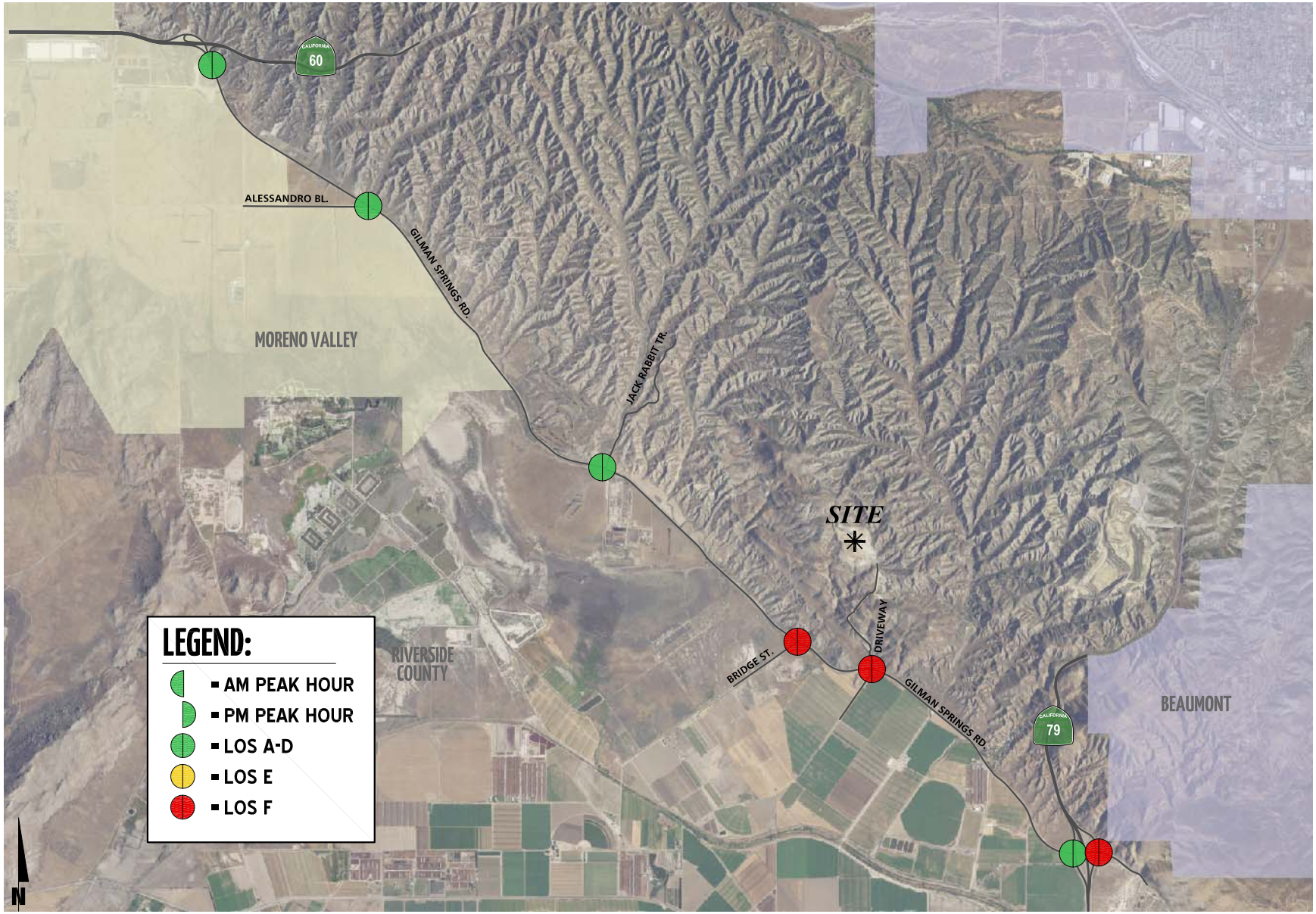


Table 6-1

Intersection Analysis for EAP (2018) Conditions

#	Intersection	Traffic Control[2]	Existing (2018)				EAP (2018)			
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Gilman Springs Rd. / SR-60 EB Ramps	UC	0.0	0.0	A	A	0.0	0.0	A	A
2	Gilman Springs Rd. / Alessandro Bl.	CSS	11.8	29.0	B	D	12.4	33.8	B	D
3	Jack Rabbit Trail / Gilman Springs Rd.	CSS	18.6	30.2	C	D	19.9	34.3	C	D
4	Bridge St. / Gilman Springs Rd.	CSS	**>100.0**	**65.8**	**F**	**F**	**>100.0**	**90.8**	**F**	**F**
5	Driveway / Gilman Springs Rd.	CSS	**36.7**	**61.4**	**E**	**F**	**64.1**	**67.0**	**F**	**F**
6	SR-79 SB Ramps / Gilman Springs Rd.	TS	7.4	12.3	A	B	7.6	12.7	A	B
7	SR-79 NB Ramps / Gilman Springs Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**

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

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

[2] UC = Uncontrolled; CSS = Cross-street Stop; TS = Traffic Signal

6.5 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the SR-79 Freeway and Gilman Springs interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the SR-79 Freeway. Queuing analysis findings are presented in Table 6-2 for EAP (2018) traffic conditions. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline.

As shown on Table 6-2, and consistent with Existing and E+P traffic conditions, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows for EAP (2018) traffic conditions. Worksheets for EAP traffic conditions off-ramp queuing analysis are provided in Appendix 6.3.

6.6 BASIC FREEWAY SEGMENT ANALYSIS

EAP (2018) peak hour mainline directional volumes are provided on Exhibits 6-3. As shown on Table 6-3, there are no additional freeway segments operating at an unacceptable LOS (i.e., LOS E or worse) during the peak hours for EAP (2018) traffic conditions in addition to those previously identified under Existing conditions. EAP (2018) conditions basic freeway segment analysis worksheets are provided in Appendix 6.4.

6.7 FREEWAY MERGE/DIVERGE ANALYSIS

Ramp merge and diverge operations were also evaluated for EAP (2018) conditions and the results of this analysis are presented in Table 6-4. As shown on Table 6-4, there are no additional freeway merge/diverge ramp junctions operating at an unacceptable LOS (i.e., LOS E or worse) during the peak hours for EAP (2018) traffic conditions in addition to those previously identified under Existing conditions. E+P conditions basic freeway segment analysis worksheets are provided in Appendix 6.5.

6.8 EAP DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

6.8.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient in an effort to reduce each location's peak hour delay and improve the associated LOS grade to an acceptable LOS (LOS D or better). The effectiveness of the recommended improvement strategies discussed below to address EAP (2018) traffic deficiencies is presented in Table 6-5. The improvements that were previously required to address LOS deficiencies for Existing and E+P traffic conditions are shown in *italics*. New improvements for EAP (2018) traffic conditions are shown in regular text.

Table 6-2

Peak Hour Freeway Off-Ramp Queuing Summary for EAP (2018) Conditions

Intersection	Movement	Available Stacking Distance (Feet)	Existing (2018)				EAP (2018)			
			95th Percentile Queue (Feet)		Acceptable? [1]		95th Percentile Queue (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
SR-79 SB Ramps / Gilman Springs Road	SBL/T	1,890	90	204	Yes	Yes	92	209	Yes	Yes
	SBR	235	0	0	Yes	Yes	0	0	Yes	Yes
SR-79 NB Ramps / Gilman Springs Road	NBL/T	1,600	425	325	Yes	Yes	525	375	Yes	Yes
	NBR	435	0	0	Yes	Yes	0	0	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

Table 6-3

Basic Freeway Segment Analysis for EAP (2018) Conditions

Freeway	Direction	Mainline Segment	Lanes[1]	Existing				EAP (2018)			
				Density[3]		LOS[4]		Density[3]		LOS[4]	
				AM	PM	AM	PM	AM	PM	AM	PM
SR-60 Freeway	Westbound	West of Gilman Springs Road	2	**36.3**	**38.4**	**E**	**E**	**38.6**	**40.2**	**E**	**E**
		East of Gilman Springs Road	2	25.7	31.0	C	D	26.4	31.9	D	D
	Eastbound	West of Gilman Springs Road	2	31.0	--[5]	D	**F**	32.2	--[5]	D	**F**
		East of Gilman Springs Road	2	25.7	31.0	C	D	26.4	31.9	D	D
SR-79 Freeway	Southbound	North of Gilman Springs Road	2	10.6	13.6	A	B	11.0	14.0	A	B
		South of Gilman Springs Road	2	11.7	15.6	B	B	12.0	15.9	B	B
	Northbound	North of Gilman Springs Road	2	8.7	9.5	A	A	8.9	9.7	A	A
		South of Gilman Springs Road	2	9.7	9.6	A	A	9.9	9.8	A	A

BOLD = LOS does not meet Caltrans requirements (i.e., unacceptable LOS or LOS E/F).

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Directional volumes based on current PeMS data.

[3] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[4] LOS = Level of Service

[5] HCS7 does not report density for freeway facilities operating at LOS F.

Table 6-4

Freeway Ramp Merge/Diverge Analysis for EAP (2018) Conditions

Freeway	Direction	Ramp Junction	Lanes on Freeway	Existing				EAP (2018)			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Density[1]	LOS[2]	Density[1]	LOS[2]	Density[1]	LOS[2]	Density[1]	LOS[2]
SR-60 Freeway	Westbound	On-Ramp at Gilman Springs Road	2	**40.6**	**E**	**42.8**	**E**	**42.5**	**E**	**44.8**	**E**
		Off-Ramp at Gilman Springs Road	2	27.9	D	**31.8**	**E**	28.5	D	**32.5**	**E**
	Eastbound	Off-Ramp at Gilman Springs Road	2	**32.5**	**E**	--[3]	**F**	**33.3**	**E**	--[3]	**F**
		On-Ramp at Gilman Springs Road	2	29.4	D	34.8	D	30.2	D	35.9	D
SR-79 Freeway	Southbound	Off-Ramp at Gilman Springs Road	2	12.1	B	15.6	B	12.5	B	16.2	C
		On-Ramp at Gilman Springs Road	2	13.4	B	17.9	B	13.7	B	18.3	C
	Northbound	On-Ramp at Gilman Springs Road	2	9.8	B	10.8	B	10.1	B	11.1	B
		Off-Ramp at Gilman Springs Road	2	11.2	B	11.0	B	11.5	B	11.2	B

BOLD = LOS does not meet Caltrans requirements (i.e., unacceptable LOS or LOS E/F).

[1] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[2] LOS = Level of Service

[3] HCS7 does not report density for freeway facilities operating at LOS F.

Table 6-5

Intersection Analysis for EAP (2018) Conditions With Improvements

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
4	Bridge St. / Gilman Springs Rd.																	
	- Without Improvements	CSS	0	1	0	0	0	0	0	1	1	1	1	0	**>100.0**	**90.8**	**F**	**F**
	- With Improvements	**TS**	0	1	0	0	0	0	0	1	1	1	1	0	12.0	14.4	B	B
5	Driveway / Gilman Springs Rd.																	
	- Without Improvements	CSS	0	1	0	0	1	0	1	1	0	1	1	1	**64.1**	**67.0**	**F**	**F**
	- With Improvements	**TS**	0	1	0	0	1	0	1	1	0	1	1	1	13.0	11.0	B	B
7	SR-79 NB Ramps / Gilman Springs Rd.																	
	- Without Improvements	CSS	0	1	1	0	0	0	1	2	0	0	2	0	**>100.0**	**>100.0**	**F**	**F**
	- With Improvements	**TS**	0	1	1	0	0	0	1	2	0	0	2	0	17.6	10.9	B	B

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

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

L = Left; T = Through; R = Right

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

[3] CSS = Cross-street Stop; TS = Traffic Signal; **TS** = Improvements

EXHIBIT 6-3: EAP (2018) FREEWAY MAINLINE VOLUMES





LEGEND:

⟵ 100/200 = AM/PM PEAK HOUR VOLUMES

NOTE: VOLUMES IN ACTUAL VEHICLES (NOT PCE)

Recommended Improvement – Bridge St. & Gilman Springs Rd. (#4)

- *Install a traffic signal (consistent with Existing and E+P conditions)*

Recommended Improvement – Driveway & Gilman Springs Rd. (#5)

- *Install a traffic signal (consistent with Existing and E+P conditions)*

Recommended Improvement – SR-79 Northbound Ramps & Gilman Springs Rd. (#7)

- *Install a traffic signal (consistent with Existing and E+P conditions)*

Worksheets for EAP (2018) conditions, with improvements, HCM calculations are provided in Appendix 6.6.

Although Table 6-2 had shown there are no movements anticipated to experience queuing issues during the weekday AM and PM peak hours for EAP traffic conditions, Table 6-6 shows the queuing results for the SR-79 Ramps at Gilman Springs Road with the implementation of the recommended intersection improvements discussed above and shown on Table 6-5. Worksheets for EAP traffic conditions, with improvements, off-ramp queuing analysis are provided in Appendix 6.7.

6.8.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT FREEWAY FACILITIES

At this time, Caltrans has no fee programs or other improvement programs in place to address the deficiencies caused by development projects in the County of Riverside (or other neighboring jurisdictions) on the SHS roadway segments. As such, no improvements have been recommended to address the EAP deficiencies on the SHS.

Table 6-6

Peak Hour Freeway Off-Ramp Queuing Summary for EAP (2018) Conditions With Improvements

Intersection	Movement	Available Stacking Distance (Feet)	Without Improvements				With Improvements			
			95th Percentile Queue (Feet)		Acceptable? [1]		95th Percentile Queue (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
SR-79 SB Ramps / Gilman Springs Road	SBL/T	1,890	92	209	Yes	Yes	92	209	Yes	Yes
	SBR	235	0	0	Yes	Yes	0	0	Yes	Yes
SR-79 NB Ramps / Gilman Springs Road	NBL/T	1,600	525	375	Yes	Yes	388 [2]	165	Yes	Yes
	NBR	435	0	0	Yes	Yes	0	0	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

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

7 EAPC (2018) TRAFFIC CONDITIONS

This section discusses the methods used to develop Existing plus Ambient Growth plus Project plus Cumulative (EAPC) (2018) traffic forecasts, and the resulting intersection operations and traffic signal warrant analyses.

7.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for EAPC (2018) conditions are consistent with those shown previously on Exhibit 3-1.

7.2 EAPC (2018) TRAFFIC VOLUME FORECASTS

To account for background traffic, other known cumulative development projects in the study area were included in addition to 2% of ambient growth for EAPC traffic conditions in conjunction with traffic associated with the proposed Project. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for EAPC (2018) traffic conditions are shown on Exhibit 7-1.

7.3 INTERSECTION OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under EAPC conditions with roadway and intersection geometrics consistent with Section 7.1 *Roadway Improvements*. As shown in Table 7-1, the following additional study area intersections are anticipated to operate at unacceptable LOS under EAPC (2018) traffic conditions, in addition to the locations previously identified under Existing, E+P, and EAP (2018) conditions:

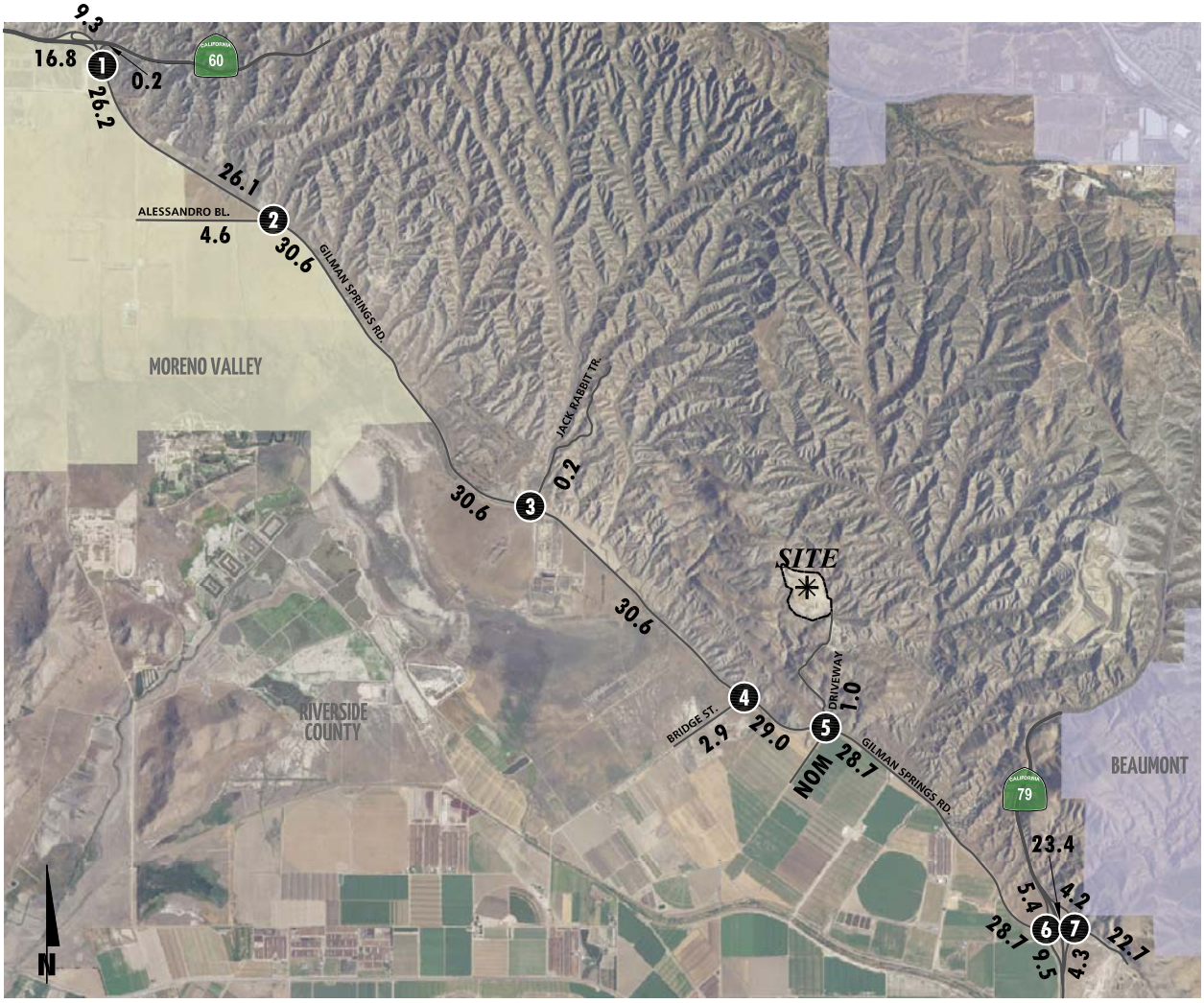
- Gilman Springs Rd. & Alessandro Bl. (#2) – LOS E PM peak hour only
- Jack Rabbit Trail & Gilman Springs Rd. (#3) – LOS E PM peak hour only

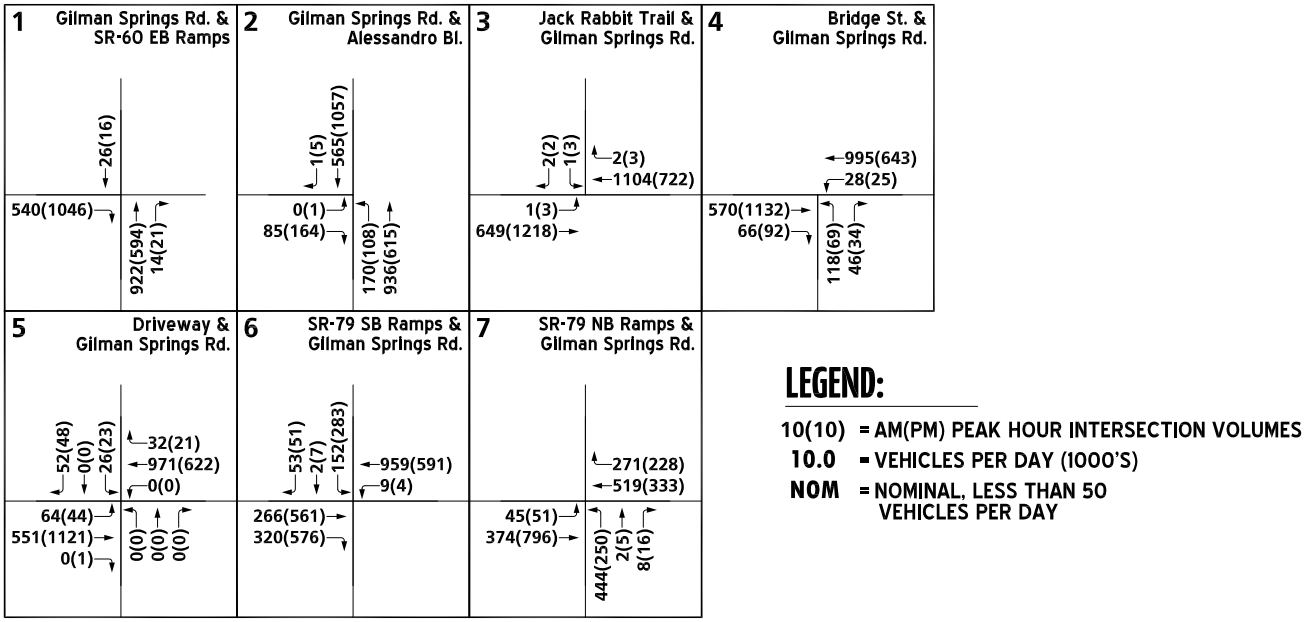
A summary of the peak hour intersection LOS for EAPC (2018) traffic conditions are shown on Exhibit 7-2. The intersection operations analysis worksheets for EAPC (2018) traffic conditions are included in Appendix 7.1 of this TIA.

7.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

There are no additional study area intersections anticipated to meet traffic signal warrants for EAPC (2018) traffic conditions, in addition to those previously warranted under Existing, E+P, and EAP traffic conditions. Worksheets for EAPC (2018) traffic conditions signal warrants are provided in Appendix 7.2.

EXHIBIT 7-1: EAPC (2018) TRAFFIC VOLUMES (IN PCE)





LEGEND:

- 10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES
- 10.0 = VEHICLES PER DAY (1000'S)
- NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

EXHIBIT 7-2: EAPC (2018) SUMMARY OF LOS

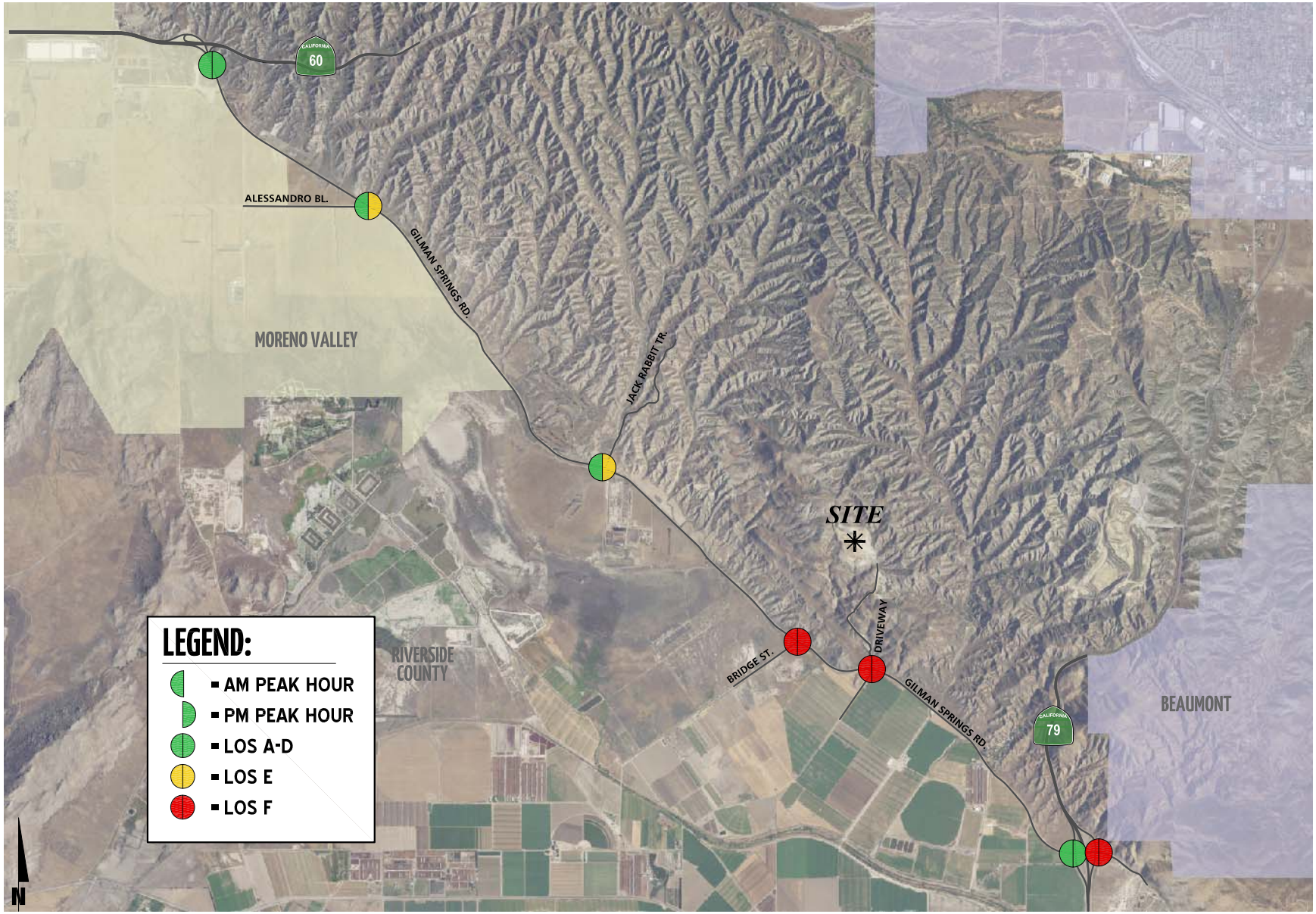


Table 7-1

Intersection Analysis for EAPC (2018) Conditions

#	Intersection	Traffic Control[2]	Existing (2018)				EAPC (2018)			
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	Gilman Springs Rd. / SR-60 EB Ramps	UC	0.0	0.0	A	A	0.0	0.0	A	A
2	Gilman Springs Rd. / Alessandro Bl.	CSS	11.8	29.0	B	D	13.1	**37.9**	B	**E**
3	Jack Rabbit Trail / Gilman Springs Rd.	CSS	18.6	30.2	C	D	31.3	**44.2**	D	**E**
4	Bridge St. / Gilman Springs Rd.	CSS	**>100.0**	**65.8**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**
5	Driveway / Gilman Springs Rd.	CSS	**36.7**	**61.4**	**E**	**F**	**77.6**	**79.3**	**F**	**F**
6	SR-79 SB Ramps / Gilman Springs Rd.	TS	7.4	12.3	A	B	8.0	13.1	A	B
7	SR-79 NB Ramps / Gilman Springs Rd.	CSS	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**

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

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

[2] UC = Uncontrolled; CSS = Cross-street Stop; TS = Traffic Signal

7.5 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the SR-79 Freeway and Gilman Springs interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the SR-79 Freeway. Queuing analysis findings are presented in Table 7-2 for EAPC (2018) traffic conditions. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline.

As shown on Table 7-2, and consistent with Existing, E+P, and EAP (2018) traffic conditions, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows for EAPC (2018) traffic conditions. Worksheets for EAPC traffic conditions off-ramp queuing analysis are provided in Appendix 7.3.

7.6 BASIC FREEWAY SEGMENT ANALYSIS

EAPC (2018) peak hour mainline directional volumes are provided on Exhibits 7-3. As shown on Table 7-3, there are no additional freeway segments operating at an unacceptable LOS (i.e., LOS E or worse) during the peak hours for EAPC (2018) traffic conditions in addition to those previously identified under Existing conditions. EAPC (2018) conditions basic freeway segment analysis worksheets are provided in Appendix 7.4.

7.7 FREEWAY MERGE/DIVERGE ANALYSIS

Ramp merge and diverge operations were also evaluated for EAPC (2018) conditions and the results of this analysis are presented in Table 7-4. As shown on Table 7-4, there are no additional freeway merge/diverge ramp junctions operating at an unacceptable LOS (i.e., LOS E or worse) during the peak hours for EAPC (2018) traffic conditions in addition to those previously identified under Existing conditions. EAPC conditions basic freeway segment analysis worksheets are provided in Appendix 7.5.

7.8 EAPC DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

7.8.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient in an effort to reduce each location's peak hour delay and improve the associated LOS grade to an acceptable LOS (LOS D or better). The effectiveness of the recommended improvement strategies discussed below to address EAPC traffic deficiencies is presented in Table 7-5. The improvements that were previously required to address LOS deficiencies for Existing, E+P, and EAP (2018) traffic conditions are shown in *italics*. New improvements for EAPC (2018) traffic conditions are shown in regular text.

Recommended Improvement – Gilman Springs Rd. & Alessandro Bl. (#2)

- Install a traffic signal

Table 7-2

Peak Hour Freeway Off-Ramp Queuing Summary for EAPC (2018) Conditions

Intersection	Movement	Available Stacking Distance (Feet)	Existing (2018)				EAPC (2018)			
			95th Percentile Queue (Feet)		Acceptable? [1]		95th Percentile Queue (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
SR-79 SB Ramps / Gilman Springs Road	SBL/T	1,890	90	204	Yes	Yes	98	213	Yes	Yes
	SBR	235	0	0	Yes	Yes	7	4	Yes	Yes
SR-79 NB Ramps / Gilman Springs Road	NBL/T	1,600	425	325	Yes	Yes	625	450	Yes	Yes
	NBR	435	0	0	Yes	Yes	0	25	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

Table 7-3

Basic Freeway Segment Analysis for EAPC (2018) Conditions

Freeway	Direction	Mainline Segment	Lanes[1]	Existing				EAPC (2018)			
				Density[3]		LOS[4]		Density[3]		LOS[4]	
				AM	PM	AM	PM	AM	PM	AM	PM
SR-60 Freeway	Westbound	West of Gilman Springs Road	2	**36.3**	**38.4**	**E**	**E**	**38.7**	**41.3**	**E**	**E**
		East of Gilman Springs Road	2	25.7	31.0	C	D	26.5	32.0	D	D
	Eastbound	West of Gilman Springs Road	2	31.0	--[5]	D	**F**	32.4	--[5]	D	**F**
		East of Gilman Springs Road	2	25.7	31.0	C	D	26.4	32.0	D	D
SR-79 Freeway	Southbound	North of Gilman Springs Road	2	10.6	13.6	A	B	11.0	14.1	A	B
		South of Gilman Springs Road	2	11.7	15.6	B	B	12.0	15.9	B	B
	Northbound	North of Gilman Springs Road	2	8.7	9.5	A	A	8.9	9.9	A	A
		South of Gilman Springs Road	2	9.7	9.6	A	A	10.0	9.8	A	A

BOLD = LOS does not meet Caltrans requirements (i.e., unacceptable LOS or LOS E/F).

[1] Number of lanes are in the specified direction and is based on existing conditions.

[2] Directional volumes based on current PeMS data.

[3] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[4] LOS = Level of Service

[5] HCS7 does not report density for freeway facilities operating at LOS F.

Table 7-4

Freeway Ramp Merge/Diverge Analysis for EAPC (2018) Conditions

Freeway	Direction	Ramp Junction	Lanes on Freeway	Existing				EAPC (2018)			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				Density[1]	LOS[2]	Density[1]	LOS[2]	Density[1]	LOS[2]	Density[1]	LOS[2]
SR-60 Freeway	Westbound	On-Ramp at Gilman Springs Road	2	**40.6**	**E**	**42.8**	**E**	**42.5**	**E**	**45.2**	**E**
		Off-Ramp at Gilman Springs Road	2	27.9	D	**31.8**	**E**	28.6	D	**32.5**	**E**
	Eastbound	Off-Ramp at Gilman Springs Road	2	**32.5**	**E**	--[3]	**F**	**33.4**	**E**	--[3]	**F**
		On-Ramp at Gilman Springs Road	2	29.4	D	34.8	D	30.3	D	36.0	D
SR-79 Freeway	Southbound	Off-Ramp at Gilman Springs Road	2	12.1	B	15.6	B	12.6	B	16.2	C
		On-Ramp at Gilman Springs Road	2	13.4	B	17.9	B	13.7	B	18.3	C
	Northbound	On-Ramp at Gilman Springs Road	2	9.8	B	10.8	B	10.2	B	11.2	B
		Off-Ramp at Gilman Springs Road	2	11.2	B	11.0	B	11.5	B	11.2	B

BOLD = LOS does not meet Caltrans requirements (i.e., unacceptable LOS or LOS E/F).

[1] Density is measured by passenger cars per mile per lane (pc/mi/ln).

[2] LOS = Level of Service

[3] HCS7 does not report density for freeway facilities operating at LOS F.

Table 7-5

Intersection Analysis for EAPC (2018) Conditions With Improvements

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
2	Gilman Springs Rd. / Alessandro Bl.																	
	- Without Improvements	CSS	1	1	0	0	1	0	0	1	0	0	0	0	13.1	**37.9**	B	**E**
	- With Improvements	**TS**	1	1	0	0	1	0	0	1	0	0	0	0	13.1	25.7	B	C
3	Jack Rabbit Trail / Gilman Springs Rd.																	
	- Without Improvements	CSS	0	0	0	0	1	0	1	1	0	0	1	0	31.3	**44.2**	D	**E**
	- With Improvements	**TS**	0	0	0	0	1	0	1	1	0	0	1	0	11.3	10.1	B	C
4	Bridge St. / Gilman Springs Rd.																	
	- Without Improvements	CSS	0	1	0	0	0	0	0	1	1	1	1	0	**>100.0**	**>100.0**	**F**	**F**
	- With Improvements	**TS**	0	1	0	0	0	0	0	1	1	1	1	0	13.1	16.3	B	B
5	Driveway / Gilman Springs Rd.																	
	- Without Improvements	CSS	0	1	0	0	1	0	1	1	0	1	1	1	**77.6**	**79.3**	**F**	**F**
	- With Improvements	**TS**	0	1	0	0	1	0	1	1	0	1	1	1	13.5	11.4	B	B
7	SR-79 NB Ramps / Gilman Springs Rd.																	
	- Without Improvements	CSS	0	1	1	0	0	0	1	2	0	0	2	0	**>100.0**	**>100.0**	**F**	**F**
	- With Improvements	**TS**	0	1	1	0	0	0	1	2	0	0	2	0	18.6	11.4	B	B

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

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

L = Left; T = Through; R = Right

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

[3] CSS = Cross-street Stop; TS = Traffic Signal; **TS** = Improvements

EXHIBIT 7-3: EAPC (2018) FREEWAY MAINLINE VOLUMES





LEGEND:

⟵ 100/200 = AM/PM PEAK HOUR VOLUMES

NOTE: VOLUMES IN ACTUAL VEHICLES (NOT PCE)

Recommended Improvement – Jack Rabbit Trail & Gilman Springs Rd. (#3)

- Install a traffic signal

Recommended Improvement – Bridge St. & Gilman Springs Rd. (#4)

- *Install a traffic signal (consistent with Existing, E+P, and EAP (2018) conditions)*

Recommended Improvement – Driveway & Gilman Springs Rd. (#5)

- *Install a traffic signal (consistent with Existing, E+P, and EAP (2018) conditions)*

Recommended Improvement – SR-79 Northbound Ramps & Gilman Springs Rd. (#7)

- *Install a traffic signal (consistent with Existing, E+P, and EAP (2018) conditions)*

Worksheets for EAPC (2018) conditions, with improvements, HCM calculations are provided in Appendix 7.6.

Although Table 7-2 had shown there are no movements anticipated to experience queuing issues during the weekday AM and PM peak hours for EAPC traffic conditions, Table 7-6 shows the queuing results for the SR-79 Ramps at Gilman Springs Road with the implementation of the recommended intersection improvements discussed above and shown on Table 7-5. Worksheets for EAPC traffic conditions, with improvements, off-ramp queuing analysis are provided in Appendix 7.7.

7.8.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT FREEWAY FACILITIES

At this time, Caltrans has no fee programs or other improvement programs in place to address the deficiencies caused by development projects in the County of Riverside (or other neighboring jurisdictions) on the SHS roadway segments. As such, no improvements have been recommended to address the EAPC deficiencies on the SHS.

Table 7-6

Peak Hour Freeway Off-Ramp Queuing Summary for EAPC (2018) Conditions With Improvements

Intersection	Movement	Available Stacking Distance (Feet)	Without Improvements				With Improvements			
			95th Percentile Queue (Feet)		Acceptable? [1]		95th Percentile Queue (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
SR-79 SB Ramps / Gilman Springs Road	SBL/T	1,890	98	213	Yes	Yes	98	213	Yes	Yes
	SBR	235	7	4	Yes	Yes	7	4	Yes	Yes
SR-79 NB Ramps / Gilman Springs Road	NBL/T	1,600	625	450	Yes	Yes	416 [2]	173	Yes	Yes
	NBR	435	0	25	Yes	Yes	0	0	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

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

8 REFERENCES

1. **Riverside County Transportation Department.** *Traffic Impact Analysis Preparation Guide.* County of Riverside : s.n., April 2008.
2. **California Department of Transportation.** *Guide for the Preparation of Traffic Impact Studies.* December 2002.
3. **Western Riverside Council of Governments.** *TUMF Nexus Study, 2016 Program Update.* July 2017.
4. **Southern California Association of Governments.** *2016 Regional Transportation Plan.* April 2016.
5. **David Taussig & Associates, Inc.** *County of Riverside DIF Update - Updated Public Facilities Needs List through the year 2010.* County of Riverside : s.n., 2006.
6. **Transportation Research Board.** *Highway Capacity Manual (HCM).* 6th Edition. s.l. : National Academy of Sciences, 2016.
7. **California Department of Transportation.** Manual on Uniform Traffic Control Devices (MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CAMUTCD).* 2014.
8. **San Bernardino Associated Governments.** *Congestion Management Program for County of San Bernardino.* County of San Bernardino : s.n., Updated December 2007.
9. **Institute of Transportation Engineers.** *Trip Generation.* 10th Edition. 2017.

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APPENDIX 1.1:

APPROVED TRAFFIC STUDY SCOPING AGREEMENT

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EXHIBIT B

SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

This letter acknowledges the Riverside County Transportation Department requirements for traffic impact analysis of the following project. The analysis must follow the Riverside County Transportation Department Traffic Study Guidelines dated April 2008.

Case No. SMP159R2
Related Cases-
SP No.
EIR No.
GPA No.
CZ No.
Project Name: Gilman Mine
Project Address: Northeast of Gilman Springs Road, and east of Bridge Street
Project Description: 629,386.6 Tons Per Year (increase)

	Consultant	Developer
Name:	Urban Crossroads Inc. - Charlene So	Chandler Aggregates
Address:	260 E. Baker Street, Suite 200	PO Box 77850
	Costa Mesa, CA 92626	Corona, CA 92877
Telephone:	(949) 336-5982	
Fax:		

A. Trip Generation Source: ITE 10th Edition (2017) (See Table 1)

Current GP Land Use	OS-Min/OS-RUR		Proposed Land Use	OS-Min/OS-RUR		
Current Zoning	W-2/MRA		Proposed Zoning	W-2/MRA		

	Current Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips	**0**	**0**	**0**	**84**	**79**	**163**
PM Trips	**0**	**0**	**0**	**73**	**78**	**151**

Internal Trip Allowance ☐ Yes ■ No (0 % Trip Discount)
Pass-By Trip Allowance ☐ Yes ■ No (0 % Trip Discount)

A passby trip discount of 25% is allowed for appropriate land uses. The passby trips at adjacent study area intersections and project driveways shall be indicated on a report figure.

B. Trip Geographic Distribution: (See attached Exhibit 3 and Exhibit 4 for detailed assignment)

N **Varies** % S **Varies** % E **Varies** % W **Varies** %

C. Background Traffic

Project Build-out Year: 2018 Annual Ambient Growth Rate: 2 %
Phase Year(s) N/A

Other area Projects to be analyzed: N/A
Model/Forecast Methodology:

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D. Study Intersections: *(NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments form other agencies).* (See Exhibit 2)

1. Gilman Springs Rd. & SR-60 EB Ramps
2. Gilman Springs Rd. & Alessandro Bl.
3. Jack Rabbit Trail & Gilman Springs Rd.
4. Brigde St. & Gilman Springs Rd.
5. Driveway & Gilman Springs Rd.
6. SR-79 SB Ramps & Gilman Springs Rd.
7. SR-79 NB Ramps & Gilman Springs Rd.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.
20.

E. Study Roadway Segments: *(NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments form other agencies).*

1.
2.

F. Other Jurisdictional Impacts

Is this project within a City's Sphere of influence or one mile radius of City boundaries? ☐ Yes ■ No

If so, name of City jurisdiction:

G. Site Plan (please attach reduced copy)

H. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (To be filled out by Transportation Department)

(NOTE: If the traffic study states that "a traffic signal is warranted" (or "a traffic signal appears to be warranted", or similar statement) at an existing unsignalized intersection under existing conditions, 8-hour approach traffic volume information must be submitted in addition to the peak hourly turning movement counts for that intersection.

I. Existing Conditions

Traffic count data must be new or recent. Provide traffic count dates if using other than new counts.

Date of counts

***NOTE* Traffic Study Submittal Form and appropriate fee must be submitted with, or prior to submittal of this form. Transportation Department staff will not process the Scoping Agreement prior to receipt of the fee.**

Recommended by:

Charlene So — 11/20/2017

Consultant's Representative — Date

Approved Scoping Agreement:

02/01/2018

Riverside County Transportation Department — Date

URBAN CROSSROADS

URBAN CROSSROADS

260 E. Baker St. | Suite 200 | Costa Mesa, CA 92626 | (949) 660-1994
urbanxroads.com

November 20, 2017

Mr. Kevin Tsang
County of Riverside, Transportation Department
4080 Lemon Street, 8th Floor
Riverside, CA 92501

SUBJECT: GILMAN MINE TRAFFIC IMPACT ANALYSIS SCOPING AGREEMENT

Dear Mr. Kevin Tsang:

The firm of Urban Crossroads, Inc. is pleased to submit this scoping letter regarding the traffic impact analysis for the proposed Gilman Mine ("Project"), which is located on the northeast side of Gilman Springs Road and south of Bridge Street in the County of Riverside. This letter describes the proposed Project trip generation, trip distribution, and analysis methodology, which have been used to establish the draft proposed Project study area and analysis locations.

PROJECT DESCRIPTION

Exhibit 2 depicts the location of the proposed project in relation to the existing roadway network. The historic tonnage average is 370,613.4 tons per year (TPY) based on a 15-year average of historical data. The Project is proposing a permit that would allow up to 1,000,000 TPY. For impact calculations that rely on annual tonnage, the net increase over the baseline (e.g., 370,613.4 TPY) will be evaluated as part of the analysis. When compared to the proposed permitted maximum annual production quantity of the 1.0 million tons per year (MTPY) results in a net increase of 629,386.6 TPY, or a 62.94% share of the total permitted annual production quantity. As such, the high-end estimate of daily tonnage at the site is approximately 4,500 tons per day (TPD), with approximately 1,668 TPD associated with the mine's existing operations (i.e., baseline) and 2,832 TPD attributable to the proposed Project (62.94% of 4,500 TPD).

TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

As the proposed Project's land use is rather unique and not comparable to any current ITE Trip Generation Manual rates, the traffic generating potential of the proposed Project has been estimated based on the increase in permitted annual production above the Project's historical baseline. Annual production information was obtained for a 15-year period from 2002-2016. Table 1 presents the 15-year average production quantity or historical baseline for the proposed Project. As shown in Table 1,

the historical baseline has been calculated as 370,613.4 tons per year (TPY), which when compared to the proposed permitted maximum annual production quantity of the 1.0 million tons per year (MTPY) results in a net increase of 629,386.6 TPY, or a 62.94% share of the total permitted annual production quantity.

An estimated daily production quantity of 4,500 tons per day (TPD) has been determined to be a reasonable high-end and conservative estimate for purposes of evaluating potential impacts. Table 2 demonstrates why the assumption of 4,500 TPD is conservative. As shown in Table 2, based on an operations schedule of 364 days (7 days a week) the mine could not operate at the conservatively estimated 4,500 TPD production level each day and stay within the proposed permitted annual limit of 1.0 MTPY. Based on the proposed operation schedule the actual average daily tonnage for the Project would be substantially less than 4,500 TPD.

Table 3 illustrates the breakdown of truck trips associated with the conservative estimate of 4,500 TPD. As indicated in Table 3, the proposed Project is estimated to generate 227 net additional daily truck trips above the historical baseline.

Table 4 illustrates the number of daily truck trips per day for the existing site. This data indicates the typical operational characteristics of mining operation where truck activity is heaviest in the late morning hours (at 9 AM, at the end of the typical morning peak hour of 7-9 AM), then remains relatively steady during the early afternoon hours, and finally tapers off the mid to late afternoon hours. In an effort to conduct a conservative analysis, the percentage of overall daily truck trips shown at 9 AM and 11 AM have been utilized for the typical commute hours of 7-9 AM and 4-6 PM, respectively.

Table 5 illustrates the daily and peak hour trip generation of the proposed Project. A Passenger Car Equivalent (PCE) factor has been applied to the trip generation rates for heavy trucks. PCE factors allow the typical “real-world” mix of vehicle types to be represented as a single standardized unit, such as the passenger car, for the purposes of capacity and level of service analysis. A PCE factor of 3.0 has been applied to large 4+ axle trucks that are typically used to haul aggregate. As shown in Table 5, the project is anticipated to generate a net total of approximately 1,110 PCE trip-ends per day with 163 PCE AM peak hour and 151 PCE PM peak hour trips.

TRIP DISTRIBUTION

The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. The Project trip distribution patterns are graphically depicted on Exhibit 3 for passenger cars and on Exhibit 4 for trucks.

ANALYSIS SCENARIOS

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

- Existing (2017) Conditions
- Existing plus Project (E+P) Conditions
- Existing plus Ambient Growth plus Project (EAP) Conditions
- Existing plus Ambient Growth plus Project plus Cumulative (EAPC) Conditions

All study area intersections will be evaluated using the Highway Capacity Manual (HCM) 2010 analysis methodology.

CUMULATIVE PROJECTS

It is requested that County staff provide an updated list of cumulative projects for inclusion in the traffic study. The City of San Jacinto and City of Moreno Valley will also be contacted to get a list of updated cumulative projects within their respective agencies.

CONCLUSION

Urban Crossroads, Inc. is pleased to submit this letter documenting the Project trip generation, trip distribution, and the recommended intersection analysis locations for the Gilman Mine Traffic Impact Study. We will continue to move forward towards completing the traffic study after receiving jurisdiction approval or comments finalizing the study area. If you have any questions, please contact me directly at (949) 336-5982.

Respectfully submitted,

URBAN CROSSROADS, INC.

Charlene So

Charlene So, PE
Senior Associate

Attachments

EXHIBIT 1: LOCATION MAP

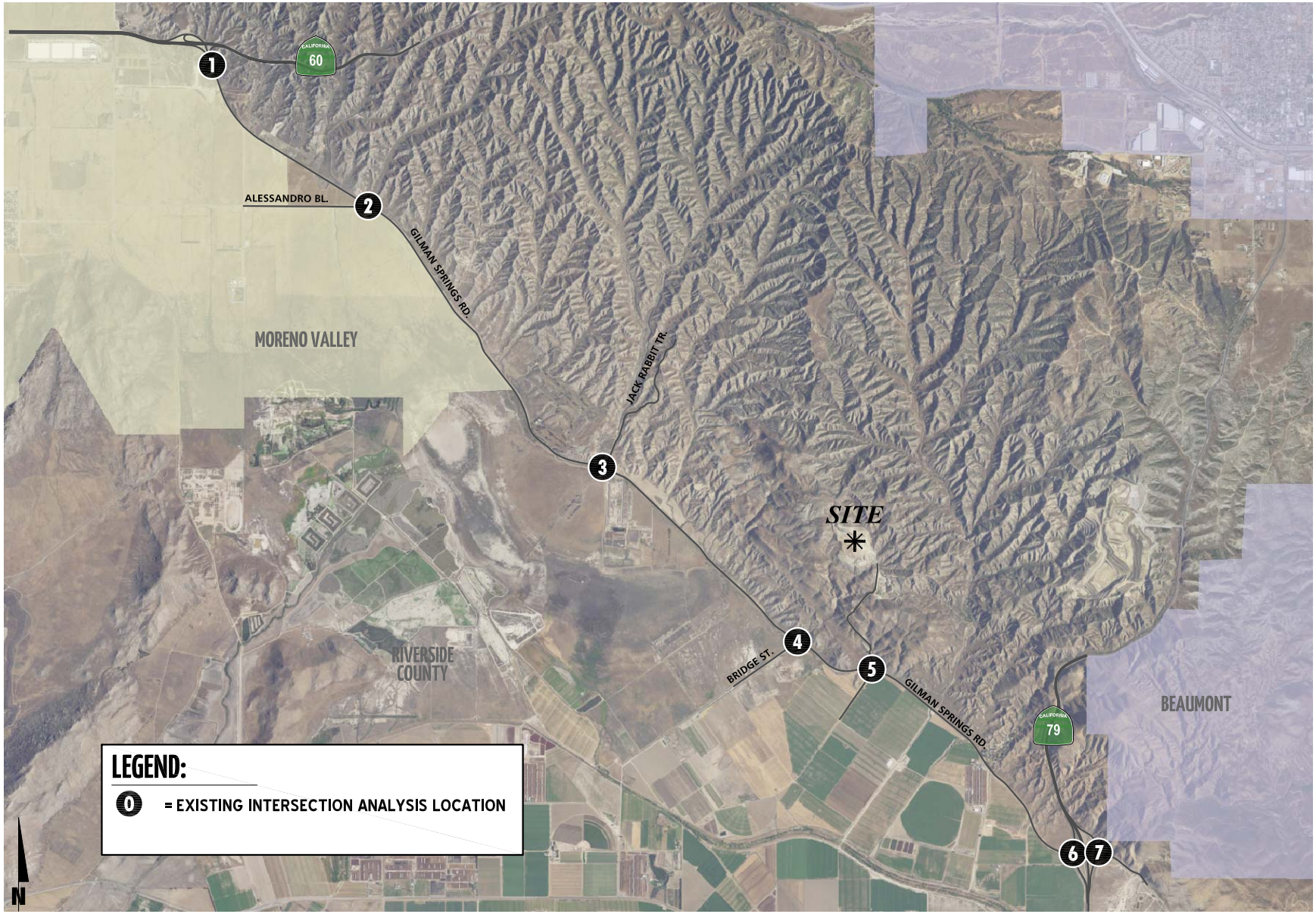


EXHIBIT 2: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION

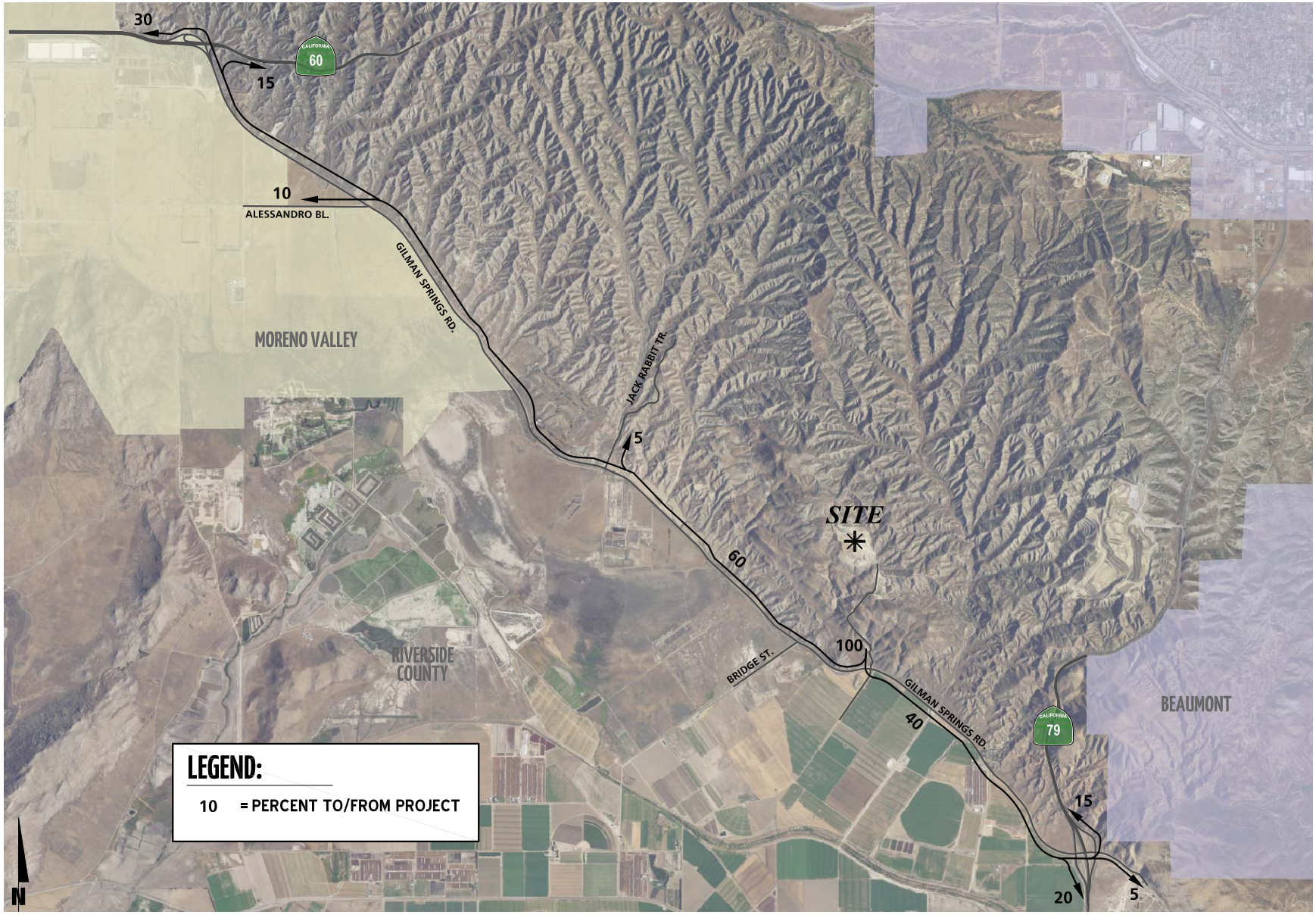
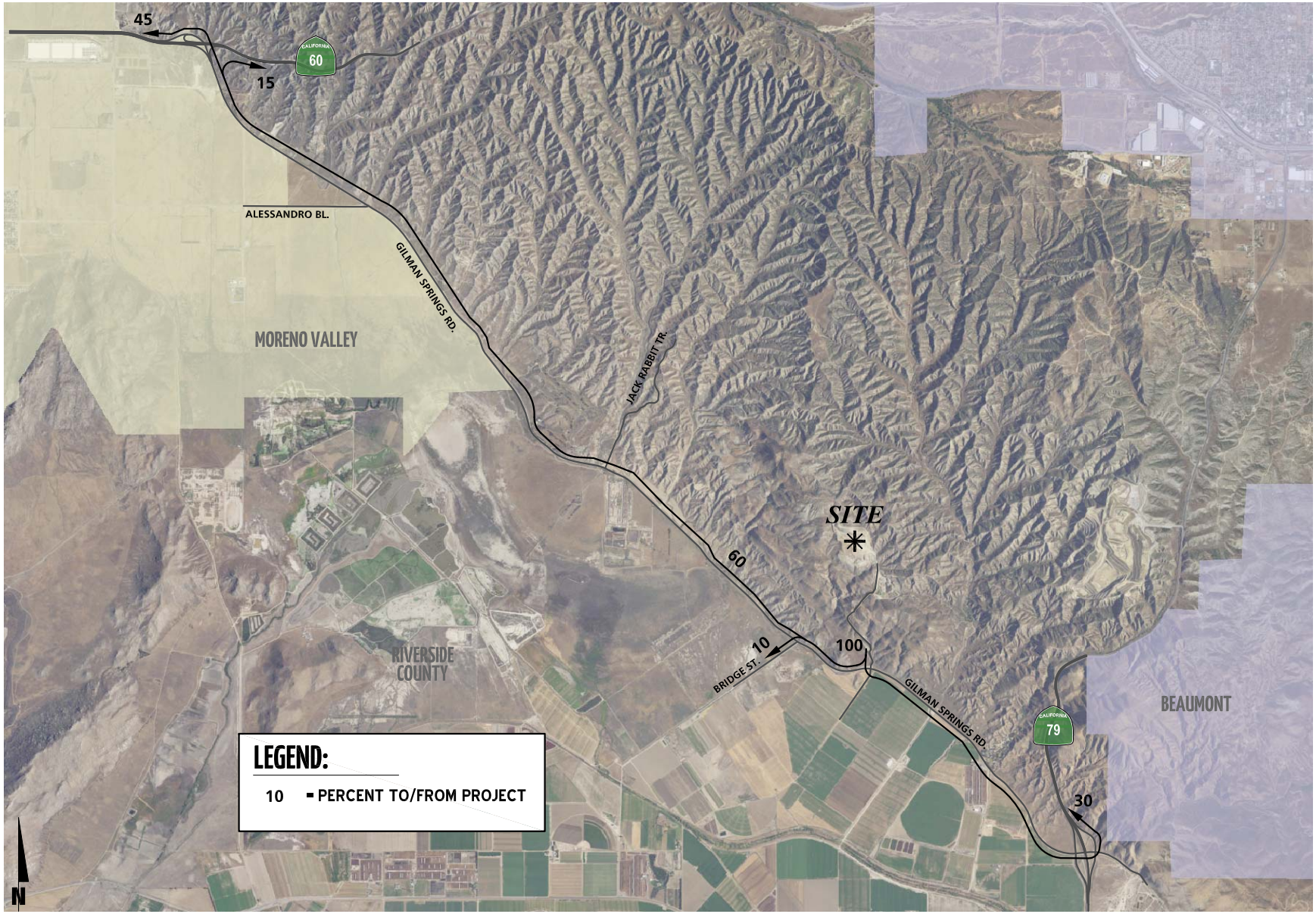


EXHIBIT 3: PROJECT (TRUCKS) TRIP DISTRIBUTION



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Table 1

Summary of Historic Data

A. Average Historic Annual Tonnage (2002-2016):	370,613.4 TPY[1]
B. Proposed Project:	1,000,000 TPY
C. Project Increase (B. - A.)	629,386.6 TPY
D. Project Share of Total Tonnage (C. / B.):	62.94%

[1] TPY = Tons Per Year

Table 2

Data to Support 4,500 Tons Per Day Assumption

Annual Tonnage at 4,500 TPD	
A. Proposed Annual Tonnage for Traffic Study (TPD):	4,500 TPD[1]
B. Working Days Per Year (7-Days Per Week):	364 Days
C. Total Annual Tonnage at 4,500 TPD (A. X B.):	1,638,000 TPY[2]
D. Percent Increase over Project's Proposed Annual Tonnage (C. / 629,386.6 TPY):	163.80%

Operating Days to Achieve 1,000,000 TPY[2] at 4,500 TPD	
E. Proposed Daily Tonnage for Traffic Study (TPD):	4,500 TPY
F. Maximum Annual Tonnage Allowed as Proposed:	1,000,000 TPY
G. Number of Mining Days to Reach 629.386.6 TPY at 4,500 TPD (F. / E.):	222 Days

[1] TPD = Tons Per Day

[2] TPY = Tons Per Year

Table 3

Total and Project Daily Truck Trips

A. Proposed Daily Tonnage for Traffic Study (TPD):	4,500 TPD
B. Average Tons Per Truck:	25 Tons
C. One-Way Trucks Per Day (A. / B.):	180 Trucks
D. Total Two-Way Total Trucks Per Day Based on 4,500 TPD (C. X 2-trips)[1]:	360 Trucks[1]
E. Total New Project Trucks Trips Per Day (D. X D. from Table 1 or 62.94% of 360)[2]:	227 Trucks[2]

[1] Total trucks based on 4,500 TPD. Total trucks per day multiplied by 2.0 to represent two-way trip ends (one inbound trip and one outbound trip).

[2] Truck trips associated with proposed Project, or net increase of 2,832 TPD (e.g., 62.94% from Table 1 of 4,500 TPD) from the existing 1,668 TPD.

Table 4

Peak Hour Trips as a Percentage of Total ADT

Time	Average Hourly Trips	Total Trips	Hourly %
12:00 AM			
1:00 AM			
2:00 AM			
3:00 AM			
4:00 AM			
5:00 AM			
6:00 AM	6	390	11.0%
7:00 AM	6	374	10.6%
8:00 AM	7	415	11.7%
9:00 AM	8	495	14.0%
10:00 AM	7	446	12.6%
11:00 AM	7	453	12.8%
12:00 PM	7	452	12.8%
1:00 PM	5	310	8.7%
2:00 PM	3	188	5.3%
3:00 PM	1	21	0.6%
4:00 PM			
5:00 PM			
6:00 PM			
7:00 PM			
8:00 PM			
9:00 PM			
10:00 PM			
11:00 PM			
Total Tickets:	57	3544	100.0%

* Data supplied by Project Applicant for the existing mine site.

Table 5

Average Daily and Peak Hour Project Trip Generation Summary

Proposed Project Trip Generation Summary									
			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[1]	In	Out	Total	In	Out	Total	Daily
Gilman Mine	1.000	MTPY							
Passenger Cars			6	4	10	4	6	10	30
Truck Trips[2]			26	25	51	23	24	47	360
Project Trips (PCE)[3]			**84**	**79**	**163**	**73**	**78**	**151**	**1,110**

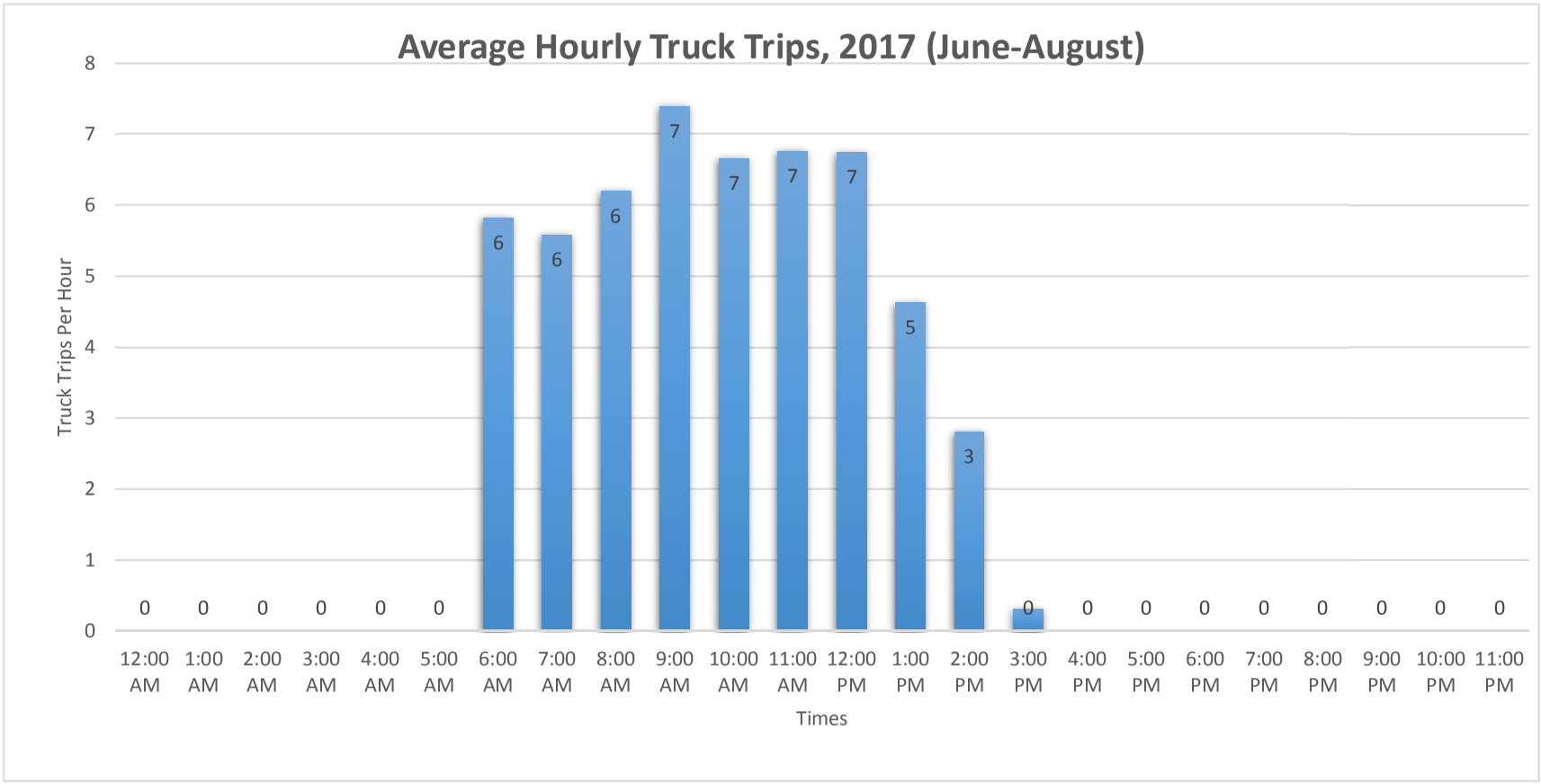
[1] MTPY = Million Tons Per Year

[2] Total project truck trips based on typical peak operating day of 4,500 tons per day.

[3] Based on passenger car equivalent (PCE) factor of 3.0 PCE per truck.

times	total trips	hourly trips		
12:00 AM	0	0	12:00 AM	0
1:00 AM	0	0	1:00 AM	0
2:00 AM	0	0	2:00 AM	0
3:00 AM	0	0	3:00 AM	0
4:00 AM	0	0	4:00 AM	0
5:00 AM	0	0	5:00 AM	0
6:00 AM	390	6	6:00 AM	6
7:00 AM	374	6	7:00 AM	6
8:00 AM	415	6	8:00 AM	6
9:00 AM	495	7	9:00 AM	7
10:00 AM	446	7	10:00 AM	7
11:00 AM	453	7	11:00 AM	7
12:00 PM	452	7	12:00 PM	7
1:00 PM	310	5	1:00 PM	5
2:00 PM	188	3	2:00 PM	3
3:00 PM	21	0	3:00 PM	0
4:00 PM	0	0	4:00 PM	0
5:00 PM	0	0	5:00 PM	0
6:00 PM	0	0	6:00 PM	0
7:00 PM	0	0	7:00 PM	0
8:00 PM	0	0	8:00 PM	0
9:00 PM	0	0	9:00 PM	0
10:00 PM	0	0	10:00 PM	0
11:00 PM	0	0	11:00 PM	0
Total:	3544			

Methodology: 1) Create an excel file of just times **2)** Convert all times to military time **3)**Sort times by increasing order **4)**Count # rows for each time interval (1 hour) **5)** divide by the total days included in the excel sheet (67 days) **6)**Check total trips correspond to ticket number in original excel sheet


Average Hourly Truck Trips, 2017 (June-August)
Truck Trips Per Hour
Times
0 1 2 3 4 5 6 7 8
12:00 AM
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM
10:00 PM
11:00 PM
0 0 0 0 0 0 6 6 6 7 7 7 7 5 3 0 0 0 0 0 0 0 0 0

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APPENDIX 3.1:

EXISTING TRAFFIC COUNTS – FEBRUARY 2018

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

City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

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

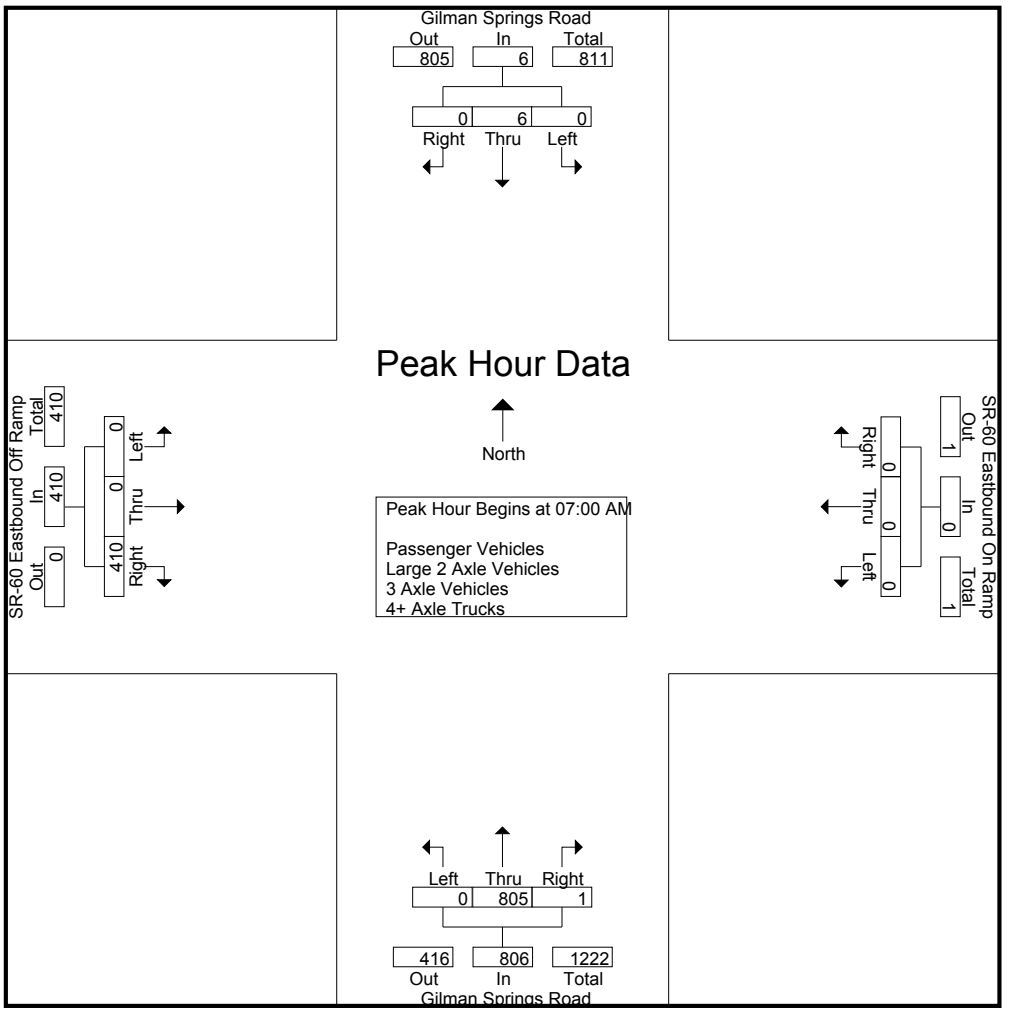
	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	234	0	234	0	0	105	105	339
07:15 AM	0	1	0	1	0	0	0	0	0	182	0	182	0	0	96	96	279
07:30 AM	0	0	0	0	0	0	0	0	0	205	1	206	0	0	103	103	309
07:45 AM	0	5	0	5	0	0	0	0	0	184	0	184	0	0	106	106	295
Total	0	6	0	6	0	0	0	0	0	805	1	806	0	0	410	410	1222
08:00 AM	0	0	0	0	0	0	0	0	0	165	2	167	0	0	91	91	258
08:15 AM	0	0	0	0	0	0	0	0	0	135	1	136	0	0	74	74	210
08:30 AM	0	0	0	0	0	0	0	0	0	166	0	166	0	0	94	94	260
08:45 AM	0	0	0	0	0	0	0	0	0	130	2	132	0	0	86	86	218
Total	0	0	0	0	0	0	0	0	0	596	5	601	0	0	345	345	946
Grand Total	0	6	0	6	0	0	0	0	0	1401	6	1407	0	0	755	755	2168
Apprch %	0	100	0		0	0	0		0	99.6	0.4		0	0	100		
Total %	0	0.3	0	0.3	0	0	0	0	0	64.6	0.3	64.9	0	0	34.8	34.8	
Passenger Vehicles	0	6	0	6	0	0	0	0	0	1359	4	1363	0	0	698	698	2067
% Passenger Vehicles	0	100	0	100	0	0	0	0	0	97	66.7	96.9	0	0	92.5	92.5	95.3
Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	17	1	18	0	0	30	30	48
% Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	1.2	16.7	1.3	0	0	4	4	2.2
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	2	0	2	0	0	4	4	6
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0	0	0.5	0.5	0.3
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	23	1	24	0	0	23	23	47
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	1.6	16.7	1.7	0	0	3	3	2.2

	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	**234**	0	**234**	0	0	105	105	**339**
07:15 AM	0	1	0	1	0	0	0	0	0	182	0	182	0	0	96	96	279
07:30 AM	0	0	0	0	0	0	0	0	0	205	**1**	206	0	0	103	103	309
07:45 AM	0	**5**	0	**5**	0	0	0	0	0	184	0	184	0	0	**106**	**106**	295
Total Volume	0	6	0	6	0	0	0	0	0	805	1	806	0	0	410	410	1222
% App. Total	0	100	0		0	0	0		0	99.9	0.1		0	0	100		
PHF	.000	.300	.000	.300	.000	.000	.000	.000	.000	.860	.250	.861	.000	.000	.967	.967	.901

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

City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E AM
Site Code : 05118094
Start Date : 2/7/2018
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:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	**234**	0	**234**	0	0	105	105
+15 mins.	0	1	0	1	0	0	0	0	0	182	0	182	0	0	96	96
+30 mins.	0	0	0	0	0	0	0	0	0	205	**1**	206	0	0	103	103
+45 mins.	0	**5**	0	**5**	0	0	0	0	0	184	0	184	0	0	**106**	**106**
Total Volume	0	6	0	6	0	0	0	0	0	805	1	806	0	0	410	410
% App. Total	0	100	0		0	0	0		0	99.9	0.1		0	0	100	
PHF	.000	.300	.000	.300	.000	.000	.000	.000	.000	.860	.250	.861	.000	.000	.967	.967

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

City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Passenger Vehicles

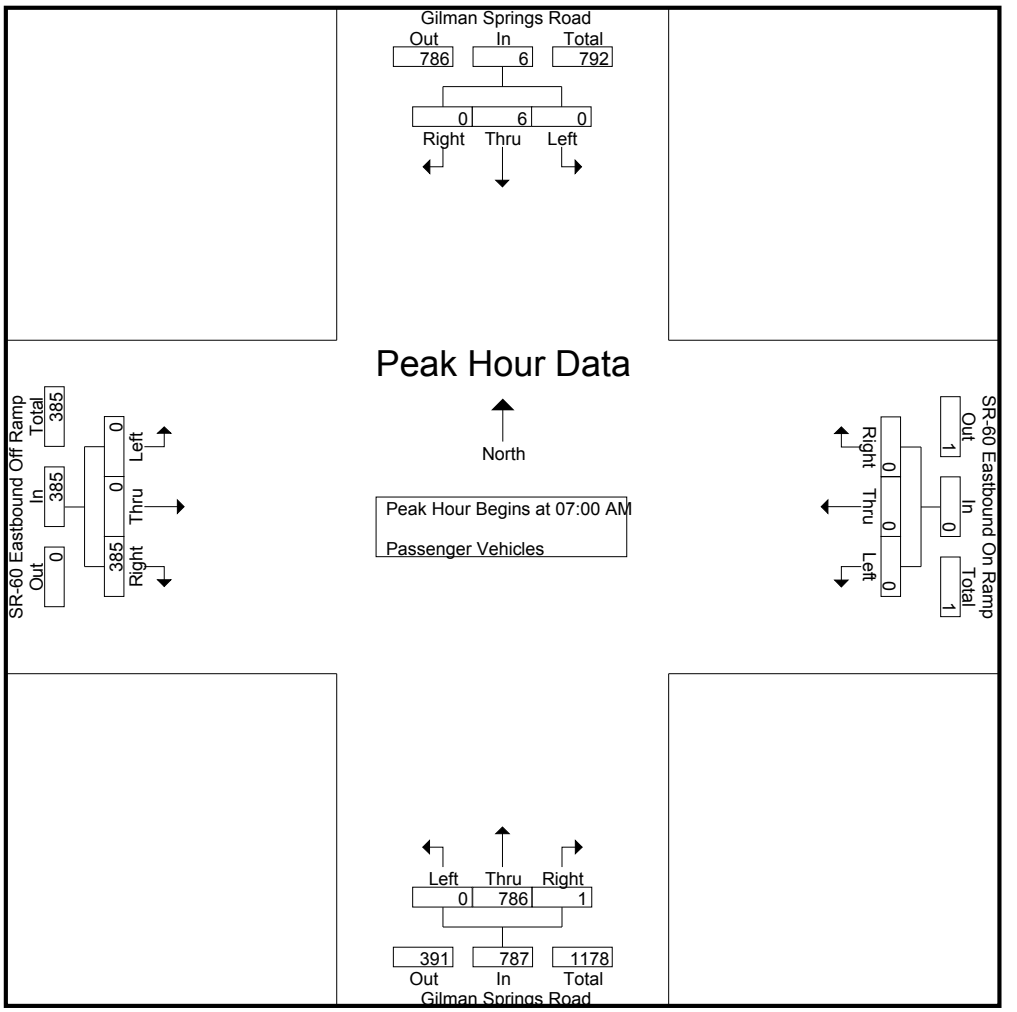
	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	225	0	225	0	0	99	99	324
07:15 AM	0	1	0	1	0	0	0	0	0	181	0	181	0	0	92	92	274
07:30 AM	0	0	0	0	0	0	0	0	0	202	1	203	0	0	97	97	300
07:45 AM	0	5	0	5	0	0	0	0	0	178	0	178	0	0	97	97	280
Total	0	6	0	6	0	0	0	0	0	786	1	787	0	0	385	385	1178
08:00 AM	0	0	0	0	0	0	0	0	0	160	0	160	0	0	84	84	244
08:15 AM	0	0	0	0	0	0	0	0	0	128	1	129	0	0	65	65	194
08:30 AM	0	0	0	0	0	0	0	0	0	159	0	159	0	0	83	83	242
08:45 AM	0	0	0	0	0	0	0	0	0	126	2	128	0	0	81	81	209
Total	0	0	0	0	0	0	0	0	0	573	3	576	0	0	313	313	889
Grand Total	0	6	0	6	0	0	0	0	0	1359	4	1363	0	0	698	698	2067
Apprch %	0	100	0		0	0	0		0	99.7	0.3		0	0	100		
Total %	0	0.3	0	0.3	0	0	0	0	0	65.7	0.2	65.9	0	0	33.8	33.8	

	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	**225**	0	**225**	0	0	**99**	**99**	**324**
07:15 AM	0	1	0	1	0	0	0	0	0	181	0	181	0	0	92	92	274
07:30 AM	0	0	0	0	0	0	0	0	0	202	**1**	203	0	0	97	97	300
07:45 AM	0	**5**	0	**5**	0	0	0	0	0	178	0	178	0	0	97	97	280
Total Volume	0	6	0	6	0	0	0	0	0	786	1	787	0	0	385	385	1178
% App. Total	0	100	0		0	0	0		0	99.9	0.1		0	0	100		
PHF	.000	.300	.000	.300	.000	.000	.000	.000	.000	.873	.250	.874	.000	.000	.972	.972	.909

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

City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	**225**	0	**225**	0	0	**99**	**99**
+15 mins.	0	1	0	1	0	0	0	0	0	181	0	181	0	0	92	92
+30 mins.	0	0	0	0	0	0	0	0	0	202	**1**	203	0	0	97	97
+45 mins.	0	**5**	0	**5**	0	0	0	0	0	178	0	178	0	0	97	97
Total Volume	0	6	0	6	0	0	0	0	0	786	1	787	0	0	385	385
% App. Total	0	100	0		0	0	0		0	99.9	0.1		0	0	100	
PHF	.000	.300	.000	.300	.000	.000	.000	.000	.000	.873	.250	.874	.000	.000	.972	.972

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

City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

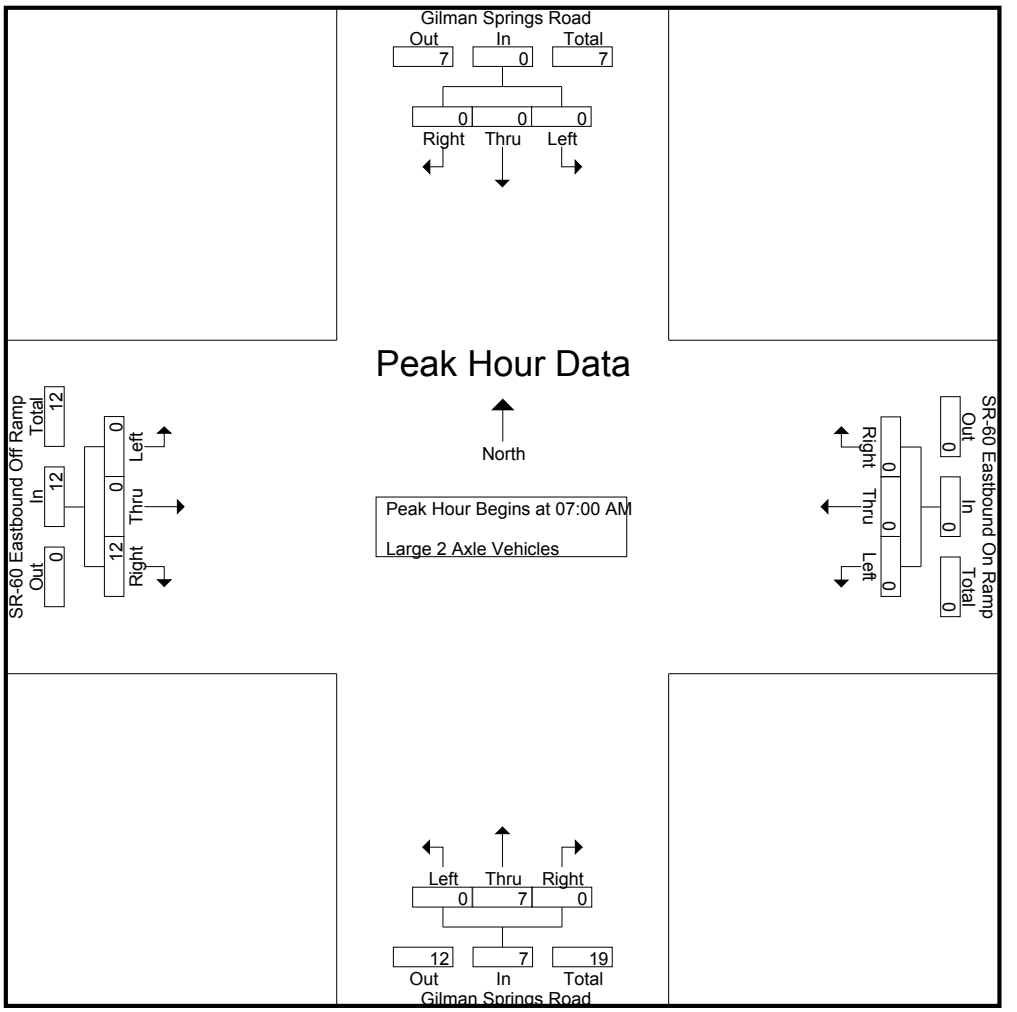
	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	4	4	7
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	4	4	5
07:45 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	3	3	6
Total	0	0	0	0	0	0	0	0	0	7	0	7	0	0	12	12	19
08:00 AM	0	0	0	0	0	0	0	0	0	2	1	3	0	0	3	3	6
08:15 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	6	6	8
08:30 AM	0	0	0	0	0	0	0	0	0	4	0	4	0	0	7	7	11
08:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2	4
Total	0	0	0	0	0	0	0	0	0	10	1	11	0	0	18	18	29
Grand Total	0	0	0	0	0	0	0	0	0	17	1	18	0	0	30	30	48
Apprch %	0	0	0		0	0	0		0	94.4	5.6		0	0	100		
Total %	0	0	0	0	0	0	0	0	0	35.4	2.1	37.5	0	0	62.5	62.5	

	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	**3**	0	**3**	0	0	**4**	**4**	**7**
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	4	4	5
07:45 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	3	3	6
Total Volume	0	0	0	0	0	0	0	0	0	7	0	7	0	0	12	12	19
% App. Total	0	0	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.583	.000	.583	.000	.000	.750	.750	.679

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

City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	**3**	0	**3**	0	0	**4**	**4**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	4	4
+45 mins.	0	0	0	0	0	0	0	0	0	3	0	3	0	0	3	3
Total Volume	0	0	0	0	0	0	0	0	0	7	0	7	0	0	12	12
% App. Total	0	0	0		0	0	0		0	100	0		0	0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.583	.000	.583	.000	.000	.750	.750

Counts Unlimited
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City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E AM
Site Code : 05118094
Start Date : 2/7/2018

Groups Printed- 3 Axle Vehicles

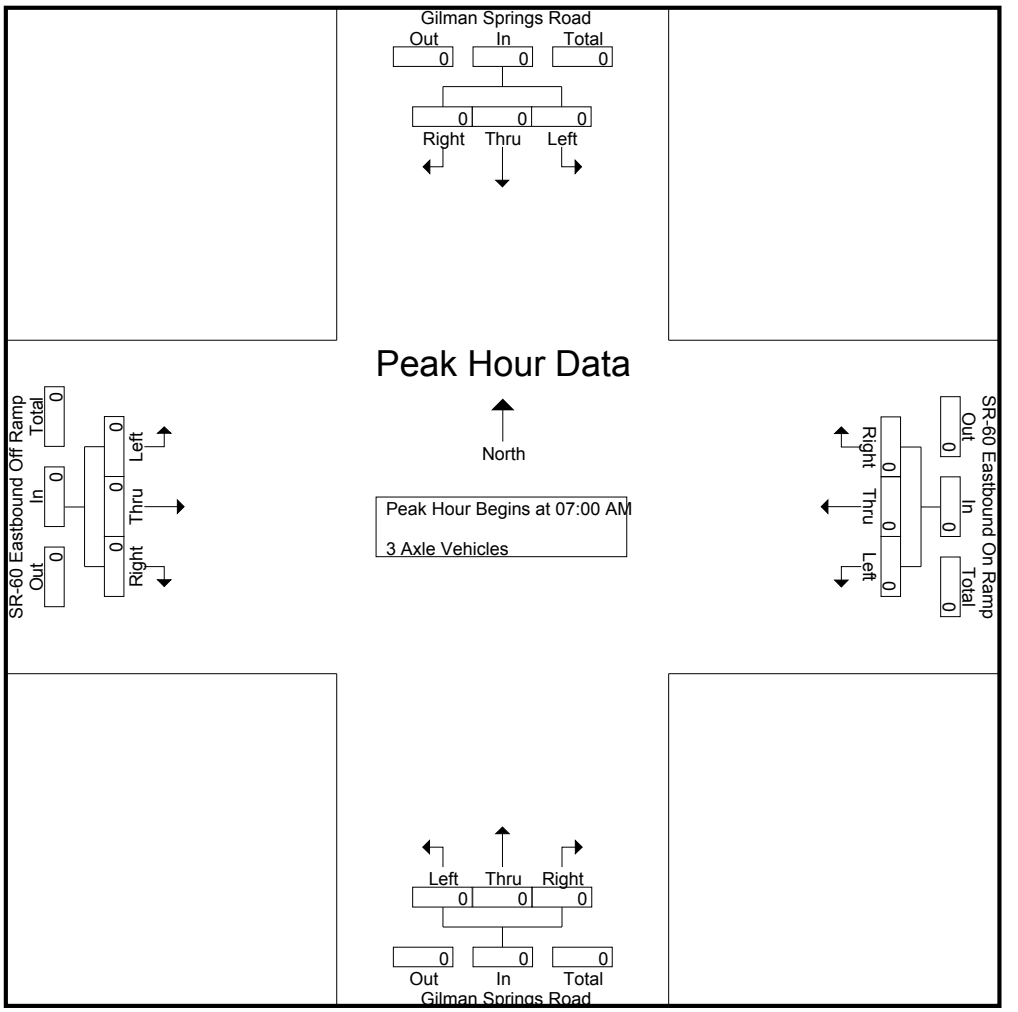
	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	1	0	1	0	0	1	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3	3	4
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	2	0	2	0	0	4	4	6
Grand Total	0	0	0	0	0	0	0	0	0	2	0	2	0	0	4	4	6
Apprch %	0	0	0		0	0	0		0	100	0		0	0	100		
Total %	0	0	0	0	0	0	0	0	0	33.3	0	33.3	0	0	66.7	66.7	

	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	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 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

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	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	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

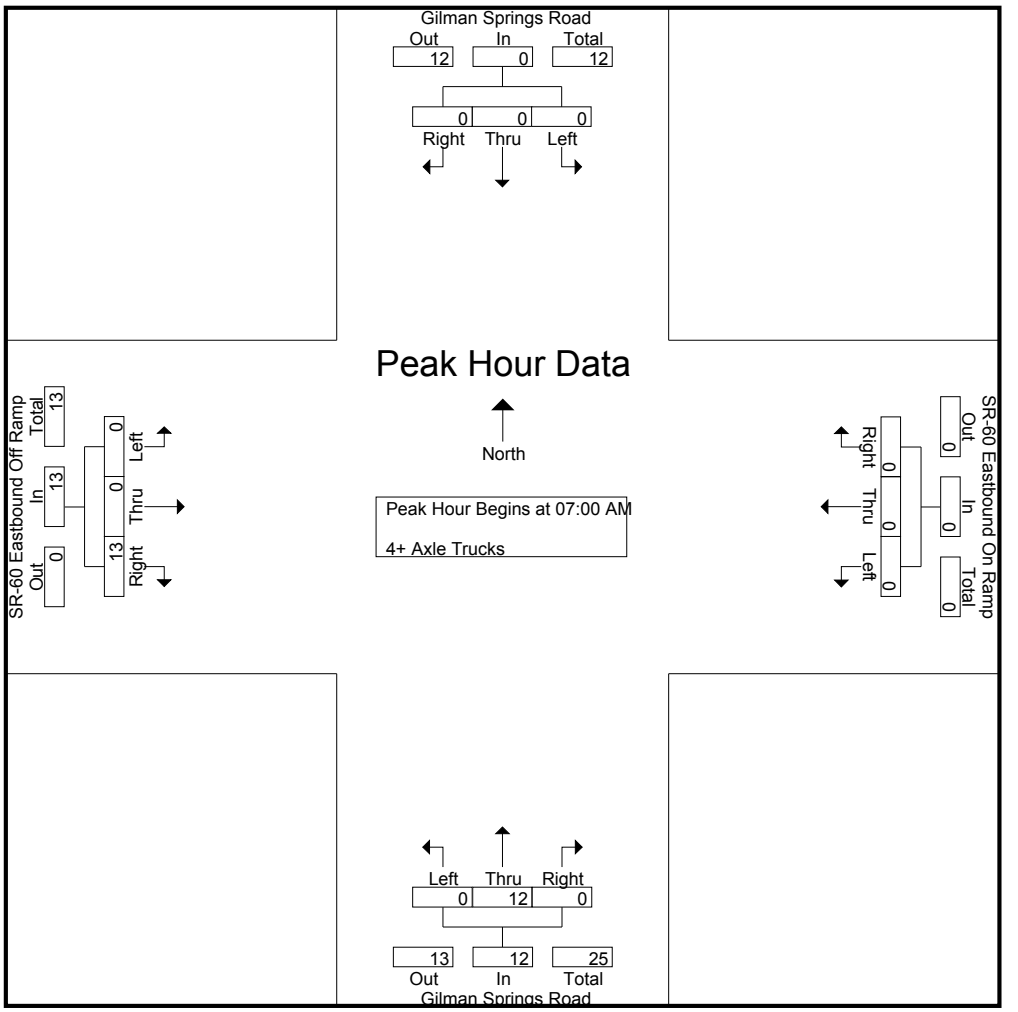
	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	6	0	6	0	0	2	2	8
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3	3	4
07:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2	4
07:45 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	6	6	9
Total	0	0	0	0	0	0	0	0	0	12	0	12	0	0	13	13	25
08:00 AM	0	0	0	0	0	0	0	0	0	3	1	4	0	0	4	4	8
08:15 AM	0	0	0	0	0	0	0	0	0	4	0	4	0	0	2	2	6
08:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	1	1	3
08:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	3	3	5
Total	0	0	0	0	0	0	0	0	0	11	1	12	0	0	10	10	22
Grand Total	0	0	0	0	0	0	0	0	0	23	1	24	0	0	23	23	47
Apprch %	0	0	0		0	0	0		0	95.8	4.2		0	0	100		
Total %	0	0	0	0	0	0	0	0	0	48.9	2.1	51.1	0	0	48.9	48.9	

	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	**6**	0	**6**	0	0	2	2	8
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3	3	4
07:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2	4
07:45 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	**6**	**6**	**9**
Total Volume	0	0	0	0	0	0	0	0	0	12	0	12	0	0	13	13	25
% App. Total	0	0	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.542	.542	.694

Counts Unlimited
PO Box 1178
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City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	**6**	0	**6**	0	0	2	2
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3	3
+30 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2
+45 mins.	0	0	0	0	0	0	0	0	0	3	0	3	0	0	**6**	**6**
Total Volume	0	0	0	0	0	0	0	0	0	12	0	12	0	0	13	13
% App. Total	0	0	0		0	0	0		0	100	0		0	0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.542	.542

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

City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

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

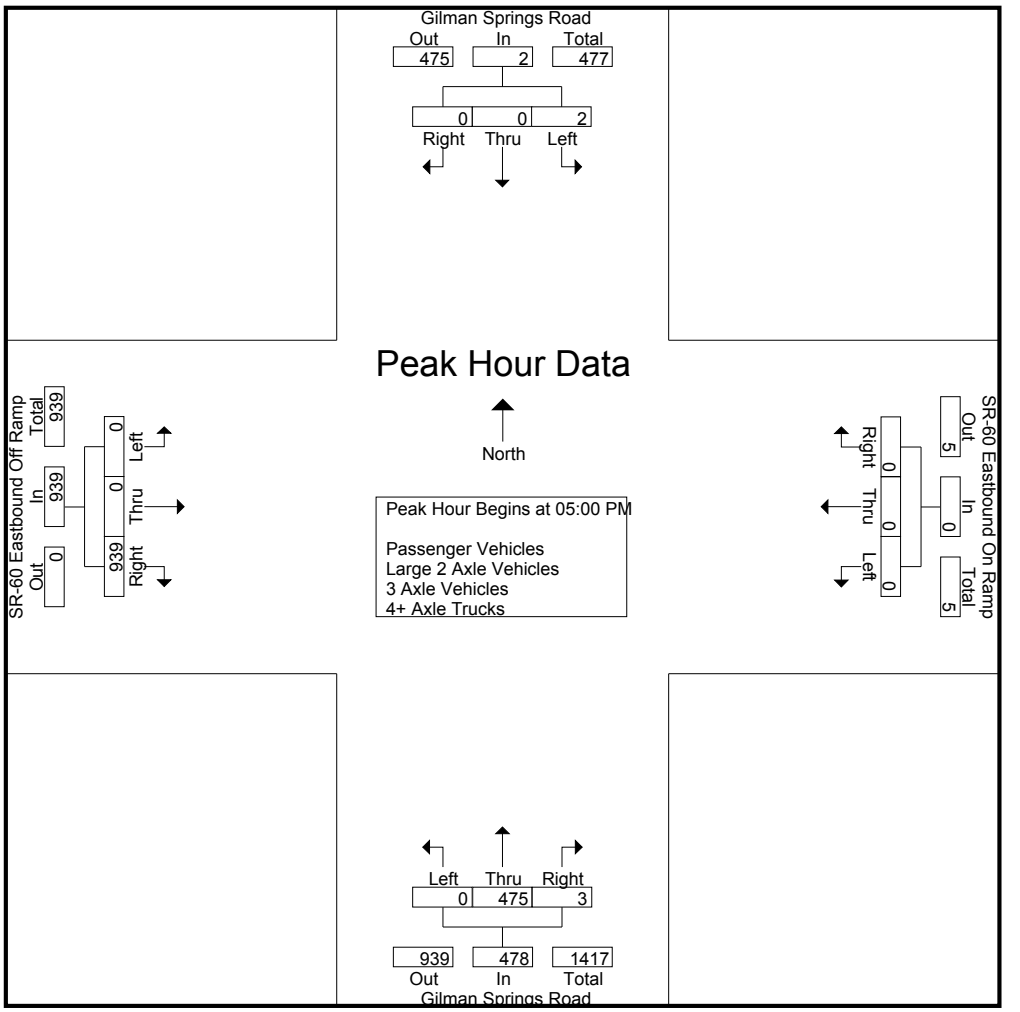
	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	0	0	0	124	0	124	0	0	226	226	352
04:15 PM	0	0	0	0	0	0	0	0	0	133	0	133	0	0	193	193	326
04:30 PM	0	4	0	4	0	0	0	0	0	102	1	103	0	0	244	244	351
04:45 PM	0	0	0	0	0	0	0	0	0	102	1	103	0	0	249	249	352
Total	0	6	0	6	0	0	0	0	0	461	2	463	0	0	912	912	1381
05:00 PM	0	0	0	0	0	0	0	0	0	126	0	126	0	0	220	220	346
05:15 PM	0	0	0	0	0	0	0	0	0	111	1	112	0	0	238	238	350
05:30 PM	1	0	0	1	0	0	0	0	0	121	2	123	0	0	237	237	361
05:45 PM	1	0	0	1	0	0	0	0	0	117	0	117	0	0	244	244	362
Total	2	0	0	2	0	0	0	0	0	475	3	478	0	0	939	939	1419
Grand Total	2	6	0	8	0	0	0	0	0	936	5	941	0	0	1851	1851	2800
Apprch %	25	75	0		0	0	0		0	99.5	0.5		0	0	100		
Total %	0.1	0.2	0	0.3	0	0	0	0	0	33.4	0.2	33.6	0	0	66.1	66.1	
Passenger Vehicles	2	6	0	8	0	0	0	0	0	907	5	912	0	0	1827	1827	2747
% Passenger Vehicles	100	100	0	100	0	0	0	0	0	96.9	100	96.9	0	0	98.7	98.7	98.1
Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	17	0	17	0	0	18	18	35
% Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	1.8	0	1.8	0	0	1	1	1.2
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	11	0	11	0	0	6	6	17
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	1.2	0	1.2	0	0	0.3	0.3	0.6

	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	**126**	0	**126**	0	0	220	220	346
05:15 PM	0	0	0	0	0	0	0	0	0	111	1	112	0	0	238	238	350
05:30 PM	**1**	0	0	**1**	0	0	0	0	0	121	**2**	123	0	0	237	237	361
05:45 PM	1	0	0	1	0	0	0	0	0	117	0	117	0	0	**244**	**244**	**362**
Total Volume	2	0	0	2	0	0	0	0	0	475	3	478	0	0	939	939	1419
% App. Total	100	0	0		0	0	0		0	99.4	0.6		0	0	100		
PHF	.500	.000	.000	.500	.000	.000	.000	.000	.000	.942	.375	.948	.000	.000	.962	.962	.980

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

City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E PM
Site Code : 05118094
Start Date : 2/7/2018
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:

	04:00 PM				04:00 PM				05:00 PM				04:30 PM			
+0 mins.	0	2	0	2	0	0	0	0	0	**126**	0	**126**	0	0	244	244
+15 mins.	0	0	0	0	0	0	0	0	0	111	1	112	0	0	**249**	**249**
+30 mins.	0	**4**	0	**4**	0	0	0	0	0	121	**2**	123	0	0	220	220
+45 mins.	0	0	0	0	0	0	0	0	0	117	0	117	0	0	238	238
Total Volume	0	6	0	6	0	0	0	0	0	475	3	478	0	0	951	951
% App. Total	0	100	0		0	0	0		0	99.4	0.6		0	0	100	
PHF	.000	.375	.000	.375	.000	.000	.000	.000	.000	.942	.375	.948	.000	.000	.955	.955

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Passenger Vehicles

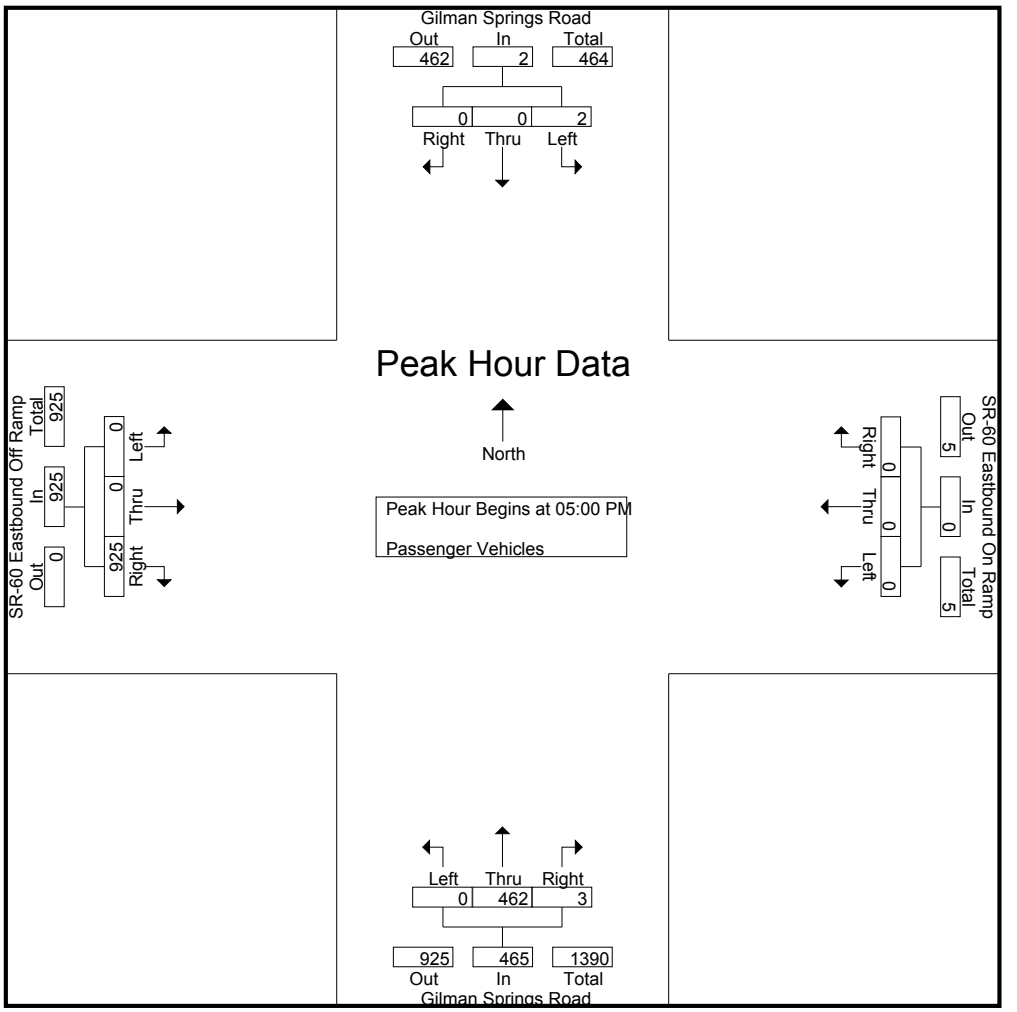
	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	0	0	0	120	0	120	0	0	224	224	346
04:15 PM	0	0	0	0	0	0	0	0	0	130	0	130	0	0	191	191	321
04:30 PM	0	4	0	4	0	0	0	0	0	97	1	98	0	0	240	240	342
04:45 PM	0	0	0	0	0	0	0	0	0	98	1	99	0	0	247	247	346
Total	0	6	0	6	0	0	0	0	0	445	2	447	0	0	902	902	1355
05:00 PM	0	0	0	0	0	0	0	0	0	124	0	124	0	0	218	218	342
05:15 PM	0	0	0	0	0	0	0	0	0	108	1	109	0	0	235	235	344
05:30 PM	1	0	0	1	0	0	0	0	0	115	2	117	0	0	234	234	352
05:45 PM	1	0	0	1	0	0	0	0	0	115	0	115	0	0	238	238	354
Total	2	0	0	2	0	0	0	0	0	462	3	465	0	0	925	925	1392
Grand Total	2	6	0	8	0	0	0	0	0	907	5	912	0	0	1827	1827	2747
Apprch %	25	75	0		0	0	0		0	99.5	0.5		0	0	100		
Total %	0.1	0.2	0	0.3	0	0	0	0	0	33	0.2	33.2	0	0	66.5	66.5	

	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	**124**	0	**124**	0	0	218	218	342
05:15 PM	0	0	0	0	0	0	0	0	0	108	1	109	0	0	235	235	344
05:30 PM	**1**	0	0	**1**	0	0	0	0	0	115	**2**	117	0	0	234	234	352
05:45 PM	1	0	0	1	0	0	0	0	0	115	0	115	0	0	**238**	**238**	**354**
Total Volume	2	0	0	2	0	0	0	0	0	462	3	465	0	0	925	925	1392
% App. Total	100	0	0		0	0	0		0	99.4	0.6		0	0	100		
PHF	.500	.000	.000	.500	.000	.000	.000	.000	.000	.931	.375	.938	.000	.000	.972	.972	.983

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E PM
Site Code : 05118094
Start Date : 2/7/2018
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	0	0	0	0	0	0	0	0	**124**	0	**124**	0	0	218	218
+15 mins.	0	0	0	0	0	0	0	0	0	108	1	109	0	0	235	235
+30 mins.	**1**	0	0	**1**	0	0	0	0	0	115	**2**	117	0	0	234	234
+45 mins.	1	0	0	1	0	0	0	0	0	115	0	115	0	0	**238**	**238**
Total Volume	2	0	0	2	0	0	0	0	0	462	3	465	0	0	925	925
% App. Total	100	0	0		0	0	0		0	99.4	0.6		0	0	100	
PHF	.500	.000	.000	.500	.000	.000	.000	.000	.000	.931	.375	.938	.000	.000	.972	.972

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

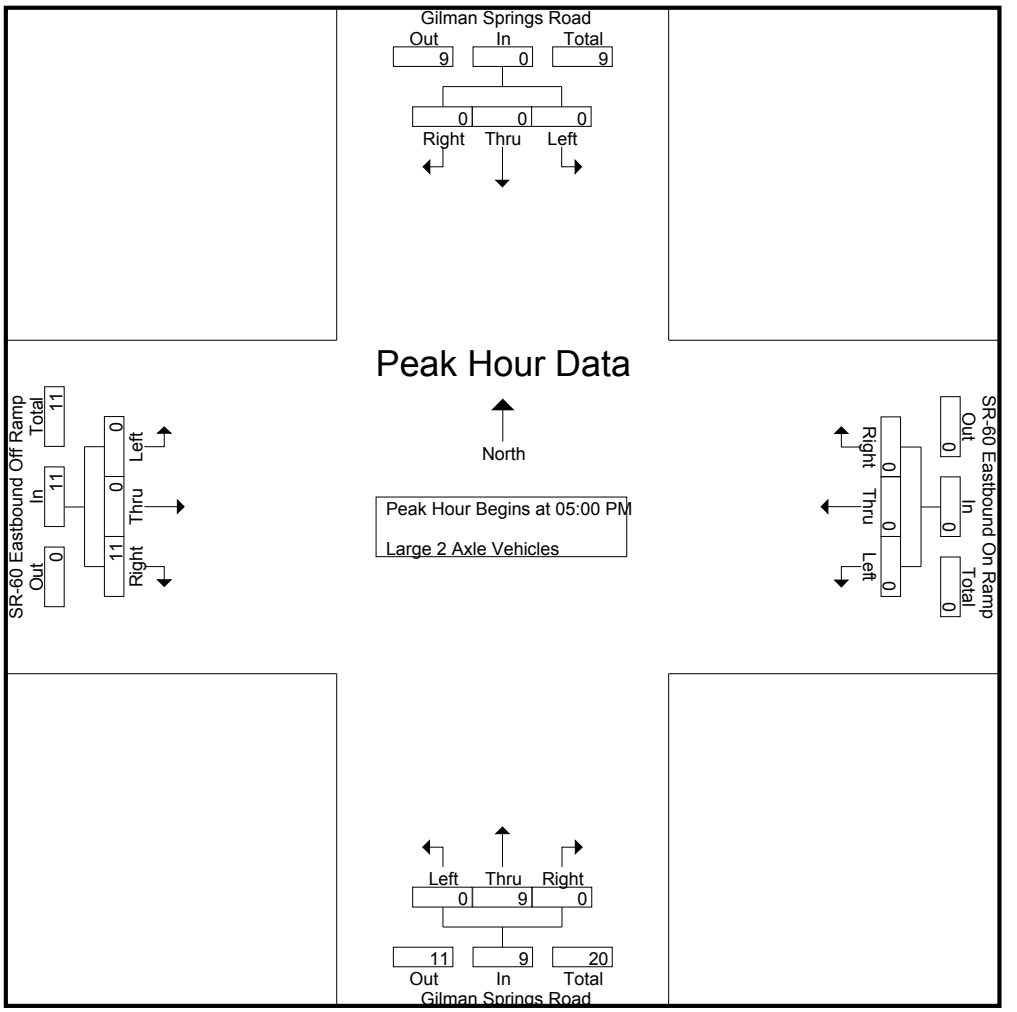
	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	1	1	3
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2	3
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2	3
04:45 PM	0	0	0	0	0	0	0	0	0	4	0	4	0	0	2	2	6
Total	0	0	0	0	0	0	0	0	0	8	0	8	0	0	7	7	15
05:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2	4
05:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2	4
05:30 PM	0	0	0	0	0	0	0	0	0	4	0	4	0	0	2	2	6
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	5	5	6
Total	0	0	0	0	0	0	0	0	0	9	0	9	0	0	11	11	20
Grand Total	0	0	0	0	0	0	0	0	0	17	0	17	0	0	18	18	35
Apprch %	0	0	0		0	0	0		0	100	0		0	0	100		
Total %	0	0	0	0	0	0	0	0	0	48.6	0	48.6	0	0	51.4	51.4	

	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2	4
05:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2	4
05:30 PM	0	0	0	0	0	0	0	0	0	**4**	0	**4**	0	0	2	2	**6**
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	**5**	**5**	6
Total Volume	0	0	0	0	0	0	0	0	0	9	0	9	0	0	11	11	20
% App. Total	0	0	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.563	.000	.563	.000	.000	.550	.550	.833

Counts Unlimited
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City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E PM
Site Code : 05118094
Start Date : 2/7/2018
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	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2
+15 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2
+30 mins.	0	0	0	0	0	0	0	0	0	**4**	0	**4**	0	0	2	2
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	**5**	**5**
Total Volume	0	0	0	0	0	0	0	0	0	9	0	9	0	0	11	11
% App. Total	0	0	0		0	0	0		0	100	0		0	0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.563	.000	.563	.000	.000	.550	.550

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E PM
Site Code : 05118094
Start Date : 2/7/2018

Groups Printed- 3 Axle Vehicles

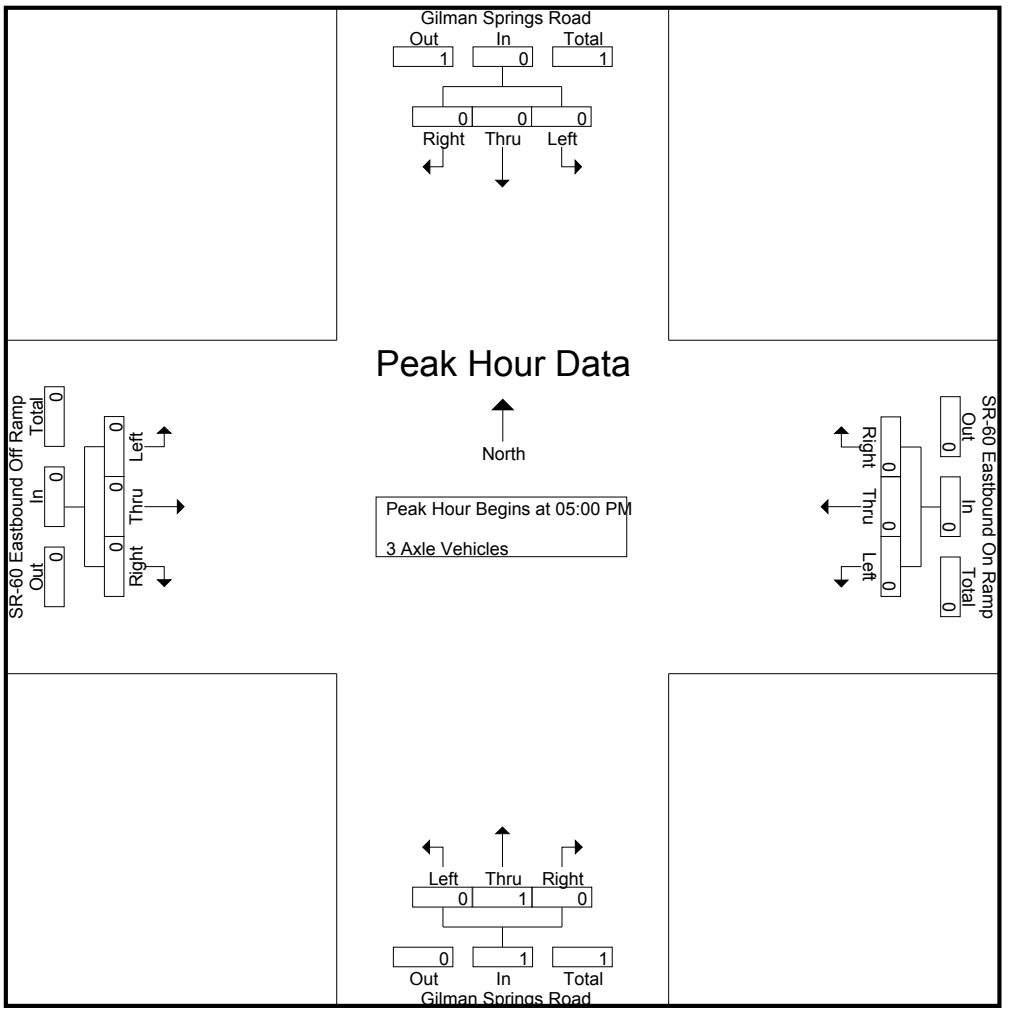
	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Apprch %	0	0	0		0	0	0		0	100	0		0	0	0		
Total %	0	0	0	0	0	0	0	0	0	100	0	100	0	0	0	0	

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

Counts Unlimited
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City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E PM
Site Code : 05118094
Start Date : 2/7/2018
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	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	**1**	0	**1**	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

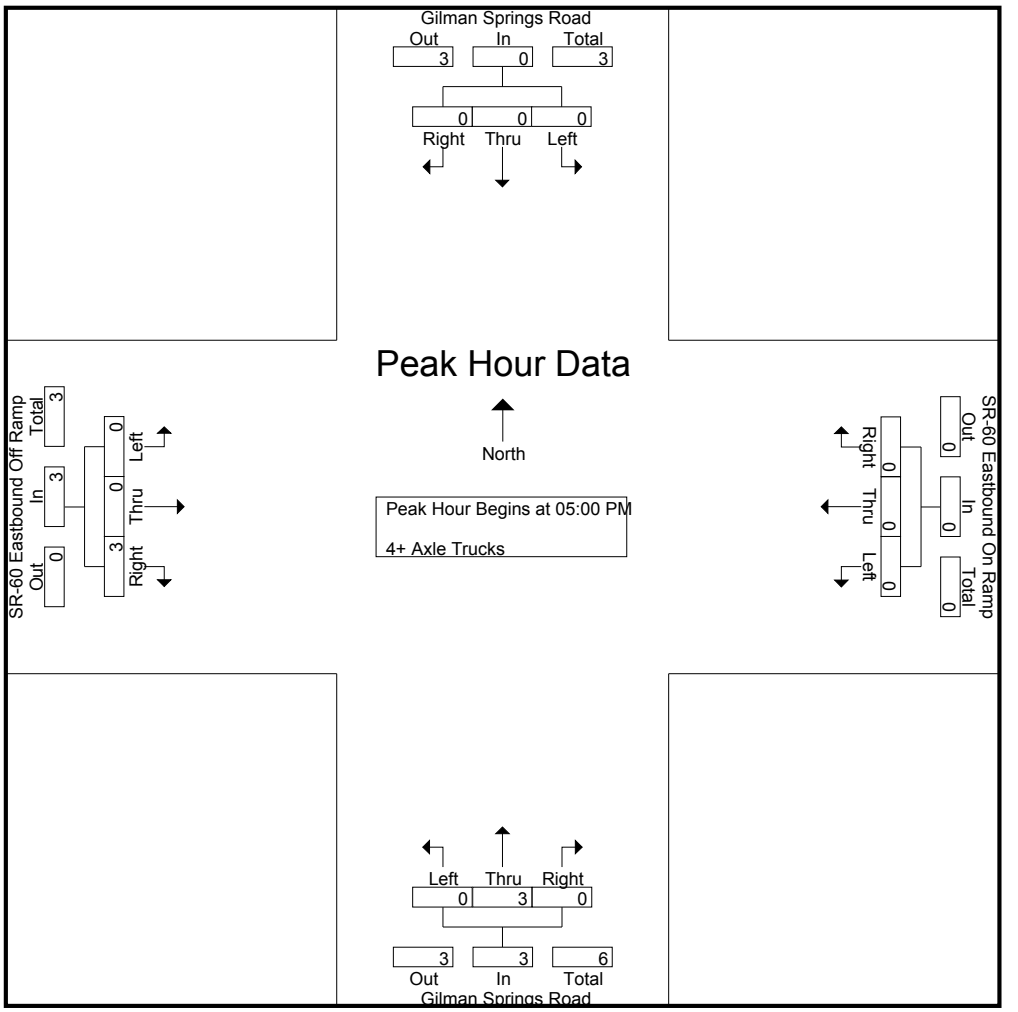
	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	1	1	3
04:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	4	0	4	0	0	2	2	6
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	8	0	8	0	0	3	3	11
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	1	0	1	0	0	1	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	1	1	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	0	0	3	0	3	0	0	3	3	6
Grand Total	0	0	0	0	0	0	0	0	0	11	0	11	0	0	6	6	17
Apprch %	0	0	0		0	0	0		0	100	0		0	0	100		
Total %	0	0	0	0	0	0	0	0	0	64.7	0	64.7	0	0	35.3	35.3	

	Gilman Springs Road Southbound				SR-60 Eastbound On Ramp Westbound				Gilman Springs Road Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	**1**	**1**	2
05:30 PM	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	1	1	**3**
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	0	0	0	0	0	0	3	0	3	0	0	3	3	6
% App. Total	0	0	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.750	.750	.500

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 01_MRV_Gilman Springs_60E PM
Site Code : 05118094
Start Date : 2/7/2018
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	**1**	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	1	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	3	0	3	0	0	3	3
% App. Total	0	0	0		0	0	0		0	100	0		0	0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.750	.750

Location: Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound Ramps

Date: 2/7/2018
Date: Wednesday

PEDESTRIANS

	North Leg Gilman Springs Road	East Leg SR-60 Eastbound Ramps	South Leg Gilman Springs Road	West Leg SR-60 Eastbound Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Gilman Springs Road	East Leg SR-60 Eastbound Ramps	South Leg Gilman Springs Road	West Leg SR-60 Eastbound Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Moreno Valley
N/S: Gilman Springs Road
E/W: SR-60 Eastbound

Date: 2/7/2018
Date: Wednesday

BICYCLES

	Southbound Gilman Springs Road			Westbound SR-60 Eastbound Ramps			Northbound Gilman Springs Road			Eastbound SR-60 Eastbound Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Gilman Springs Road			Westbound SR-60 Eastbound Ramps			Northbound Gilman Springs Road			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	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

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

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

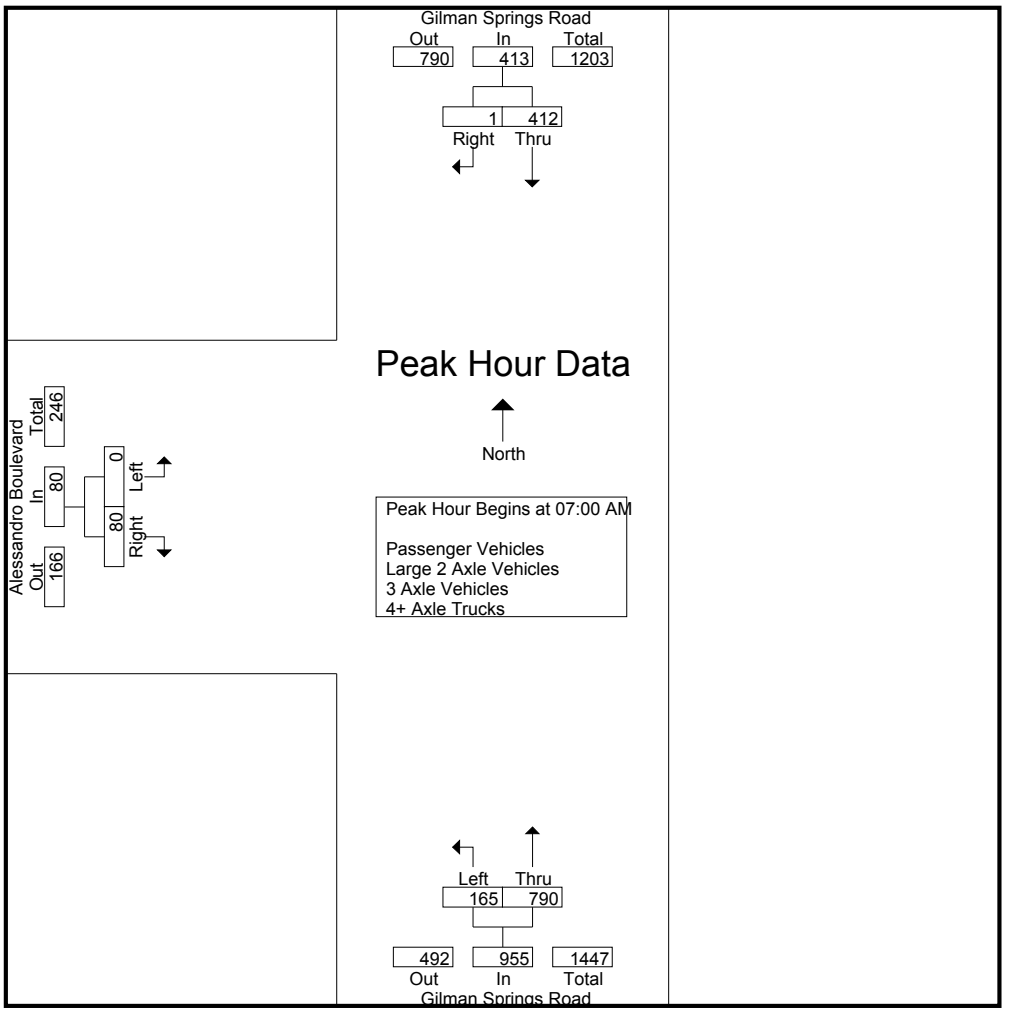
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	101	0	101	44	207	251	0	20	20	372
07:15 AM	100	0	100	42	192	234	0	18	18	352
07:30 AM	105	0	105	46	197	243	0	22	22	370
07:45 AM	106	1	107	33	194	227	0	20	20	354
Total	412	1	413	165	790	955	0	80	80	1448
08:00 AM	94	0	94	27	153	180	1	24	25	299
08:15 AM	70	1	71	23	155	178	0	16	16	265
08:30 AM	96	1	97	32	161	193	0	19	19	309
08:45 AM	85	0	85	17	132	149	0	14	14	248
Total	345	2	347	99	601	700	1	73	74	1121
Grand Total	757	3	760	264	1391	1655	1	153	154	2569
Apprch %	99.6	0.4		16	84		0.6	99.4		
Total %	29.5	0.1	29.6	10.3	54.1	64.4	0	6	6	
Passenger Vehicles	688	3	691	261	1341	1602	0	150	150	2443
% Passenger Vehicles	90.9	100	90.9	98.9	96.4	96.8	0	98	97.4	95.1
Large 2 Axle Vehicles	42	0	42	1	21	22	1	2	3	67
% Large 2 Axle Vehicles	5.5	0	5.5	0.4	1.5	1.3	100	1.3	1.9	2.6
3 Axle Vehicles	6	0	6	1	5	6	0	0	0	12
% 3 Axle Vehicles	0.8	0	0.8	0.4	0.4	0.4	0	0	0	0.5
4+ Axle Trucks	21	0	21	1	24	25	0	1	1	47
% 4+ Axle Trucks	2.8	0	2.8	0.4	1.7	1.5	0	0.7	0.6	1.8

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	101	0	101	44	**207**	**251**	0	20	20	**372**
07:15 AM	100	0	100	42	192	234	0	18	18	352
07:30 AM	105	0	105	**46**	197	243	0	**22**	**22**	370
07:45 AM	**106**	**1**	**107**	33	194	227	0	20	20	354
Total Volume	412	1	413	165	790	955	0	80	80	1448
% App. Total	99.8	0.2		17.3	82.7		0	100		
PHF	.972	.250	.965	.897	.954	.951	.000	.909	.909	.973

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City of Moreno Valley
N/S: Gilman Springs Road
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Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro AM
Site Code : 05118094
Start Date : 2/7/2018
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:

	07:00 AM			07:00 AM			07:15 AM		
+0 mins.	101	0	101	44	**207**	**251**	0	18	18
+15 mins.	100	0	100	42	192	234	0	22	22
+30 mins.	105	0	105	**46**	197	243	0	20	20
+45 mins.	**106**	**1**	**107**	33	194	227	**1**	**24**	**25**
Total Volume	412	1	413	165	790	955	1	84	85
% App. Total	99.8	0.2		17.3	82.7		1.2	98.8	
PHF	.972	.250	.965	.897	.954	.951	.250	.875	.850

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Passenger Vehicles

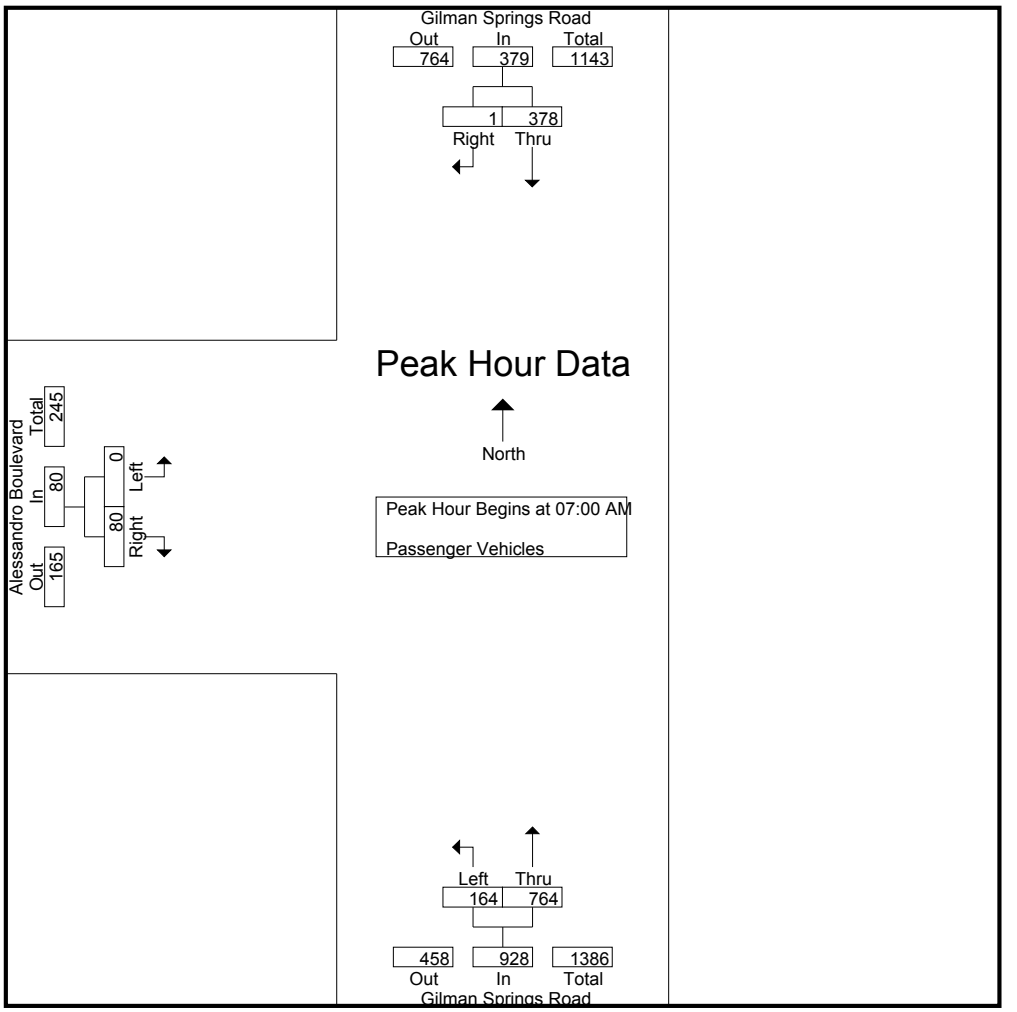
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	92	0	92	44	198	242	0	20	20	354
07:15 AM	94	0	94	41	188	229	0	18	18	341
07:30 AM	100	0	100	46	192	238	0	22	22	360
07:45 AM	92	1	93	33	186	219	0	20	20	332
Total	378	1	379	164	764	928	0	80	80	1387
08:00 AM	86	0	86	26	148	174	0	22	22	282
08:15 AM	59	1	60	23	146	169	0	16	16	245
08:30 AM	84	1	85	31	154	185	0	18	18	288
08:45 AM	81	0	81	17	129	146	0	14	14	241
Total	310	2	312	97	577	674	0	70	70	1056
Grand Total	688	3	691	261	1341	1602	0	150	150	2443
Apprch %	99.6	0.4		16.3	83.7		0	100		
Total %	28.2	0.1	28.3	10.7	54.9	65.6	0	6.1	6.1	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	92	0	92	44	**198**	**242**	0	20	20	354
07:15 AM	94	0	94	41	188	229	0	18	18	341
07:30 AM	**100**	0	**100**	**46**	192	238	0	**22**	**22**	**360**
07:45 AM	92	**1**	93	33	186	219	0	20	20	332
Total Volume	378	1	379	164	764	928	0	80	80	1387
% App. Total	99.7	0.3		17.7	82.3		0	100		
PHF	.945	.250	.948	.891	.965	.959	.000	.909	.909	.963

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	92	0	92	44	**198**	**242**	0	20	20
+15 mins.	94	0	94	41	188	229	0	18	18
+30 mins.	**100**	0	**100**	**46**	192	238	0	**22**	**22**
+45 mins.	92	**1**	93	33	186	219	0	20	20
Total Volume	378	1	379	164	764	928	0	80	80
% App. Total	99.7	0.3		17.7	82.3		0	100	
PHF	.945	.250	.948	.891	.965	.959	.000	.909	.909

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro AM
Site Code : 05118094
Start Date : 2/7/2018

Groups Printed- Large 2 Axle Vehicles

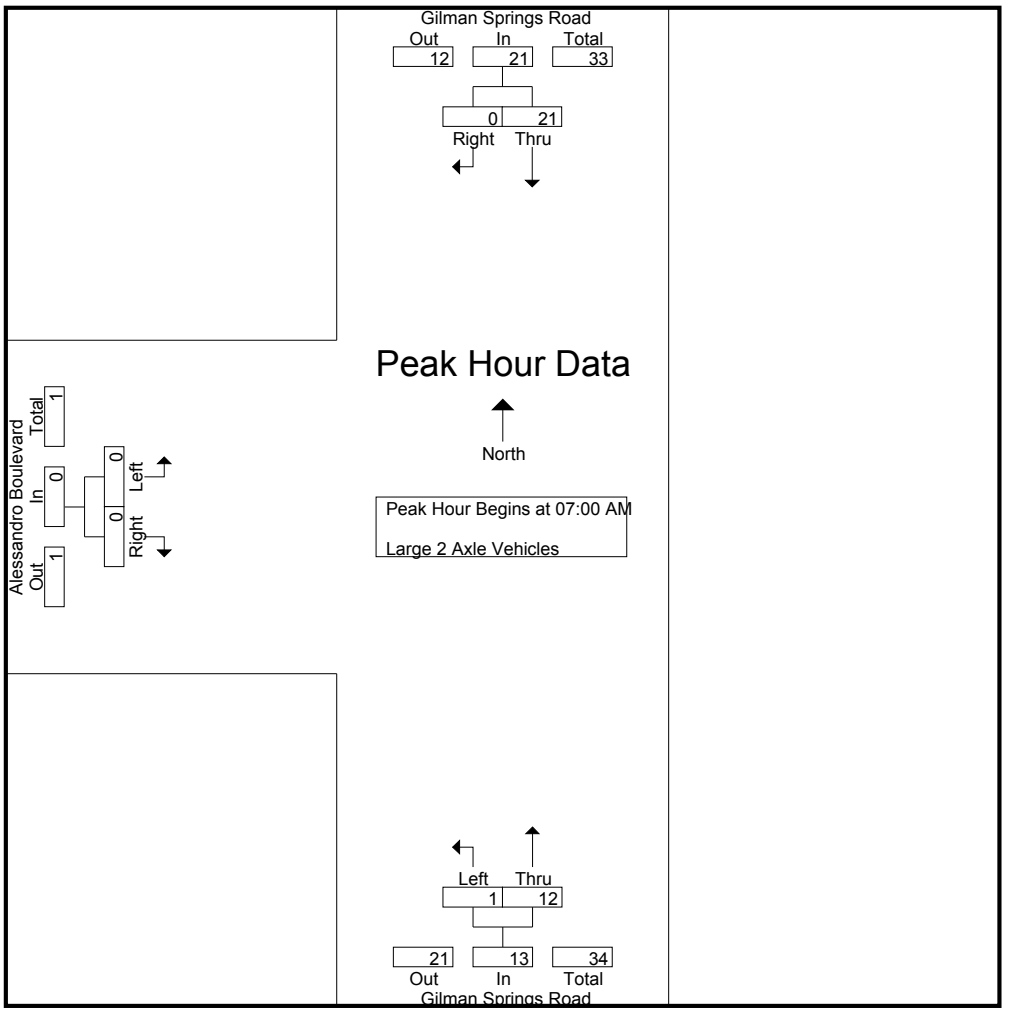
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	7	0	7	0	3	3	0	0	0	10
07:15 AM	3	0	3	1	3	4	0	0	0	7
07:30 AM	3	0	3	0	3	3	0	0	0	6
07:45 AM	8	0	8	0	3	3	0	0	0	11
Total	21	0	21	1	12	13	0	0	0	34
08:00 AM	4	0	4	0	1	1	1	1	2	7
08:15 AM	8	0	8	0	3	3	0	0	0	11
08:30 AM	6	0	6	0	4	4	0	1	1	11
08:45 AM	3	0	3	0	1	1	0	0	0	4
Total	21	0	21	0	9	9	1	2	3	33
Grand Total	42	0	42	1	21	22	1	2	3	67
Apprch %	100	0		4.5	95.5		33.3	66.7		
Total %	62.7	0	62.7	1.5	31.3	32.8	1.5	3	4.5	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	7	0	7	0	**3**	3	0	0	0	10
07:15 AM	3	0	3	**1**	3	**4**	0	0	0	7
07:30 AM	3	0	3	0	3	3	0	0	0	6
07:45 AM	**8**	0	**8**	0	3	3	0	0	0	**11**
Total Volume	21	0	21	1	12	13	0	0	0	34
% App. Total	100	0		7.7	92.3		0	0		
PHF	.656	.000	.656	.250	1.00	.813	.000	.000	.000	.773

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City of Moreno Valley
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Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	7	0	7	0	**3**	3	0	0	0
+15 mins.	3	0	3	**1**	3	**4**	0	0	0
+30 mins.	3	0	3	0	3	3	0	0	0
+45 mins.	**8**	0	**8**	0	3	3	0	0	0
Total Volume	21	0	21	1	12	13	0	0	0
% App. Total	100	0		7.7	92.3		0	0	
PHF	.656	.000	.656	.250	1.000	.813	.000	.000	.000

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

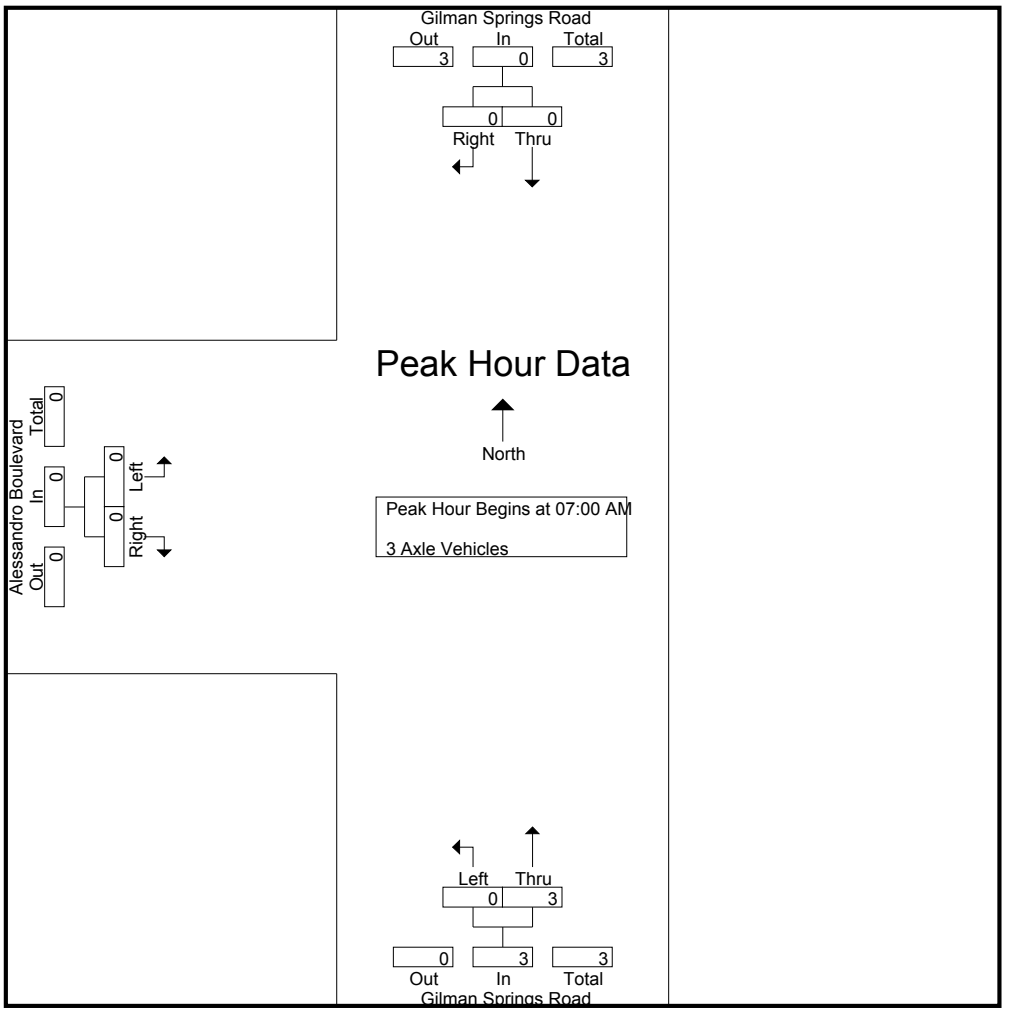
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	1	1	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	2	2	0	0	0	2
Total	0	0	0	0	3	3	0	0	0	3
08:00 AM	1	0	1	1	0	1	0	0	0	2
08:15 AM	1	0	1	0	1	1	0	0	0	2
08:30 AM	4	0	4	0	1	1	0	0	0	5
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	6	0	6	1	2	3	0	0	0	9
Grand Total	6	0	6	1	5	6	0	0	0	12
Apprch %	100	0		16.7	83.3		0	0		
Total %	50	0	50	8.3	41.7	50	0	0	0	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	1	1	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	**2**	**2**	0	0	0	**2**
Total Volume	0	0	0	0	3	3	0	0	0	3
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.375	.375	.000	.000	.000	.375

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	1	1	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	**2**	**2**	0	0	0
Total Volume	0	0	0	0	3	3	0	0	0
% App. Total	0	0		0	100		0	0	
PHF	.000	.000	.000	.000	.375	.375	.000	.000	.000

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

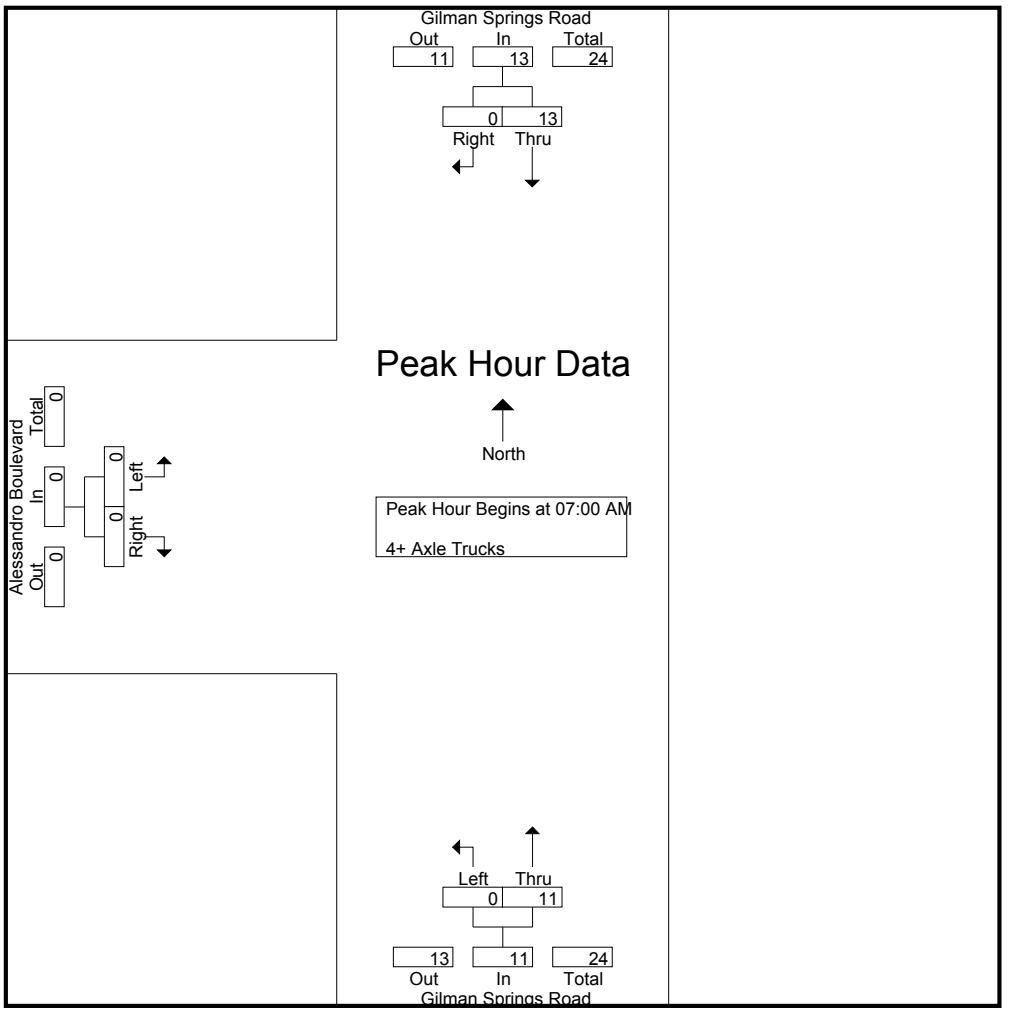
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	2	0	2	0	5	5	0	0	0	7
07:15 AM	3	0	3	0	1	1	0	0	0	4
07:30 AM	2	0	2	0	2	2	0	0	0	4
07:45 AM	6	0	6	0	3	3	0	0	0	9
Total	13	0	13	0	11	11	0	0	0	24
08:00 AM	3	0	3	0	4	4	0	1	1	8
08:15 AM	2	0	2	0	5	5	0	0	0	7
08:30 AM	2	0	2	1	2	3	0	0	0	5
08:45 AM	1	0	1	0	2	2	0	0	0	3
Total	8	0	8	1	13	14	0	1	1	23
Grand Total	21	0	21	1	24	25	0	1	1	47
Apprch %	100	0		4	96		0	100		
Total %	44.7	0	44.7	2.1	51.1	53.2	0	2.1	2.1	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	2	0	2	0	**5**	**5**	0	0	0	7
07:15 AM	3	0	3	0	1	1	0	0	0	4
07:30 AM	2	0	2	0	2	2	0	0	0	4
07:45 AM	**6**	0	**6**	0	3	3	0	0	0	**9**
Total Volume	13	0	13	0	11	11	0	0	0	24
% App. Total	100	0		0	100		0	0		
PHF	.542	.000	.542	.000	.550	.550	.000	.000	.000	.667

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City of Moreno Valley
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E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro AM
Site Code : 05118094
Start Date : 2/7/2018
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	2	0	2	0	**5**	**5**	0	0	0
+15 mins.	3	0	3	0	1	1	0	0	0
+30 mins.	2	0	2	0	2	2	0	0	0
+45 mins.	**6**	0	**6**	0	3	3	0	0	0
Total Volume	13	0	13	0	11	11	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.542	.000	.542	.000	.550	.550	.000	.000	.000

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

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

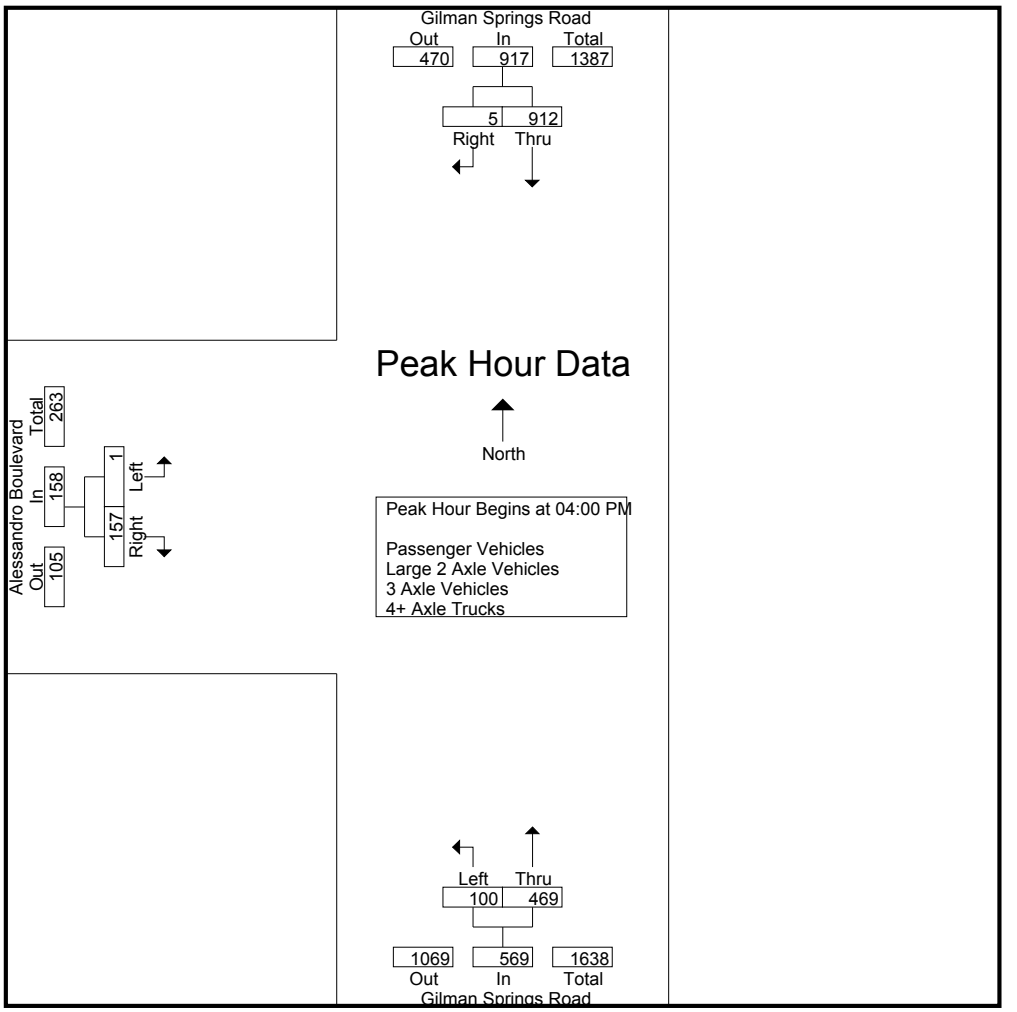
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	229	1	230	28	130	158	1	36	37	425
04:15 PM	194	1	195	21	121	142	0	39	39	376
04:30 PM	238	2	240	27	109	136	0	39	39	415
04:45 PM	251	1	252	24	109	133	0	43	43	428
Total	912	5	917	100	469	569	1	157	158	1644
05:00 PM	228	1	229	22	115	137	0	24	24	390
05:15 PM	225	0	225	16	113	129	0	46	46	400
05:30 PM	224	0	224	25	126	151	0	33	33	408
05:45 PM	235	1	236	29	122	151	0	31	31	418
Total	912	2	914	92	476	568	0	134	134	1616
Grand Total	1824	7	1831	192	945	1137	1	291	292	3260
Apprch %	99.6	0.4		16.9	83.1		0.3	99.7		
Total %	56	0.2	56.2	5.9	29	34.9	0	8.9	9	
Passenger Vehicles	1799	7	1806	190	907	1097	1	289	290	3193
% Passenger Vehicles	98.6	100	98.6	99	96	96.5	100	99.3	99.3	97.9
Large 2 Axle Vehicles	18	0	18	2	22	24	0	2	2	44
% Large 2 Axle Vehicles	1	0	1	1	2.3	2.1	0	0.7	0.7	1.3
3 Axle Vehicles	1	0	1	0	2	2	0	0	0	3
% 3 Axle Vehicles	0.1	0	0.1	0	0.2	0.2	0	0	0	0.1
4+ Axle Trucks	6	0	6	0	14	14	0	0	0	20
% 4+ Axle Trucks	0.3	0	0.3	0	1.5	1.2	0	0	0	0.6

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	229	1	230	**28**	**130**	**158**	**1**	36	37	425
04:15 PM	194	1	195	21	121	142	0	39	39	376
04:30 PM	238	**2**	240	27	109	136	0	39	39	415
04:45 PM	**251**	1	**252**	24	109	133	0	**43**	**43**	**428**
Total Volume	912	5	917	100	469	569	1	157	158	1644
% App. Total	99.5	0.5		17.6	82.4		0.6	99.4		
PHF	.908	.625	.910	.893	.902	.900	.250	.913	.919	.960

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro PM
Site Code : 05118094
Start Date : 2/7/2018
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			04:00 PM			04:00 PM		
+0 mins.	238	**2**	240	**28**	**130**	**158**	**1**	36	37
+15 mins.	**251**	1	**252**	21	121	142	0	39	39
+30 mins.	228	1	229	27	109	136	0	39	39
+45 mins.	225	0	225	24	109	133	0	**43**	**43**
Total Volume	942	4	946	100	469	569	1	157	158
% App. Total	99.6	0.4		17.6	82.4		0.6	99.4	
PHF	.938	.500	.938	.893	.902	.900	.250	.913	.919

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro PM
Site Code : 05118094
Start Date : 2/7/2018
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Groups Printed- Passenger Vehicles

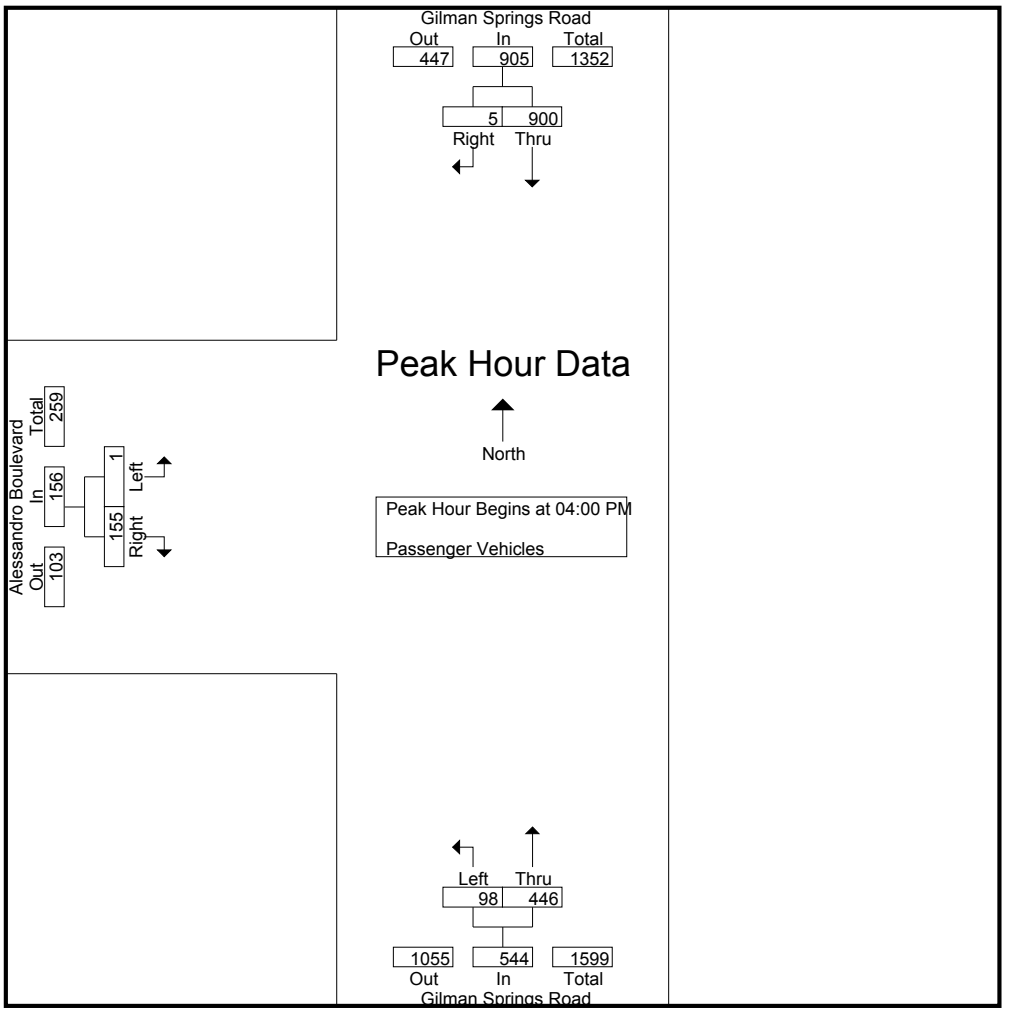
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	227	1	228	27	124	151	1	36	37	416
04:15 PM	193	1	194	21	116	137	0	39	39	370
04:30 PM	233	2	235	26	103	129	0	38	38	402
04:45 PM	247	1	248	24	103	127	0	42	42	417
Total	900	5	905	98	446	544	1	155	156	1605
05:00 PM	226	1	227	22	114	136	0	24	24	387
05:15 PM	222	0	222	16	109	125	0	46	46	393
05:30 PM	219	0	219	25	119	144	0	33	33	396
05:45 PM	232	1	233	29	119	148	0	31	31	412
Total	899	2	901	92	461	553	0	134	134	1588
Grand Total	1799	7	1806	190	907	1097	1	289	290	3193
Apprch %	99.6	0.4		17.3	82.7		0.3	99.7		
Total %	56.3	0.2	56.6	6	28.4	34.4	0	9.1	9.1	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	227	1	228	**27**	**124**	**151**	**1**	36	37	416
04:15 PM	193	1	194	21	116	137	0	39	39	370
04:30 PM	233	**2**	235	26	103	129	0	38	38	402
04:45 PM	**247**	1	**248**	24	103	127	0	**42**	**42**	**417**
Total Volume	900	5	905	98	446	544	1	155	156	1605
% App. Total	99.4	0.6		18	82		0.6	99.4		
PHF	.911	.625	.912	.907	.899	.901	.250	.923	.929	.962

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Site Code : 05118094
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	227	1	228	**27**	**124**	**151**	**1**	36	37
+15 mins.	193	1	194	21	116	137	0	39	39
+30 mins.	233	**2**	235	26	103	129	0	38	38
+45 mins.	**247**	1	**248**	24	103	127	0	**42**	**42**
Total Volume	900	5	905	98	446	544	1	155	156
% App. Total	99.4	0.6		18	82		0.6	99.4	
PHF	.911	.625	.912	.907	.899	.901	.250	.923	.929

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

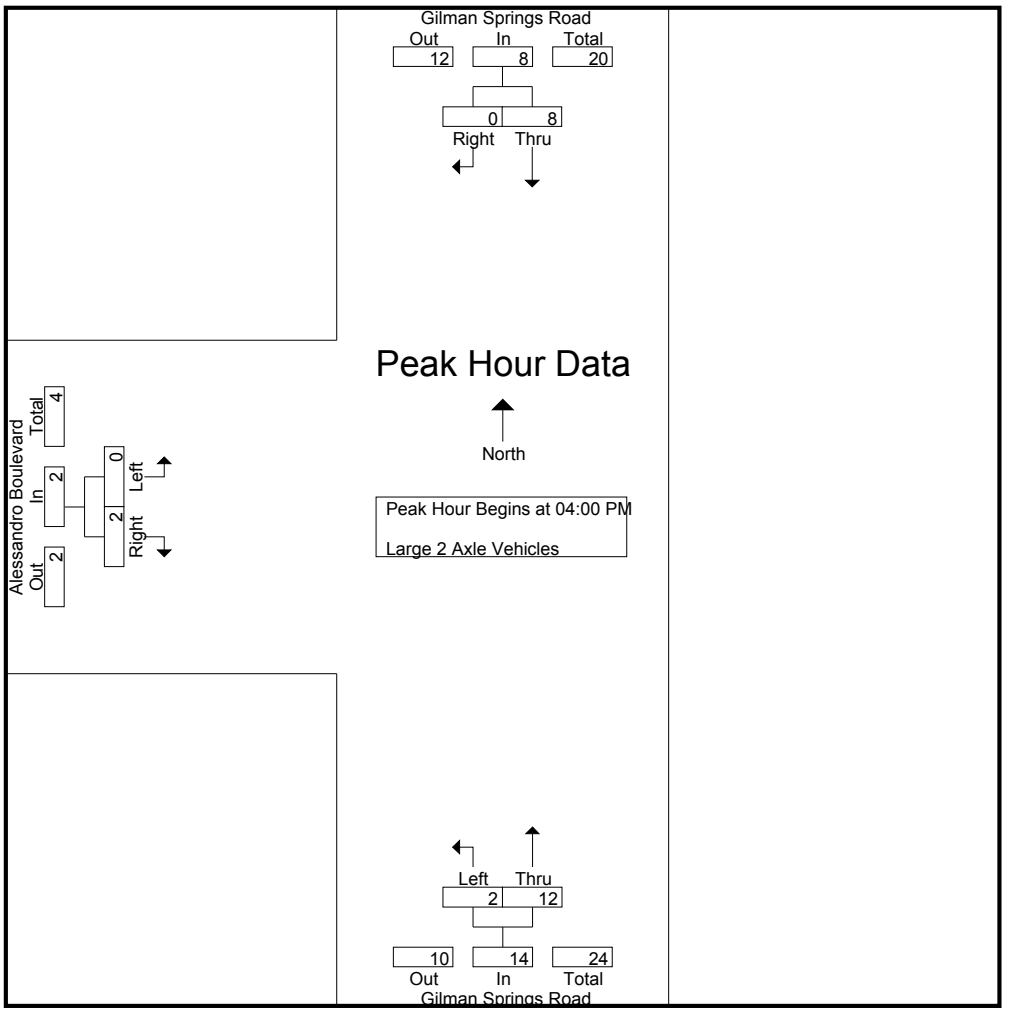
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	1	0	1	1	3	4	0	0	0	5
04:15 PM	1	0	1	0	3	3	0	0	0	4
04:30 PM	3	0	3	1	2	3	0	1	1	7
04:45 PM	3	0	3	0	4	4	0	1	1	8
Total	8	0	8	2	12	14	0	2	2	24
05:00 PM	2	0	2	0	1	1	0	0	0	3
05:15 PM	2	0	2	0	3	3	0	0	0	5
05:30 PM	4	0	4	0	4	4	0	0	0	8
05:45 PM	2	0	2	0	2	2	0	0	0	4
Total	10	0	10	0	10	10	0	0	0	20
Grand Total	18	0	18	2	22	24	0	2	2	44
Apprch %	100	0		8.3	91.7		0	100		
Total %	40.9	0	40.9	4.5	50	54.5	0	4.5	4.5	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	1	0	1	**1**	3	**4**	0	0	0	5
04:15 PM	1	0	1	0	3	3	0	0	0	4
04:30 PM	**3**	0	**3**	1	2	3	0	**1**	**1**	7
04:45 PM	3	0	3	0	**4**	4	0	1	1	**8**
Total Volume	8	0	8	2	12	14	0	2	2	24
% App. Total	100	0		14.3	85.7		0	100		
PHF	.667	.000	.667	.500	.750	.875	.000	.500	.500	.750

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Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro PM
Site Code : 05118094
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	1	0	1	**1**	3	**4**	0	0	0
+15 mins.	1	0	1	0	3	3	0	0	0
+30 mins.	**3**	0	**3**	1	2	3	0	**1**	**1**
+45 mins.	3	0	3	0	**4**	4	0	1	1
Total Volume	8	0	8	2	12	14	0	2	2
% App. Total	100	0		14.3	85.7		0	100	
PHF	.667	.000	.667	.500	.750	.875	.000	.500	.500

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro PM
Site Code : 05118094
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Groups Printed- 3 Axle Vehicles

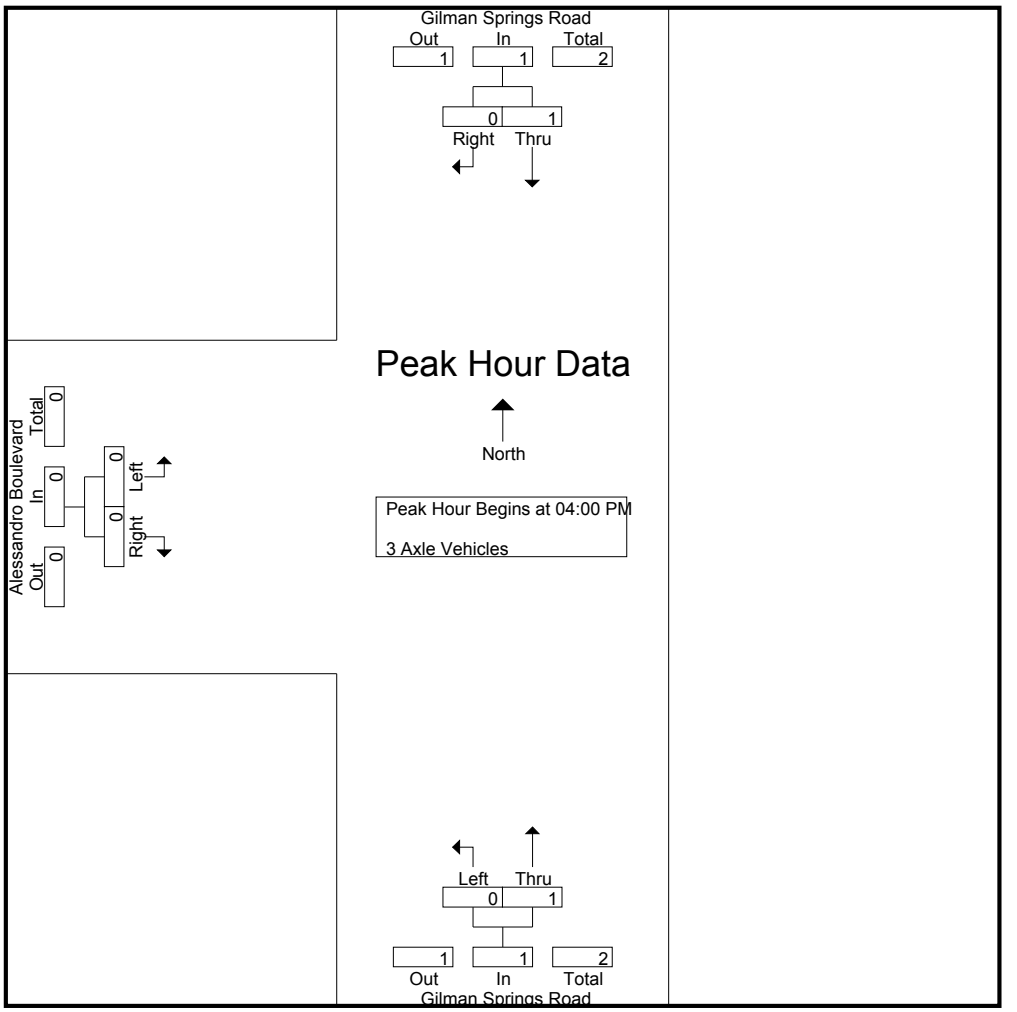
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	1	0	1	0	1	1	0	0	0	2
Total	1	0	1	0	1	1	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	1	1	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	0	0	0	1
Grand Total	1	0	1	0	2	2	0	0	0	3
Apprch %	100	0		0	100		0	0		
Total %	33.3	0	33.3	0	66.7	66.7	0	0	0	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	**1**	0	**1**	0	**1**	**1**	0	0	0	**2**
Total Volume	1	0	1	0	1	1	0	0	0	2
% App. Total	100	0		0	100		0	0		
PHF	.250	.000	.250	.000	.250	.250	.000	.000	.000	.250

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City of Moreno Valley
N/S: Gilman Springs Road
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File Name : 02_MRV_Gilman Springs_Alessandro PM
Site Code : 05118094
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	**1**	0	**1**	0	**1**	**1**	0	0	0
Total Volume	1	0	1	0	1	1	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.250	.000	.250	.000	.250	.250	.000	.000	.000

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City of Moreno Valley
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File Name : 02_MRV_Gilman Springs_Alessandro PM
Site Code : 05118094
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Groups Printed- 4+ Axle Trucks

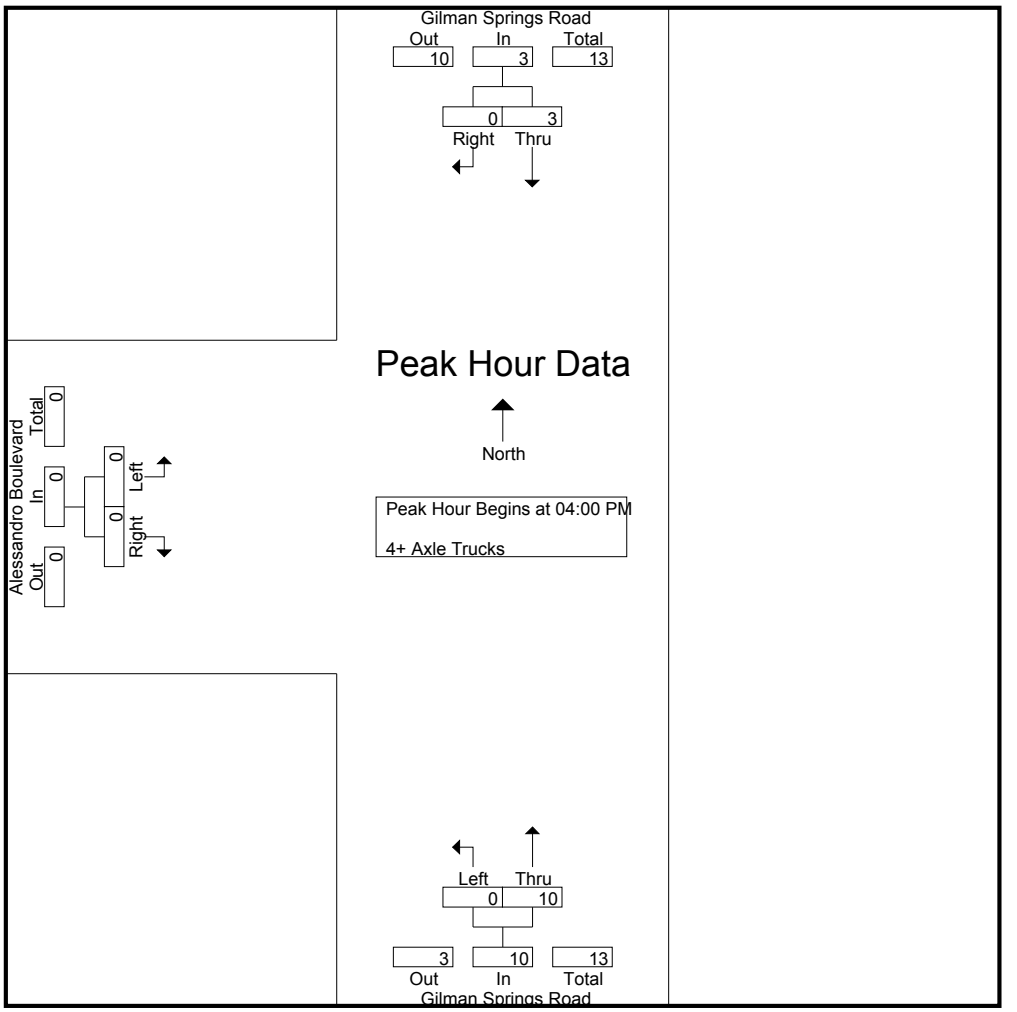
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	1	0	1	0	3	3	0	0	0	4
04:15 PM	0	0	0	0	2	2	0	0	0	2
04:30 PM	2	0	2	0	4	4	0	0	0	6
04:45 PM	0	0	0	0	1	1	0	0	0	1
Total	3	0	3	0	10	10	0	0	0	13
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	1	0	1	0	1	1	0	0	0	2
05:30 PM	1	0	1	0	2	2	0	0	0	3
05:45 PM	1	0	1	0	1	1	0	0	0	2
Total	3	0	3	0	4	4	0	0	0	7
Grand Total	6	0	6	0	14	14	0	0	0	20
Apprch %	100	0		0	100		0	0		
Total %	30	0	30	0	70	70	0	0	0	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Alessandro Boulevard Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	1	0	1	0	3	3	0	0	0	4
04:15 PM	0	0	0	0	2	2	0	0	0	2
04:30 PM	**2**	0	**2**	0	**4**	**4**	0	0	0	**6**
04:45 PM	0	0	0	0	1	1	0	0	0	1
Total Volume	3	0	3	0	10	10	0	0	0	13
% App. Total	100	0		0	100		0	0		
PHF	.375	.000	.375	.000	.625	.625	.000	.000	.000	.542

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City of Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard
Weather: Clear

File Name : 02_MRV_Gilman Springs_Alessandro PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	1	0	1	0	3	3	0	0	0
+15 mins.	0	0	0	0	2	2	0	0	0
+30 mins.	**2**	0	**2**	0	**4**	**4**	0	0	0
+45 mins.	0	0	0	0	1	1	0	0	0
Total Volume	3	0	3	0	10	10	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.375	.000	.375	.000	.625	.625	.000	.000	.000

Location: Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro Boulevard

Date: 1/18/2018
Date: Thursday

PEDESTRIANS

	North Leg Gilman Springs Road	East Leg Dead End	South Leg Gilman Springs Road	West Leg Alessandro Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Gilman Springs Road	East Leg Dead End	South Leg Gilman Springs Road	West Leg Alessandro Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

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Location: Moreno Valley
N/S: Gilman Springs Road
E/W: Alessandro

Date: 1/18/2018
Date: Thursday

BICYCLES

	Southbound Gilman Springs Road			Westbound Dead End			Northbound Gilman Springs Road			Eastbound Alessandro Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Gilman Springs Road			Westbound Dead End			Northbound Gilman Springs Road			Eastbound Alessandro Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	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

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

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

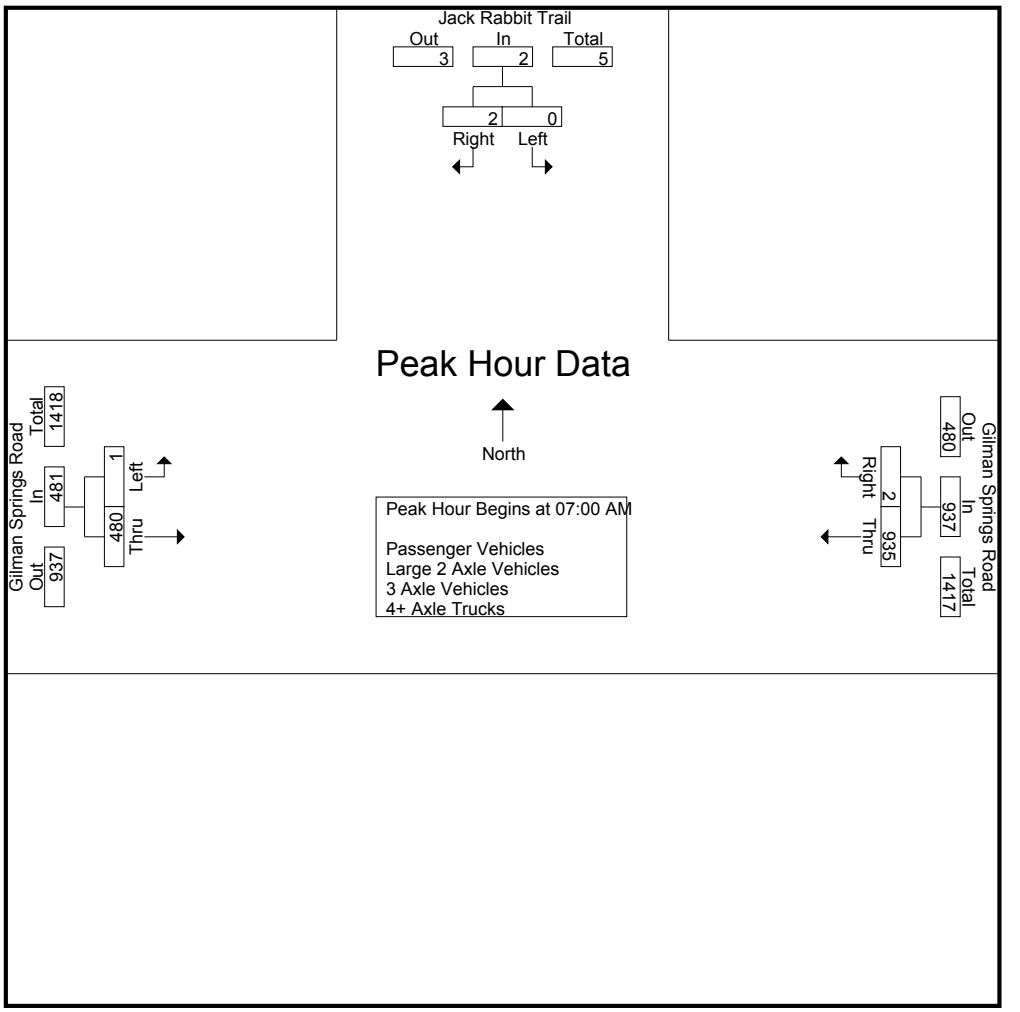
	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	2	2	247	2	249	1	113	114	365
07:15 AM	0	0	0	235	0	235	0	119	119	354
07:30 AM	0	0	0	254	0	254	0	128	128	382
07:45 AM	0	0	0	199	0	199	0	120	120	319
Total	0	2	2	935	2	937	1	480	481	1420
08:00 AM	0	0	0	183	0	183	5	127	132	315
08:15 AM	0	0	0	185	0	185	0	85	85	270
08:30 AM	0	0	0	195	0	195	0	115	115	310
08:45 AM	0	0	0	141	0	141	0	90	90	231
Total	0	0	0	704	0	704	5	417	422	1126
Grand Total	0	2	2	1639	2	1641	6	897	903	2546
Apprch %	0	100		99.9	0.1		0.7	99.3		
Total %	0	0.1	0.1	64.4	0.1	64.5	0.2	35.2	35.5	
Passenger Vehicles	0	2	2	1594	2	1596	5	838	843	2441
% Passenger Vehicles	0	100	100	97.3	100	97.3	83.3	93.4	93.4	95.9
Large 2 Axle Vehicles	0	0	0	15	0	15	1	34	35	50
% Large 2 Axle Vehicles	0	0	0	0.9	0	0.9	16.7	3.8	3.9	2
3 Axle Vehicles	0	0	0	5	0	5	0	3	3	8
% 3 Axle Vehicles	0	0	0	0.3	0	0.3	0	0.3	0.3	0.3
4+ Axle Trucks	0	0	0	25	0	25	0	22	22	47
% 4+ Axle Trucks	0	0	0	1.5	0	1.5	0	2.5	2.4	1.8

	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	**2**	**2**	247	**2**	249	**1**	113	114	365
07:15 AM	0	0	0	235	0	235	0	119	119	354
07:30 AM	0	0	0	**254**	0	**254**	0	**128**	**128**	**382**
07:45 AM	0	0	0	199	0	199	0	120	120	319
Total Volume	0	2	2	935	2	937	1	480	481	1420
% App. Total	0	100		99.8	0.2		0.2	99.8		
PHF	.000	.250	.250	.920	.250	.922	.250	.938	.939	.929

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
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:

	07:00 AM			07:00 AM			07:15 AM		
+0 mins.	0	**2**	**2**	247	**2**	249	0	119	119
+15 mins.	0	0	0	235	0	235	0	**128**	128
+30 mins.	0	0	0	**254**	0	**254**	0	120	120
+45 mins.	0	0	0	199	0	199	**5**	127	**132**
Total Volume	0	2	2	935	2	937	5	494	499
% App. Total	0	100		99.8	0.2		1	99	
PHF	.000	.250	.250	.920	.250	.922	.250	.965	.945

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Passenger Vehicles

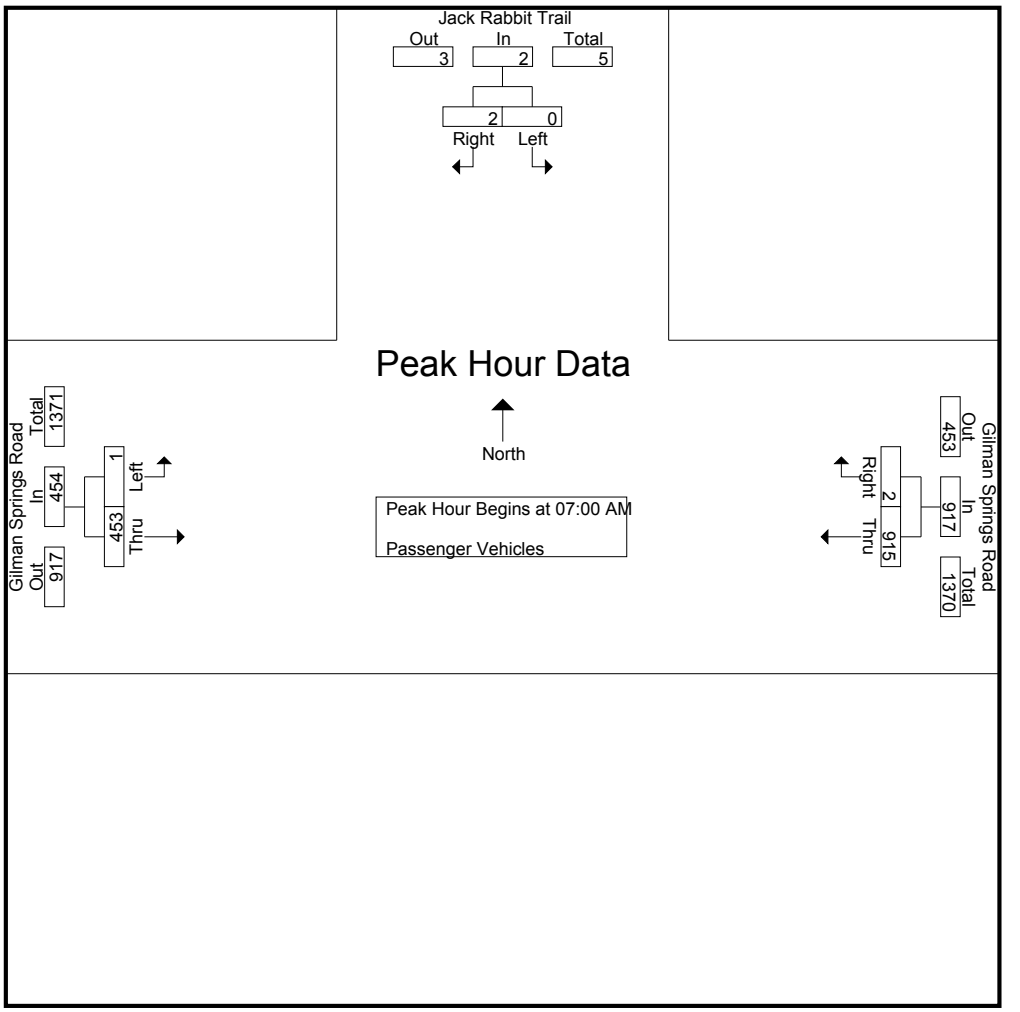
	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	2	2	241	2	243	1	104	105	350
07:15 AM	0	0	0	232	0	232	0	116	116	348
07:30 AM	0	0	0	251	0	251	0	123	123	374
07:45 AM	0	0	0	191	0	191	0	110	110	301
Total	0	2	2	915	2	917	1	453	454	1373
08:00 AM	0	0	0	177	0	177	4	121	125	302
08:15 AM	0	0	0	176	0	176	0	75	75	251
08:30 AM	0	0	0	190	0	190	0	103	103	293
08:45 AM	0	0	0	136	0	136	0	86	86	222
Total	0	0	0	679	0	679	4	385	389	1068
Grand Total	0	2	2	1594	2	1596	5	838	843	2441
Apprch %	0	100		99.9	0.1		0.6	99.4		
Total %	0	0.1	0.1	65.3	0.1	65.4	0.2	34.3	34.5	

	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	**2**	**2**	241	**2**	243	**1**	104	105	350
07:15 AM	0	0	0	232	0	232	0	116	116	348
07:30 AM	0	0	0	**251**	0	**251**	0	**123**	**123**	**374**
07:45 AM	0	0	0	191	0	191	0	110	110	301
Total Volume	0	2	2	915	2	917	1	453	454	1373
% App. Total	0	100		99.8	0.2		0.2	99.8		
PHF	.000	.250	.250	.911	.250	.913	.250	.921	.923	.918

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	**2**	**2**	241	**2**	243	**1**	104	105
+15 mins.	0	0	0	232	0	232	0	116	116
+30 mins.	0	0	0	**251**	0	**251**	0	**123**	**123**
+45 mins.	0	0	0	191	0	191	0	110	110
Total Volume	0	2	2	915	2	917	1	453	454
% App. Total	0	100		99.8	0.2		0.2	99.8	
PHF	.000	.250	.250	.911	.250	.913	.250	.921	.923

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

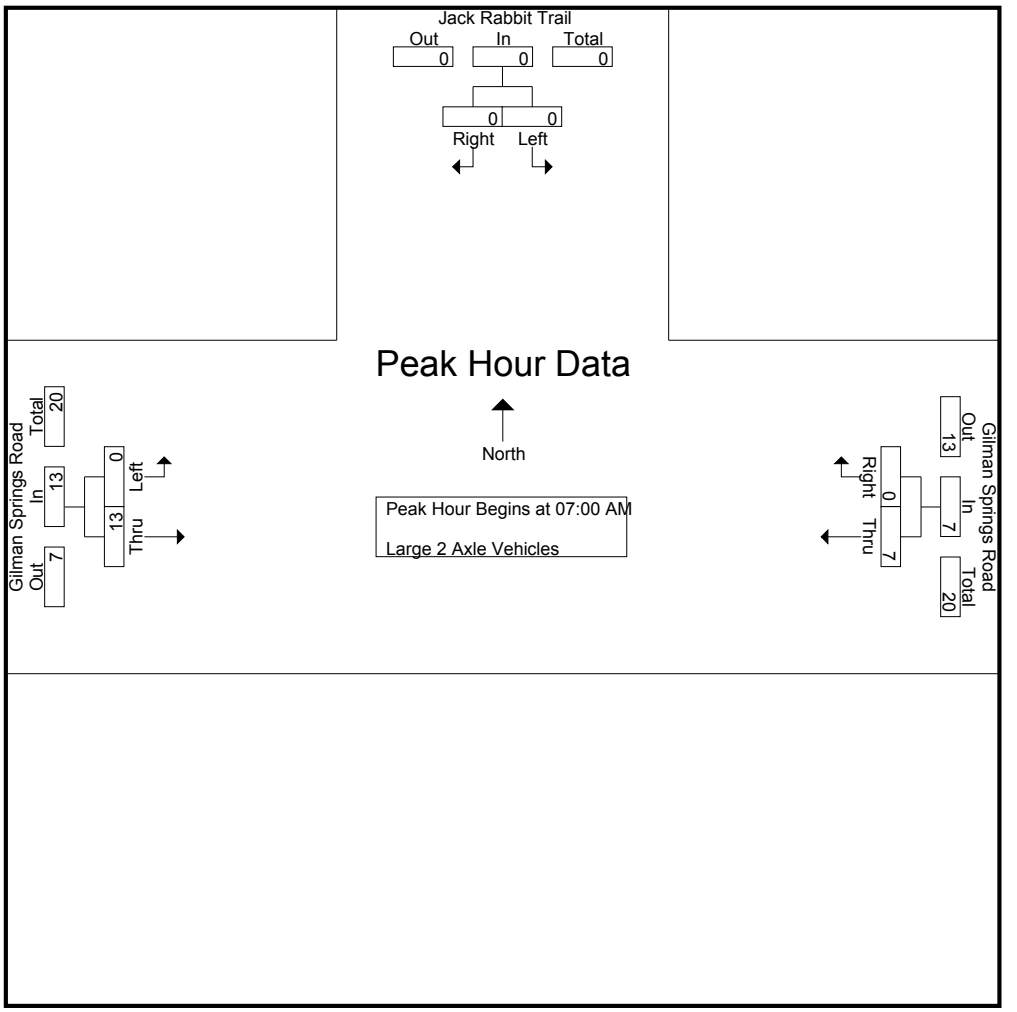
	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	1	0	1	0	6	6	7
07:15 AM	0	0	0	3	0	3	0	1	1	4
07:30 AM	0	0	0	1	0	1	0	2	2	3
07:45 AM	0	0	0	2	0	2	0	4	4	6
Total	0	0	0	7	0	7	0	13	13	20
08:00 AM	0	0	0	0	0	0	1	3	4	4
08:15 AM	0	0	0	4	0	4	0	7	7	11
08:30 AM	0	0	0	2	0	2	0	7	7	9
08:45 AM	0	0	0	2	0	2	0	4	4	6
Total	0	0	0	8	0	8	1	21	22	30
Grand Total	0	0	0	15	0	15	1	34	35	50
Apprch %	0	0		100	0		2.9	97.1		
Total %	0	0	0	30	0	30	2	68	70	

	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	1	0	1	0	**6**	**6**	**7**
07:15 AM	0	0	0	**3**	0	**3**	0	1	1	4
07:30 AM	0	0	0	1	0	1	0	2	2	3
07:45 AM	0	0	0	2	0	2	0	4	4	6
Total Volume	0	0	0	7	0	7	0	13	13	20
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.583	.000	.583	.000	.542	.542	.714

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	1	0	1	0	**6**	**6**
+15 mins.	0	0	0	**3**	0	**3**	0	1	1
+30 mins.	0	0	0	1	0	1	0	2	2
+45 mins.	0	0	0	2	0	2	0	4	4
Total Volume	0	0	0	7	0	7	0	13	13
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.583	.000	.583	.000	.542	.542

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

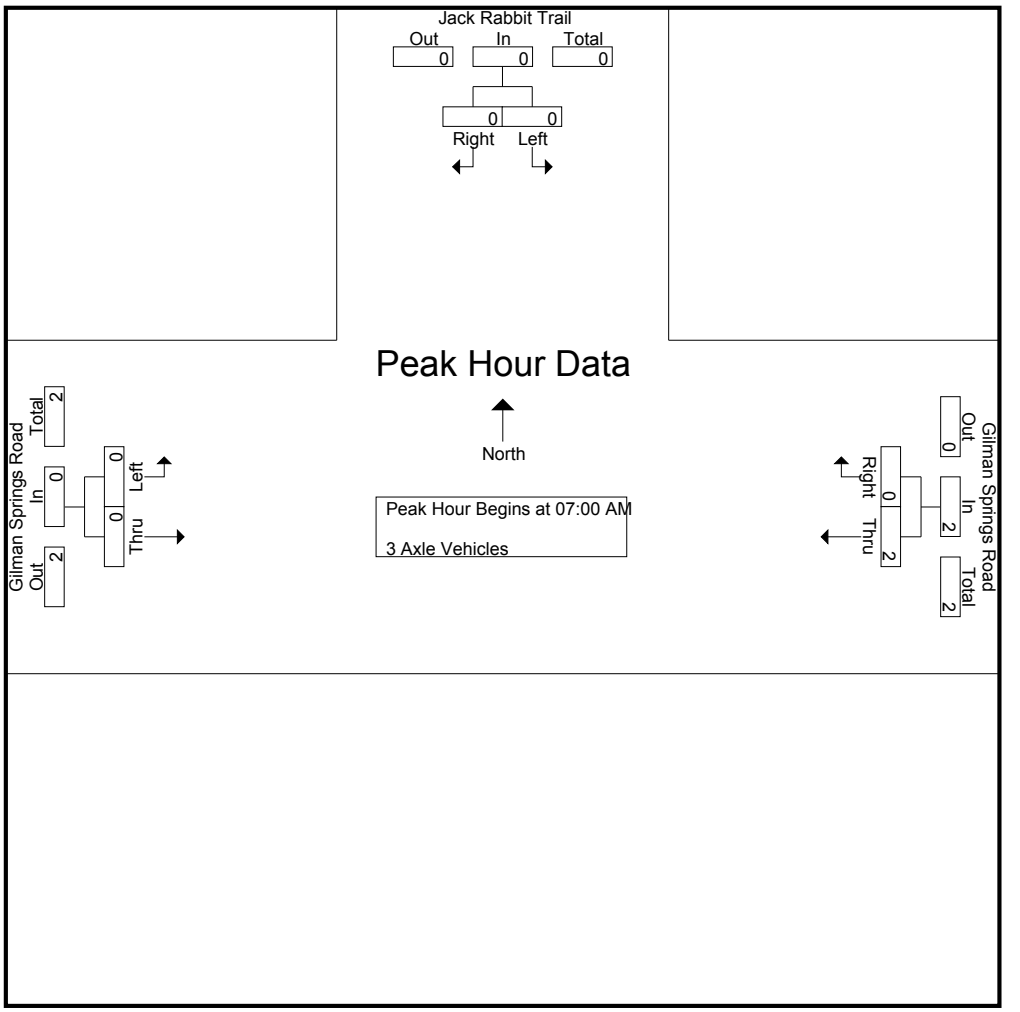
	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	2	0	2	0	0	0	2
Total	0	0	0	2	0	2	0	0	0	2
08:00 AM	0	0	0	1	0	1	0	0	0	1
08:15 AM	0	0	0	1	0	1	0	1	1	2
08:30 AM	0	0	0	1	0	1	0	2	2	3
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	3	0	3	0	3	3	6
Grand Total	0	0	0	5	0	5	0	3	3	8
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	62.5	0	62.5	0	37.5	37.5	

	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	**2**	0	**2**	0	0	0	**2**
Total Volume	0	0	0	2	0	2	0	0	0	2
% App. Total	0	0		100	0		0	0		
PHF	.000	.000	.000	.250	.000	.250	.000	.000	.000	.250

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	**2**	0	**2**	0	0	0
Total Volume	0	0	0	2	0	2	0	0	0
% App. Total	0	0		100	0		0	0	
PHF	.000	.000	.000	.250	.000	.250	.000	.000	.000

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

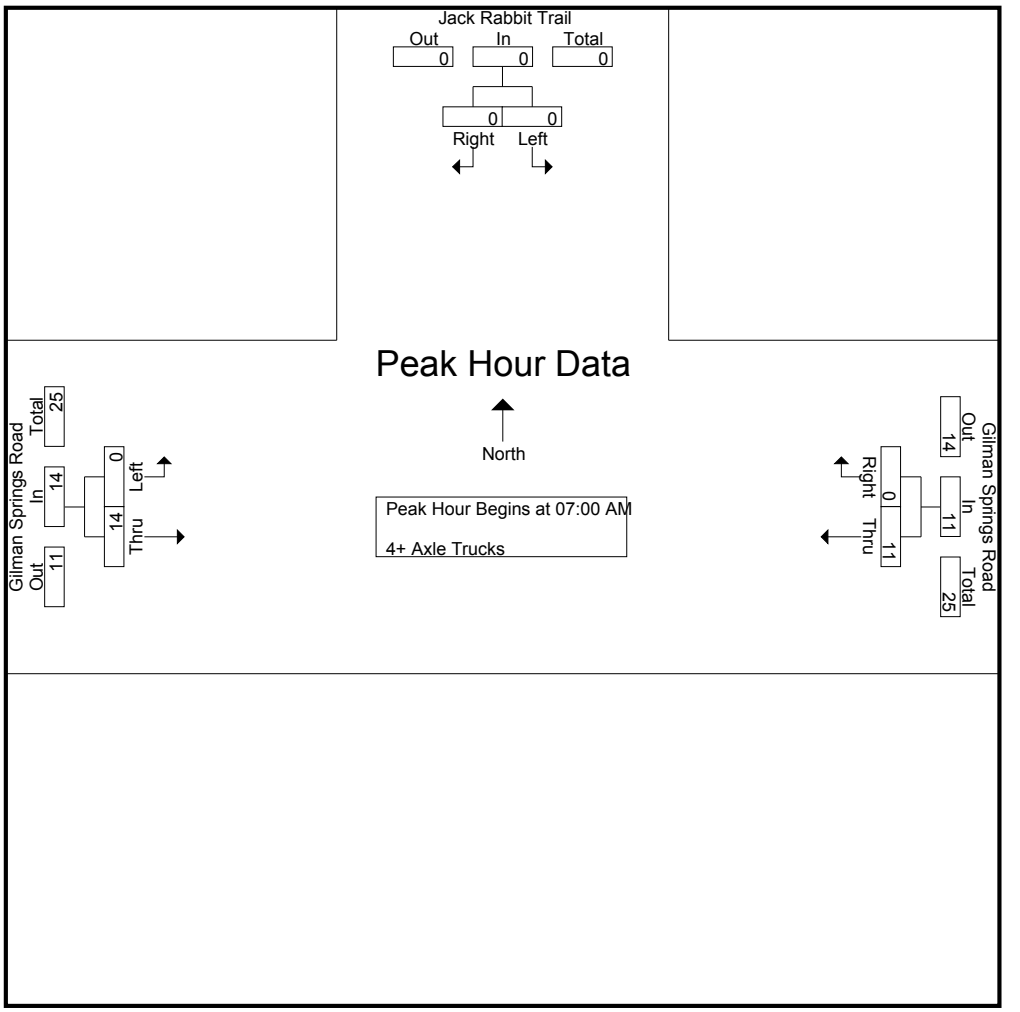
	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	5	0	5	0	3	3	8
07:15 AM	0	0	0	0	0	0	0	2	2	2
07:30 AM	0	0	0	2	0	2	0	3	3	5
07:45 AM	0	0	0	4	0	4	0	6	6	10
Total	0	0	0	11	0	11	0	14	14	25
08:00 AM	0	0	0	5	0	5	0	3	3	8
08:15 AM	0	0	0	4	0	4	0	2	2	6
08:30 AM	0	0	0	2	0	2	0	3	3	5
08:45 AM	0	0	0	3	0	3	0	0	0	3
Total	0	0	0	14	0	14	0	8	8	22
Grand Total	0	0	0	25	0	25	0	22	22	47
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	53.2	0	53.2	0	46.8	46.8	

	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	**5**	0	**5**	0	3	3	8
07:15 AM	0	0	0	0	0	0	0	2	2	2
07:30 AM	0	0	0	2	0	2	0	3	3	5
07:45 AM	0	0	0	4	0	4	0	**6**	**6**	**10**
Total Volume	0	0	0	11	0	11	0	14	14	25
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.550	.000	.550	.000	.583	.583	.625

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	**5**	0	**5**	0	3	3
+15 mins.	0	0	0	0	0	0	0	2	2
+30 mins.	0	0	0	2	0	2	0	3	3
+45 mins.	0	0	0	4	0	4	0	**6**	**6**
Total Volume	0	0	0	11	0	11	0	14	14
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.550	.000	.550	.000	.583	.583

Counts Unlimited
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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

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

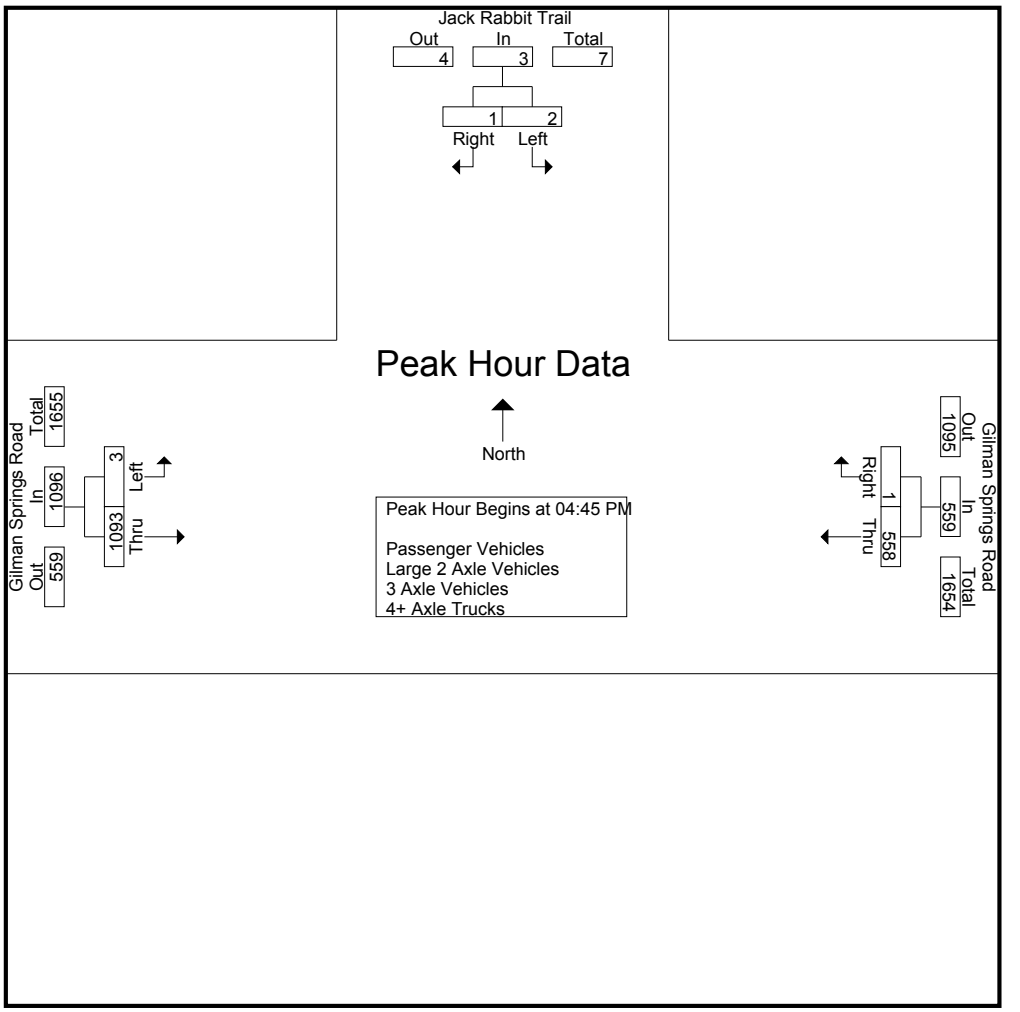
	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	1	0	1	138	0	138	0	275	275	414
04:15 PM	0	0	0	149	0	149	0	230	230	379
04:30 PM	0	0	0	131	0	131	0	282	282	413
04:45 PM	0	0	0	140	0	140	1	278	279	419
Total	1	0	1	558	0	558	1	1065	1066	1625
05:00 PM	1	0	1	135	0	135	0	263	263	399
05:15 PM	0	1	1	135	1	136	0	272	272	409
05:30 PM	1	0	1	148	0	148	2	280	282	431
05:45 PM	1	0	1	146	0	146	0	260	260	407
Total	3	1	4	564	1	565	2	1075	1077	1646
Grand Total	4	1	5	1122	1	1123	3	2140	2143	3271
Apprch %	80	20		99.9	0.1		0.1	99.9		
Total %	0.1	0	0.2	34.3	0	34.3	0.1	65.4	65.5	
Passenger Vehicles	4	0	4	1088	0	1088	3	2112	2115	3207
% Passenger Vehicles	100	0	80	97	0	96.9	100	98.7	98.7	98
Large 2 Axle Vehicles	0	1	1	19	1	20	0	21	21	42
% Large 2 Axle Vehicles	0	100	20	1.7	100	1.8	0	1	1	1.3
3 Axle Vehicles	0	0	0	2	0	2	0	0	0	2
% 3 Axle Vehicles	0	0	0	0.2	0	0.2	0	0	0	0.1
4+ Axle Trucks	0	0	0	13	0	13	0	7	7	20
% 4+ Axle Trucks	0	0	0	1.2	0	1.2	0	0.3	0.3	0.6

	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	0	0	140	0	140	1	278	279	419
05:00 PM	**1**	0	**1**	135	0	135	0	263	263	399
05:15 PM	0	**1**	1	135	**1**	136	0	272	272	409
05:30 PM	1	0	1	**148**	0	**148**	**2**	**280**	**282**	**431**
Total Volume	2	1	3	558	1	559	3	1093	1096	1658
% App. Total	66.7	33.3		99.8	0.2		0.3	99.7		
PHF	.500	.250	.750	.943	.250	.944	.375	.976	.972	.962

Counts Unlimited
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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
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			05:00 PM			04:30 PM		
+0 mins.	**1**	0	**1**	135	0	135	0	**282**	**282**
+15 mins.	0	**1**	1	135	**1**	136	**1**	278	279
+30 mins.	1	0	1	**148**	0	**148**	0	263	263
+45 mins.	1	0	1	146	0	146	0	272	272
Total Volume	3	1	4	564	1	565	1	1095	1096
% App. Total	75	25		99.8	0.2		0.1	99.9	
PHF	.750	.250	1.000	.953	.250	.954	.250	.971	.972

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Passenger Vehicles

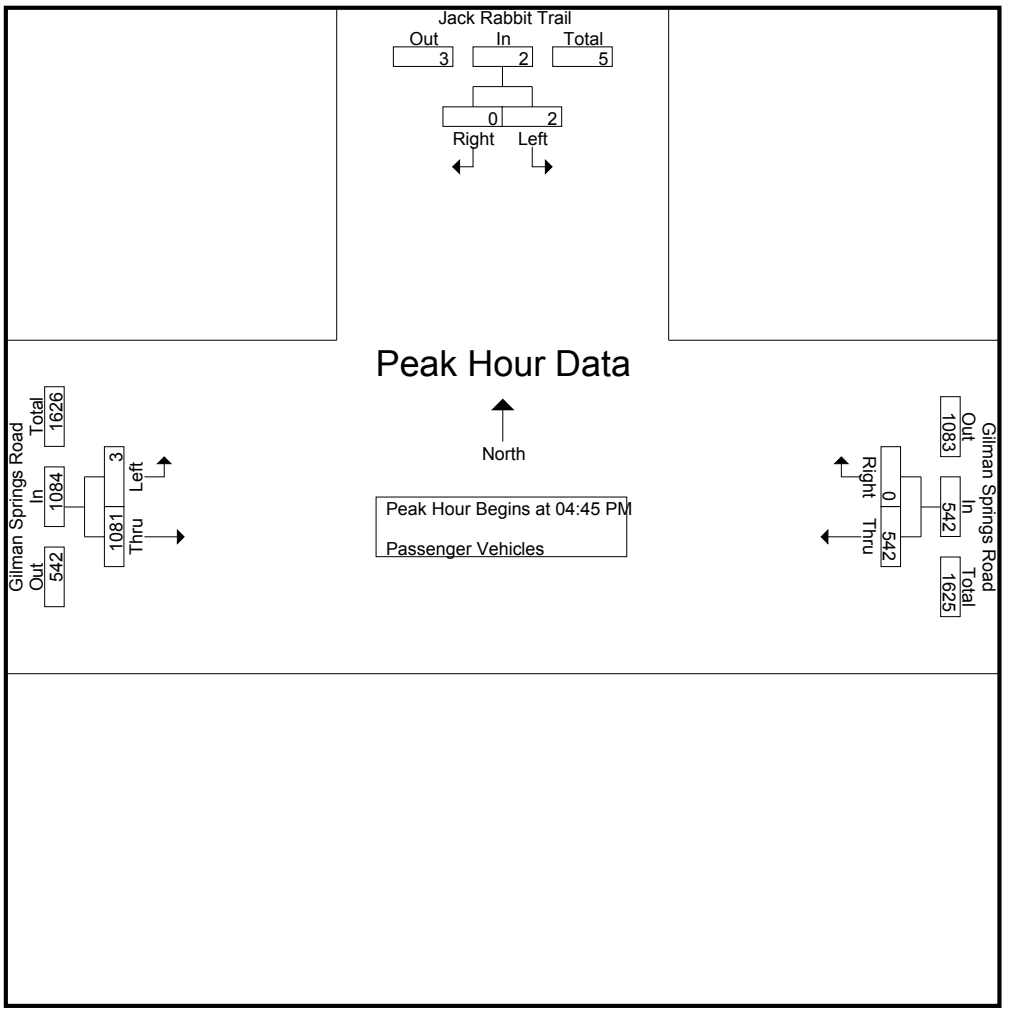
	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	1	0	1	133	0	133	0	270	270	404
04:15 PM	0	0	0	144	0	144	0	229	229	373
04:30 PM	0	0	0	126	0	126	0	278	278	404
04:45 PM	0	0	0	135	0	135	1	276	277	412
Total	1	0	1	538	0	538	1	1053	1054	1593
05:00 PM	1	0	1	134	0	134	0	260	260	395
05:15 PM	0	0	0	131	0	131	0	270	270	401
05:30 PM	1	0	1	142	0	142	2	275	277	420
05:45 PM	1	0	1	143	0	143	0	254	254	398
Total	3	0	3	550	0	550	2	1059	1061	1614
Grand Total	4	0	4	1088	0	1088	3	2112	2115	3207
Apprch %	100	0		100	0		0.1	99.9		
Total %	0.1	0	0.1	33.9	0	33.9	0.1	65.9	65.9	

	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	0	0	135	0	135	1	**276**	**277**	412
05:00 PM	**1**	0	**1**	134	0	134	0	260	260	395
05:15 PM	0	0	0	131	0	131	0	270	270	401
05:30 PM	1	0	1	**142**	0	**142**	**2**	275	277	**420**
Total Volume	2	0	2	542	0	542	3	1081	1084	1628
% App. Total	100	0		100	0		0.3	99.7		
PHF	.500	.000	.500	.954	.000	.954	.375	.979	.978	.969

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	0	0	135	0	135	1	**276**	**277**
+15 mins.	**1**	0	**1**	134	0	134	0	260	260
+30 mins.	0	0	0	131	0	131	0	270	270
+45 mins.	1	0	1	**142**	0	**142**	**2**	275	277
Total Volume	2	0	2	542	0	542	3	1081	1084
% App. Total	100	0		100	0		0.3	99.7	
PHF	.500	.000	.500	.954	.000	.954	.375	.979	.978

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

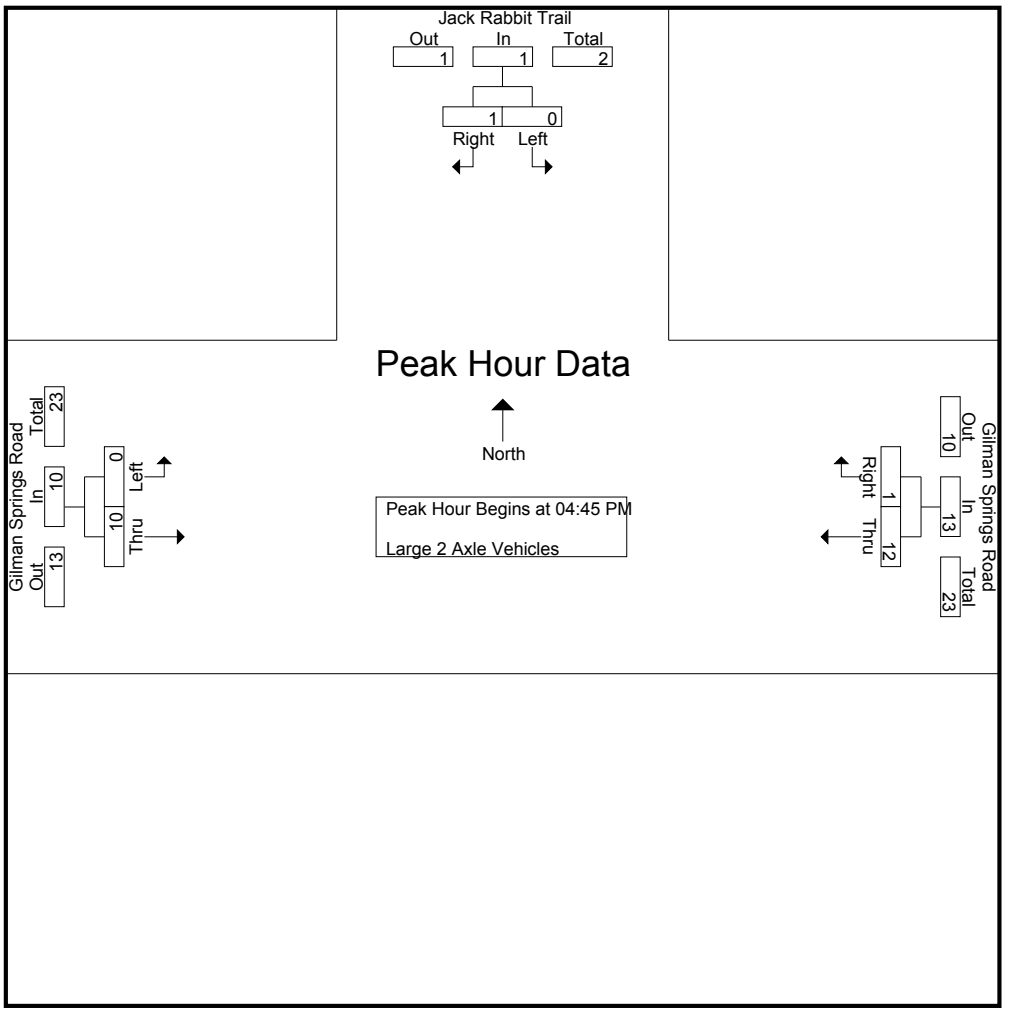
	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	3	0	3	0	4	4	7
04:15 PM	0	0	0	2	0	2	0	1	1	3
04:30 PM	0	0	0	2	0	2	0	2	2	4
04:45 PM	0	0	0	5	0	5	0	2	2	7
Total	0	0	0	12	0	12	0	9	9	21
05:00 PM	0	0	0	1	0	1	0	3	3	4
05:15 PM	0	1	1	2	1	3	0	2	2	6
05:30 PM	0	0	0	4	0	4	0	3	3	7
05:45 PM	0	0	0	0	0	0	0	4	4	4
Total	0	1	1	7	1	8	0	12	12	21
Grand Total	0	1	1	19	1	20	0	21	21	42
Apprch %	0	100		95	5		0	100		
Total %	0	2.4	2.4	45.2	2.4	47.6	0	50	50	

	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	0	0	**5**	0	**5**	0	2	2	**7**
05:00 PM	0	0	0	1	0	1	0	**3**	**3**	4
05:15 PM	0	**1**	**1**	2	**1**	3	0	2	2	6
05:30 PM	0	0	0	4	0	4	0	3	3	7
Total Volume	0	1	1	12	1	13	0	10	10	24
% App. Total	0	100		92.3	7.7		0	100		
PHF	.000	.250	.250	.600	.250	.650	.000	.833	.833	.857

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	0	0	**5**	0	**5**	0	2	2
+15 mins.	0	0	0	1	0	1	0	**3**	**3**
+30 mins.	0	**1**	**1**	2	**1**	3	0	2	2
+45 mins.	0	0	0	4	0	4	0	3	3
Total Volume	0	1	1	12	1	13	0	10	10
% App. Total	0	100		92.3	7.7		0	100	
PHF	.000	.250	.250	.600	.250	.650	.000	.833	.833

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

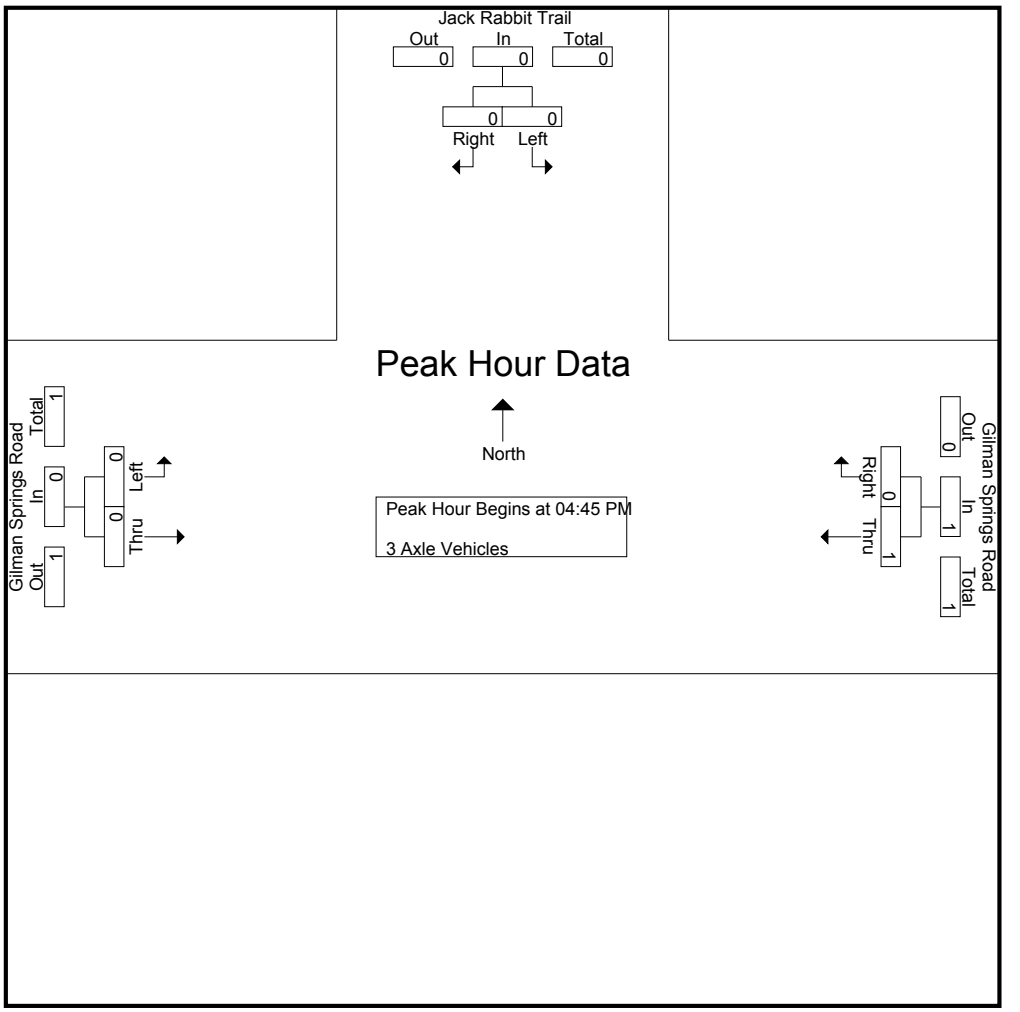
	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	1	0	1	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	1	0	1	0	0	0	1
Total	0	0	0	2	0	2	0	0	0	2
Grand Total	0	0	0	2	0	2	0	0	0	2
Apprch %	0	0		100	0		0	0		
Total %	0	0	0	100	0	100	0	0	0	

	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	**1**	0	**1**	0	0	0	**1**
05:30 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	0	1	0	0	0	1
% App. Total	0	0		100	0		0	0		
PHF	.000	.000	.000	.250	.000	.250	.000	.000	.000	.250

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

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

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

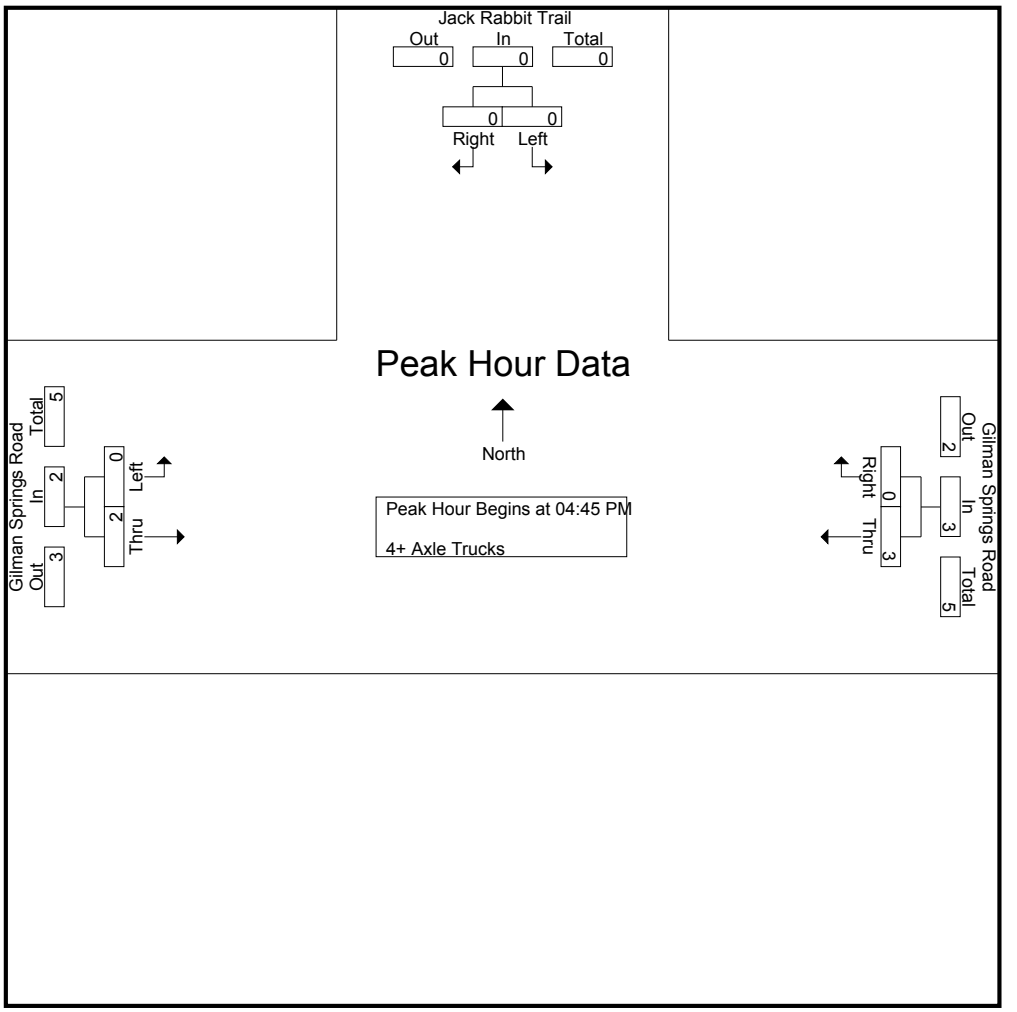
	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	2	0	2	0	1	1	3
04:15 PM	0	0	0	3	0	3	0	0	0	3
04:30 PM	0	0	0	3	0	3	0	2	2	5
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	8	0	8	0	3	3	11
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	1	0	1	0	0	0	1
05:30 PM	0	0	0	2	0	2	0	2	2	4
05:45 PM	0	0	0	2	0	2	0	2	2	4
Total	0	0	0	5	0	5	0	4	4	9
Grand Total	0	0	0	13	0	13	0	7	7	20
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	65	0	65	0	35	35	

	Jack Rabbit Trail Southbound			Gilman Springs Road Westbound			Gilman Springs Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	1	0	1	0	0	0	1
05:30 PM	0	0	0	**2**	0	**2**	0	**2**	**2**	**4**
Total Volume	0	0	0	3	0	3	0	2	2	5
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.375	.000	.375	.000	.250	.250	.313

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County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road
Weather: Clear

File Name : 03_CRV_Jack Rabbit_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

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

Location: County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road

Date: 2/7/2018
Date: Wednesday

PEDESTRIANS

	North Leg Jack Rabbit Trail	East Leg Gilman Springs Road	South Leg Dead End	West Leg Gilman Springs Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Jack Rabbit Trail	East Leg Gilman Springs Road	South Leg Dead End	West Leg Gilman Springs Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

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Location: County of Riverside
N/S: Jack Rabbit Trail
E/W: Gilman Springs Road

2/7/2018
Wednesda

Date: 2/7/2018
Date: Wednesday

BICYCLES

	Southbound Jack Rabbit Trail			Westbound Gilman Springs Road			Northbound Dead End			Eastbound Gilman Springs Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Jack Rabbit Trail			Westbound Gilman Springs Road			Northbound Dead End			Eastbound Gilman Springs Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

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County of Riverside
N/S: Gilman Springs Road
E/W: Bridge Street
Weather: Clear

File Name : 04_CRV_Gilman Springs_Bridge AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

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

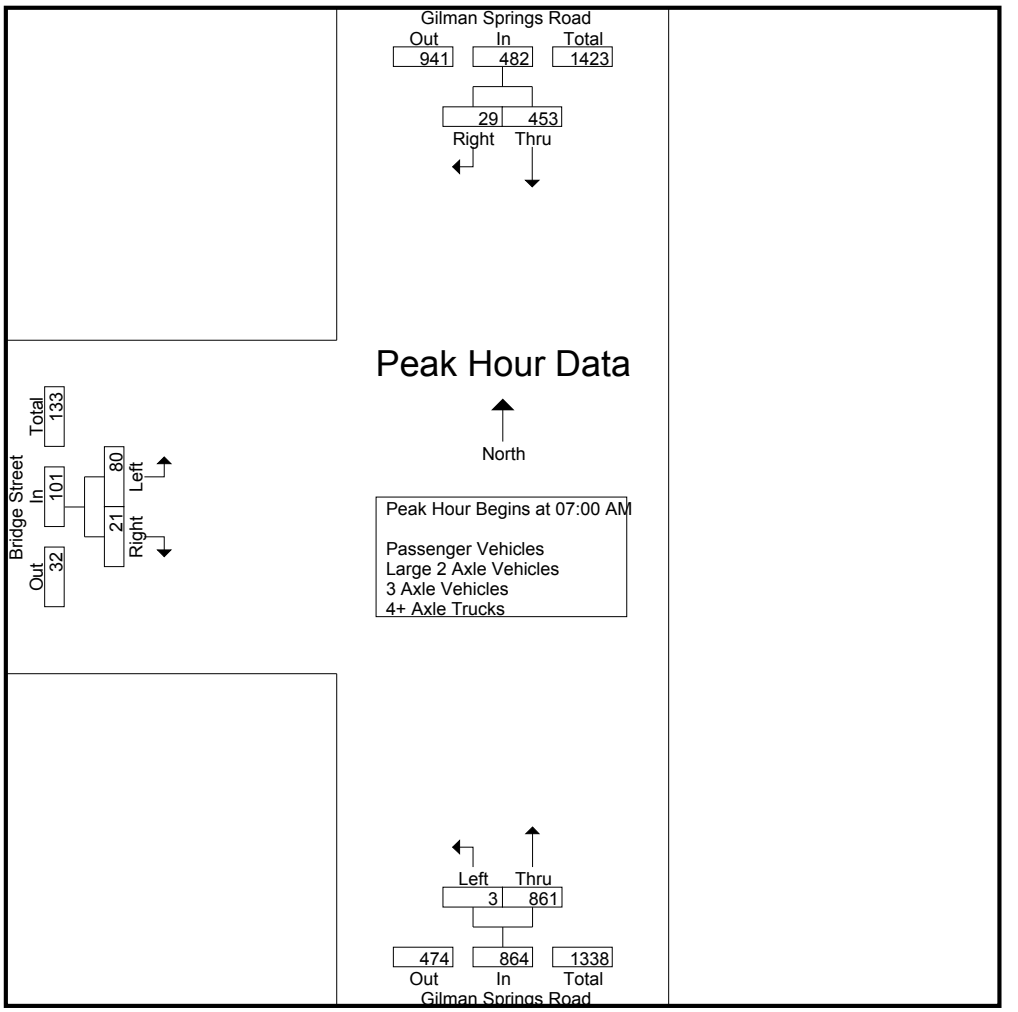
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	109	6	115	0	241	241	18	3	21	377
07:15 AM	111	8	119	0	207	207	23	6	29	355
07:30 AM	120	10	130	2	232	234	26	8	34	398
07:45 AM	113	5	118	1	181	182	13	4	17	317
Total	453	29	482	3	861	864	80	21	101	1447
08:00 AM	123	10	133	3	169	172	11	5	16	321
08:15 AM	92	5	97	5	180	185	19	1	20	302
08:30 AM	92	10	102	2	165	167	16	4	20	289
08:45 AM	100	4	104	2	134	136	4	4	8	248
Total	407	29	436	12	648	660	50	14	64	1160
Grand Total	860	58	918	15	1509	1524	130	35	165	2607
Apprch %	93.7	6.3		1	99		78.8	21.2		
Total %	33	2.2	35.2	0.6	57.9	58.5	5	1.3	6.3	
Passenger Vehicles	797	48	845	8	1471	1479	118	22	140	2464
% Passenger Vehicles	92.7	82.8	92	53.3	97.5	97	90.8	62.9	84.8	94.5
Large 2 Axle Vehicles	46	0	46	1	17	18	3	2	5	69
% Large 2 Axle Vehicles	5.3	0	5	6.7	1.1	1.2	2.3	5.7	3	2.6
3 Axle Vehicles	3	0	3	0	5	5	0	0	0	8
% 3 Axle Vehicles	0.3	0	0.3	0	0.3	0.3	0	0	0	0.3
4+ Axle Trucks	14	10	24	6	16	22	9	11	20	66
% 4+ Axle Trucks	1.6	17.2	2.6	40	1.1	1.4	6.9	31.4	12.1	2.5

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	109	6	115	0	**241**	**241**	18	3	21	377
07:15 AM	111	8	119	0	207	207	23	6	29	355
07:30 AM	**120**	**10**	**130**	**2**	232	234	**26**	**8**	**34**	**398**
07:45 AM	113	5	118	1	181	182	13	4	17	317
Total Volume	453	29	482	3	861	864	80	21	101	1447
% App. Total	94	6		0.3	99.7		79.2	20.8		
PHF	.944	.725	.927	.375	.893	.896	.769	.656	.743	.909

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Weather: Clear

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Site Code : 05118094
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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			07:00 AM		
+0 mins.	111	8	119	0	**241**	**241**	18	3	21
+15 mins.	120	**10**	130	0	207	207	23	6	29
+30 mins.	113	5	118	**2**	232	234	**26**	**8**	**34**
+45 mins.	**123**	10	**133**	1	181	182	13	4	17
Total Volume	467	33	500	3	861	864	80	21	101
% App. Total	93.4	6.6		0.3	99.7		79.2	20.8	
PHF	.949	.825	.940	.375	.893	.896	.769	.656	.743

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County of Riverside
N/S: Gilman Springs Road
E/W: Bridge Street
Weather: Clear

File Name : 04_CRV_Gilman Springs_Bridge AM
Site Code : 05118094
Start Date : 2/7/2018
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Groups Printed- Passenger Vehicles

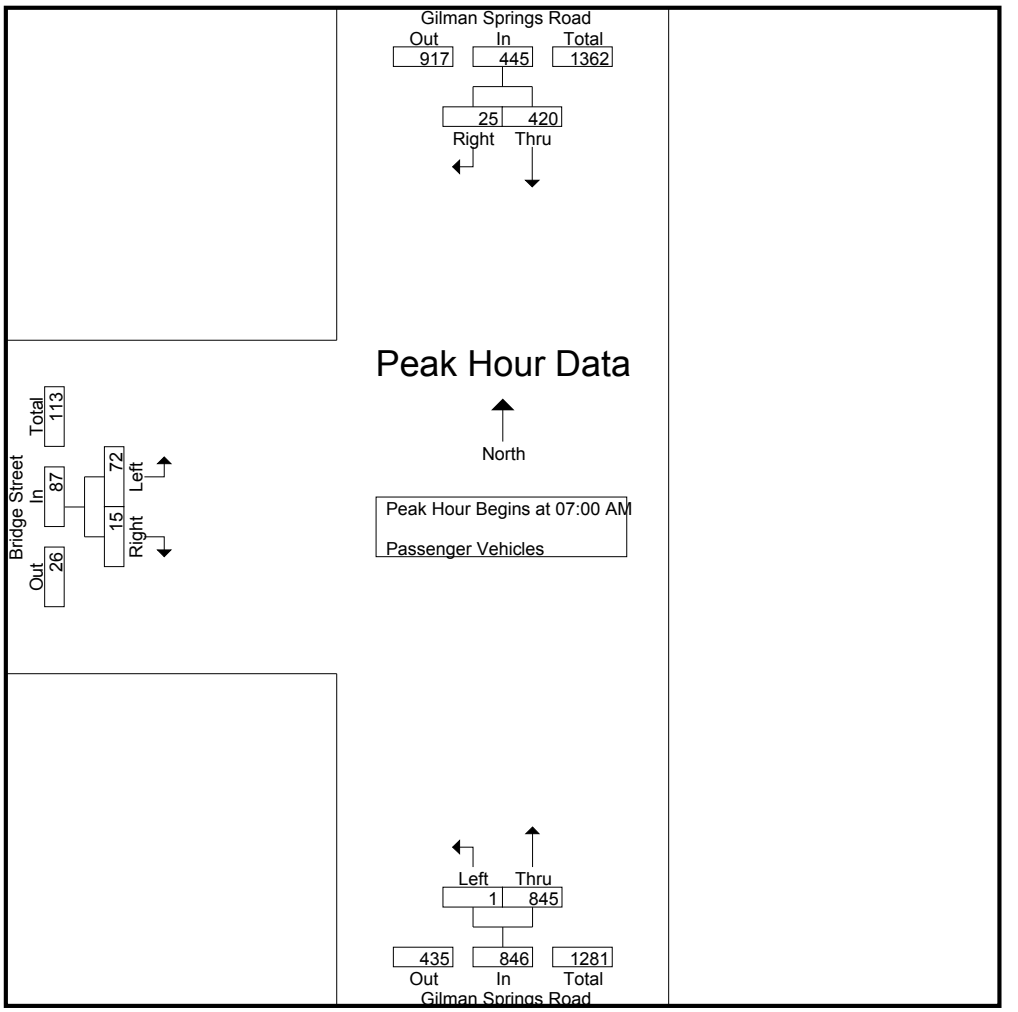
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	98	5	103	0	239	239	13	2	15	357
07:15 AM	105	7	112	0	204	204	23	5	28	344
07:30 AM	114	9	123	0	228	228	25	6	31	382
07:45 AM	103	4	107	1	174	175	11	2	13	295
Total	420	25	445	1	845	846	72	15	87	1378
08:00 AM	118	8	126	2	162	164	11	2	13	303
08:15 AM	81	4	85	4	172	176	17	1	18	279
08:30 AM	84	7	91	0	161	161	16	2	18	270
08:45 AM	94	4	98	1	131	132	2	2	4	234
Total	377	23	400	7	626	633	46	7	53	1086
Grand Total	797	48	845	8	1471	1479	118	22	140	2464
Apprch %	94.3	5.7		0.5	99.5		84.3	15.7		
Total %	32.3	1.9	34.3	0.3	59.7	60	4.8	0.9	5.7	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	98	5	103	0	**239**	**239**	13	2	15	357
07:15 AM	105	7	112	0	204	204	23	5	28	344
07:30 AM	**114**	**9**	**123**	0	228	228	**25**	**6**	**31**	**382**
07:45 AM	103	4	107	**1**	174	175	11	2	13	295
Total Volume	420	25	445	1	845	846	72	15	87	1378
% App. Total	94.4	5.6		0.1	99.9		82.8	17.2		
PHF	.921	.694	.904	.250	.884	.885	.720	.625	.702	.902

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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	98	5	103	0	**239**	**239**	13	2	15
+15 mins.	105	7	112	0	204	204	23	5	28
+30 mins.	**114**	**9**	**123**	0	228	228	**25**	**6**	**31**
+45 mins.	103	4	107	**1**	174	175	11	2	13
Total Volume	420	25	445	1	845	846	72	15	87
% App. Total	94.4	5.6		0.1	99.9		82.8	17.2	
PHF	.921	.694	.904	.250	.884	.885	.720	.625	.702

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E/W: Bridge Street
Weather: Clear

File Name : 04_CRV_Gilman Springs_Bridge AM
Site Code : 05118094
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Groups Printed- Large 2 Axle Vehicles

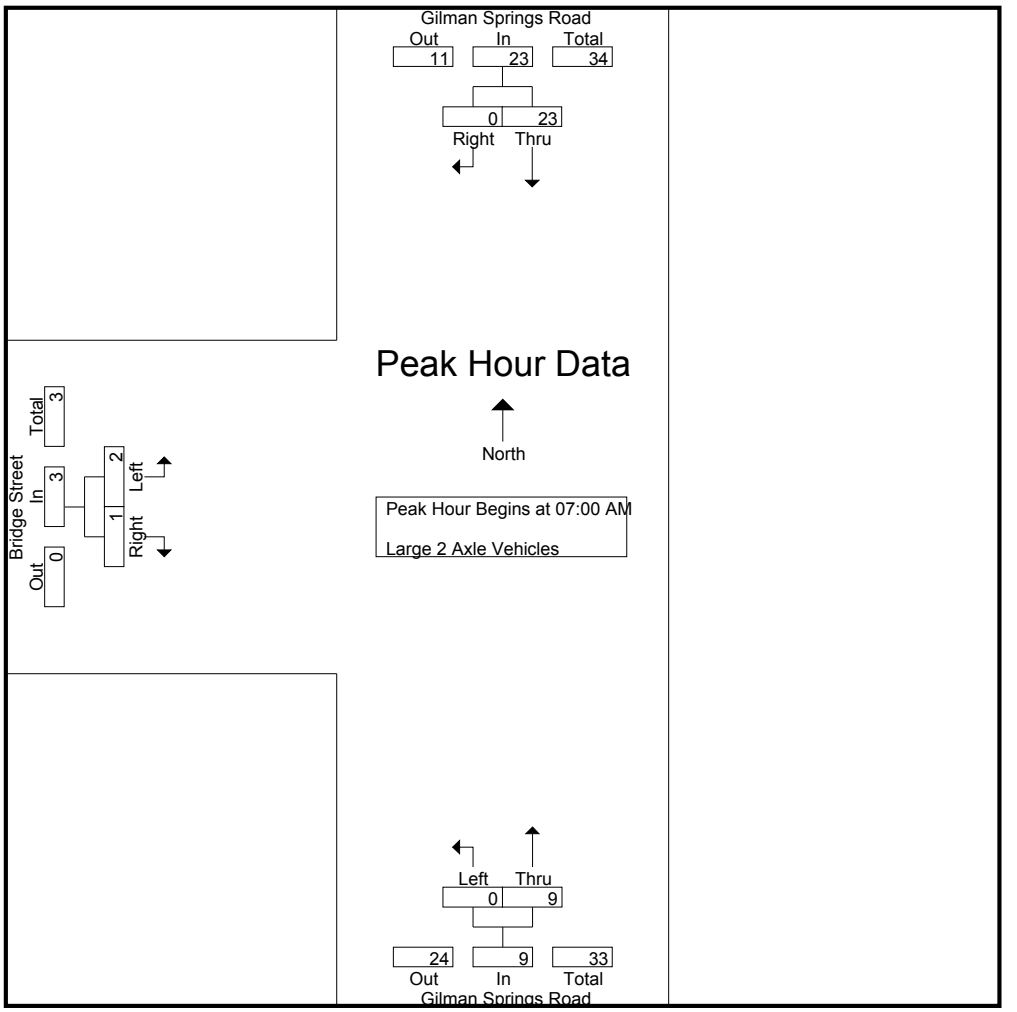
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	7	0	7	0	1	1	2	0	2	10
07:15 AM	5	0	5	0	3	3	0	0	0	8
07:30 AM	4	0	4	0	3	3	0	0	0	7
07:45 AM	7	0	7	0	2	2	0	1	1	10
Total	23	0	23	0	9	9	2	1	3	35
08:00 AM	3	0	3	0	2	2	0	1	1	6
08:15 AM	9	0	9	0	3	3	0	0	0	12
08:30 AM	5	0	5	1	2	3	0	0	0	8
08:45 AM	6	0	6	0	1	1	1	0	1	8
Total	23	0	23	1	8	9	1	1	2	34
Grand Total	46	0	46	1	17	18	3	2	5	69
Apprch %	100	0		5.6	94.4		60	40		
Total %	66.7	0	66.7	1.4	24.6	26.1	4.3	2.9	7.2	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	**7**	0	**7**	0	1	1	**2**	0	**2**	**10**
07:15 AM	5	0	5	0	**3**	**3**	0	0	0	8
07:30 AM	4	0	4	0	3	3	0	0	0	7
07:45 AM	7	0	7	0	2	2	0	**1**	1	10
Total Volume	23	0	23	0	9	9	2	1	3	35
% App. Total	100	0		0	100		66.7	33.3		
PHF	.821	.000	.821	.000	.750	.750	.250	.250	.375	.875

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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	**7**	0	**7**	0	1	1	**2**	0	**2**
+15 mins.	5	0	5	0	**3**	**3**	0	0	0
+30 mins.	4	0	4	0	3	3	0	0	0
+45 mins.	7	0	7	0	2	2	0	**1**	1
Total Volume	23	0	23	0	9	9	2	1	3
% App. Total	100	0		0	100		66.7	33.3	
PHF	.821	.000	.821	.000	.750	.750	.250	.250	.375

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File Name : 04_CRV_Gilman Springs_Bridge AM
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Groups Printed- 3 Axle Vehicles

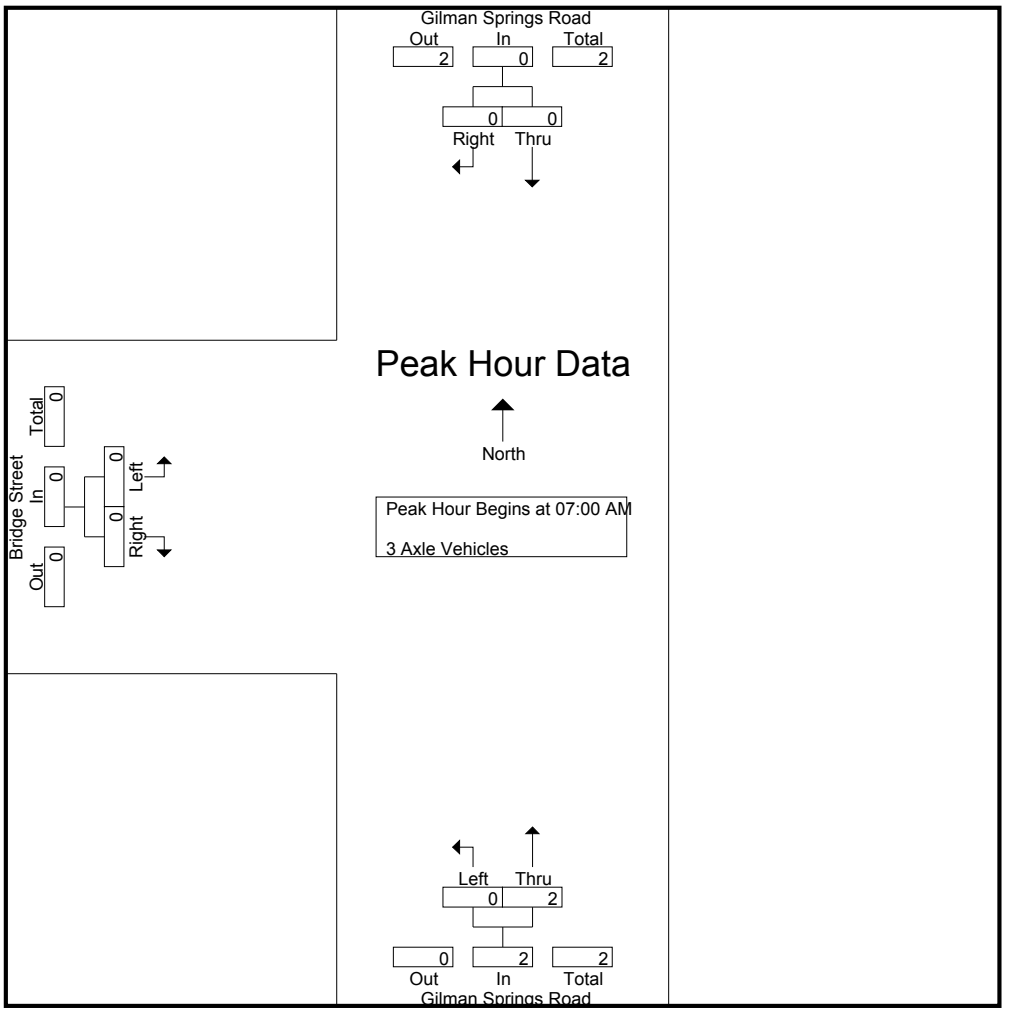
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	2	2	0	0	0	2
Total	0	0	0	0	2	2	0	0	0	2
08:00 AM	0	0	0	0	1	1	0	0	0	1
08:15 AM	1	0	1	0	2	2	0	0	0	3
08:30 AM	2	0	2	0	0	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	3	0	3	0	3	3	0	0	0	6
Grand Total	3	0	3	0	5	5	0	0	0	8
Apprch %	100	0		0	100		0	0		
Total %	37.5	0	37.5	0	62.5	62.5	0	0	0	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	**2**	**2**	0	0	0	**2**
Total Volume	0	0	0	0	2	2	0	0	0	2
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000	.250

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File Name : 04_CRV_Gilman Springs_Bridge AM
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	**2**	**2**	0	0	0
Total Volume	0	0	0	0	2	2	0	0	0
% App. Total	0	0		0	100		0	0	
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000

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Weather: Clear

File Name : 04_CRV_Gilman Springs_Bridge AM
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Groups Printed- 4+ Axle Trucks

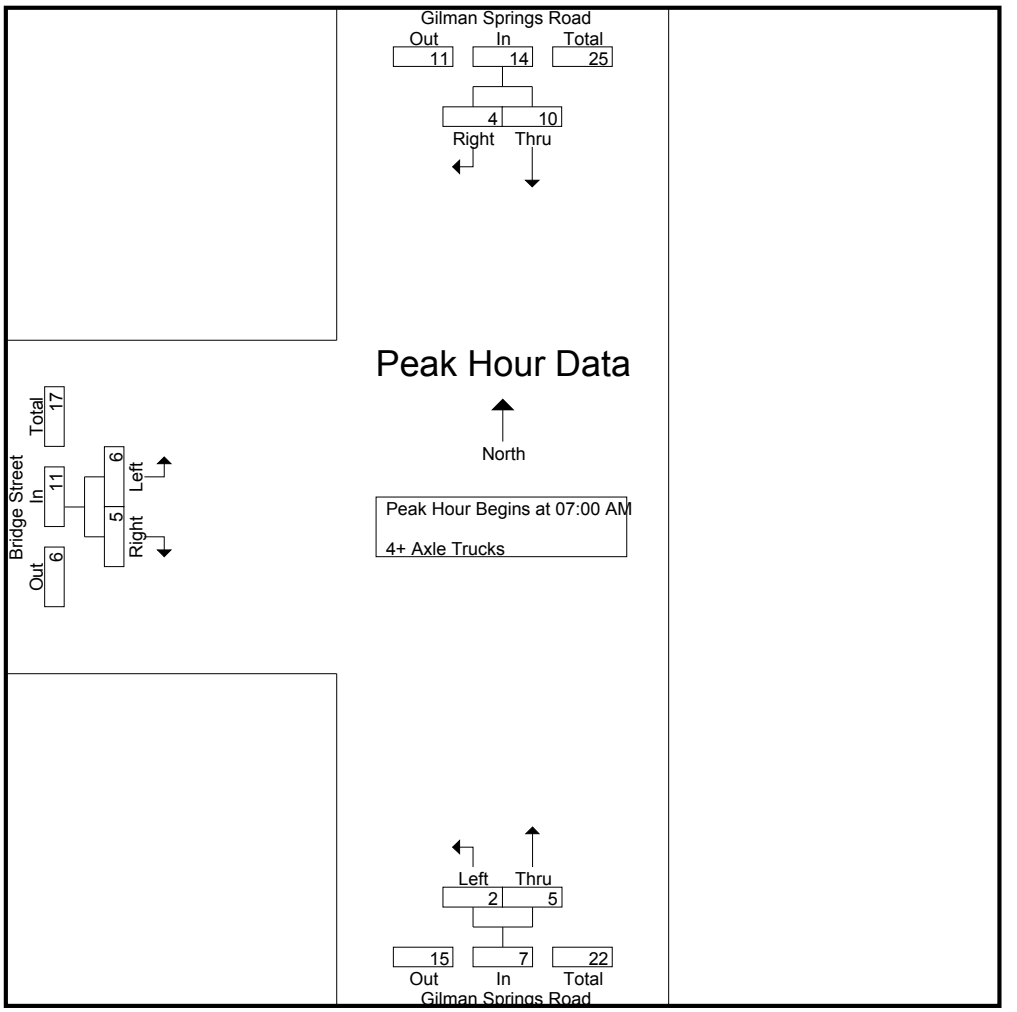
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	4	1	5	0	1	1	3	1	4	10
07:15 AM	1	1	2	0	0	0	0	1	1	3
07:30 AM	2	1	3	2	1	3	1	2	3	9
07:45 AM	3	1	4	0	3	3	2	1	3	10
Total	10	4	14	2	5	7	6	5	11	32
08:00 AM	2	2	4	1	4	5	0	2	2	11
08:15 AM	1	1	2	1	3	4	2	0	2	8
08:30 AM	1	3	4	1	2	3	0	2	2	9
08:45 AM	0	0	0	1	2	3	1	2	3	6
Total	4	6	10	4	11	15	3	6	9	34
Grand Total	14	10	24	6	16	22	9	11	20	66
Apprch %	58.3	41.7		27.3	72.7		45	55		
Total %	21.2	15.2	36.4	9.1	24.2	33.3	13.6	16.7	30.3	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	**4**	**1**	**5**	0	1	1	**3**	1	**4**	**10**
07:15 AM	1	1	2	0	0	0	0	1	1	3
07:30 AM	2	1	3	**2**	1	**3**	1	**2**	3	9
07:45 AM	3	1	4	0	**3**	3	2	1	3	10
Total Volume	10	4	14	2	5	7	6	5	11	32
% App. Total	71.4	28.6		28.6	71.4		54.5	45.5		
PHF	.625	1.00	.700	.250	.417	.583	.500	.625	.688	.800

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

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	**4**	**1**	**5**	0	1	1	**3**	1	**4**
+15 mins.	1	1	2	0	0	0	0	1	1
+30 mins.	2	1	3	**2**	1	**3**	1	**2**	3
+45 mins.	3	1	4	0	**3**	3	2	1	3
Total Volume	10	4	14	2	5	7	6	5	11
% App. Total	71.4	28.6		28.6	71.4		54.5	45.5	
PHF	.625	1.000	.700	.250	.417	.583	.500	.625	.688

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Weather: Clear

File Name : 04_CRV_Gilman Springs_Bridge PM
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

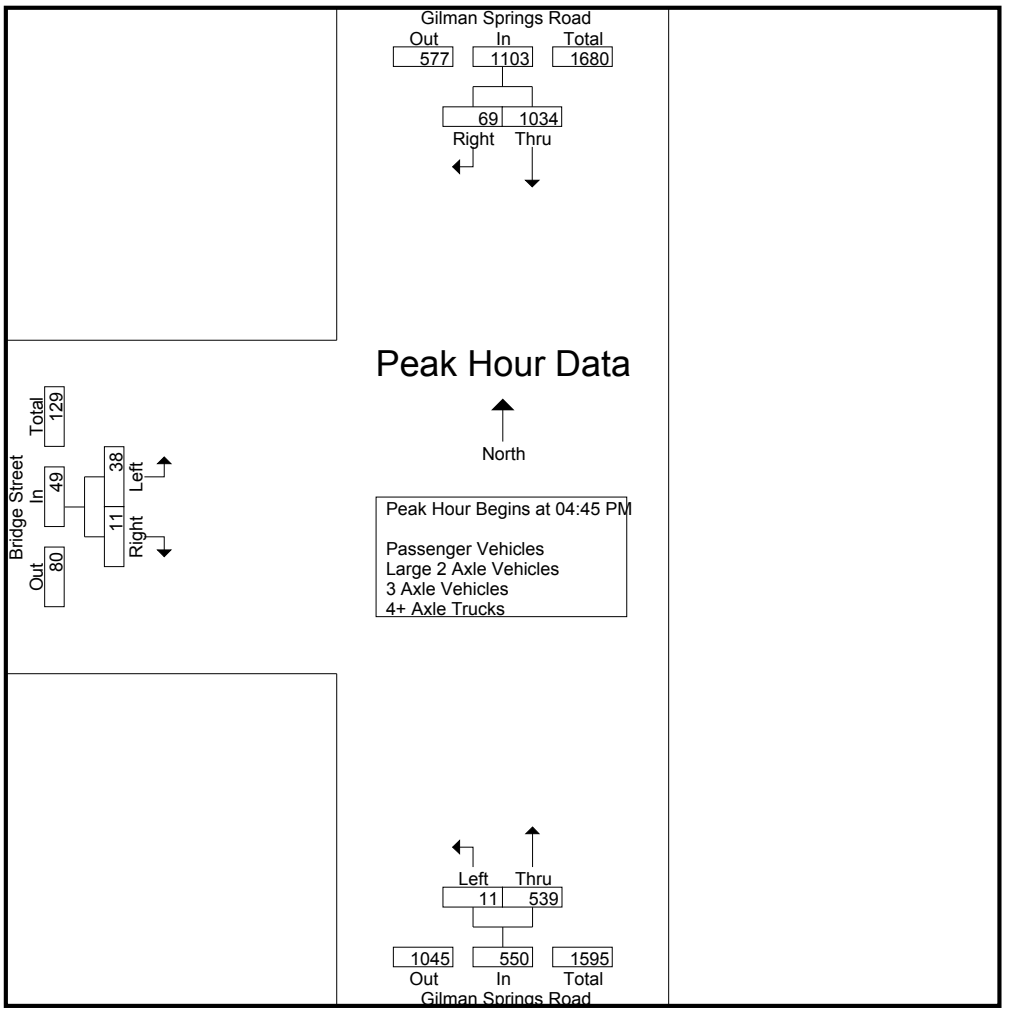
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	268	23	291	3	133	136	9	1	10	437
04:15 PM	233	18	251	2	143	145	11	4	15	411
04:30 PM	232	12	244	8	110	118	8	1	9	371
04:45 PM	262	22	284	5	144	149	7	3	10	443
Total	995	75	1070	18	530	548	35	9	44	1662
05:00 PM	264	17	281	2	110	112	14	3	17	410
05:15 PM	239	14	253	2	135	137	11	3	14	404
05:30 PM	269	16	285	2	150	152	6	2	8	445
05:45 PM	244	19	263	4	124	128	9	3	12	403
Total	1016	66	1082	10	519	529	40	11	51	1662
Grand Total	2011	141	2152	28	1049	1077	75	20	95	3324
Apprch %	93.4	6.6		2.6	97.4		78.9	21.1		
Total %	60.5	4.2	64.7	0.8	31.6	32.4	2.3	0.6	2.9	
Passenger Vehicles	1980	138	2118	27	1009	1036	70	19	89	3243
% Passenger Vehicles	98.5	97.9	98.4	96.4	96.2	96.2	93.3	95	93.7	97.6
Large 2 Axle Vehicles	25	1	26	1	28	29	2	1	3	58
% Large 2 Axle Vehicles	1.2	0.7	1.2	3.6	2.7	2.7	2.7	5	3.2	1.7
3 Axle Vehicles	1	0	1	0	2	2	0	0	0	3
% 3 Axle Vehicles	0	0	0	0	0.2	0.2	0	0	0	0.1
4+ Axle Trucks	5	2	7	0	10	10	3	0	3	20
% 4+ Axle Trucks	0.2	1.4	0.3	0	1	0.9	4	0	3.2	0.6

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	262	**22**	284	**5**	144	149	7	**3**	10	443
05:00 PM	264	17	281	2	110	112	**14**	3	**17**	410
05:15 PM	239	14	253	2	135	137	11	3	14	404
05:30 PM	**269**	16	**285**	2	**150**	**152**	6	2	8	**445**
Total Volume	1034	69	1103	11	539	550	38	11	49	1702
% App. Total	93.7	6.3		2	98		77.6	22.4		
PHF	.961	.784	.968	.550	.898	.905	.679	.917	.721	.956

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

	04:45 PM			04:45 PM			04:15 PM		
+0 mins.	262	**22**	284	**5**	144	149	11	**4**	15
+15 mins.	264	17	281	2	110	112	8	1	9
+30 mins.	239	14	253	2	135	137	7	3	10
+45 mins.	**269**	16	**285**	2	**150**	**152**	**14**	3	**17**
Total Volume	1034	69	1103	11	539	550	40	11	51
% App. Total	93.7	6.3		2	98		78.4	21.6	
PHF	.961	.784	.968	.550	.898	.905	.714	.688	.750

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County of Riverside
N/S: Gilman Springs Road
E/W: Bridge Street
Weather: Clear

File Name : 04_CRV_Gilman Springs_Bridge PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Passenger Vehicles

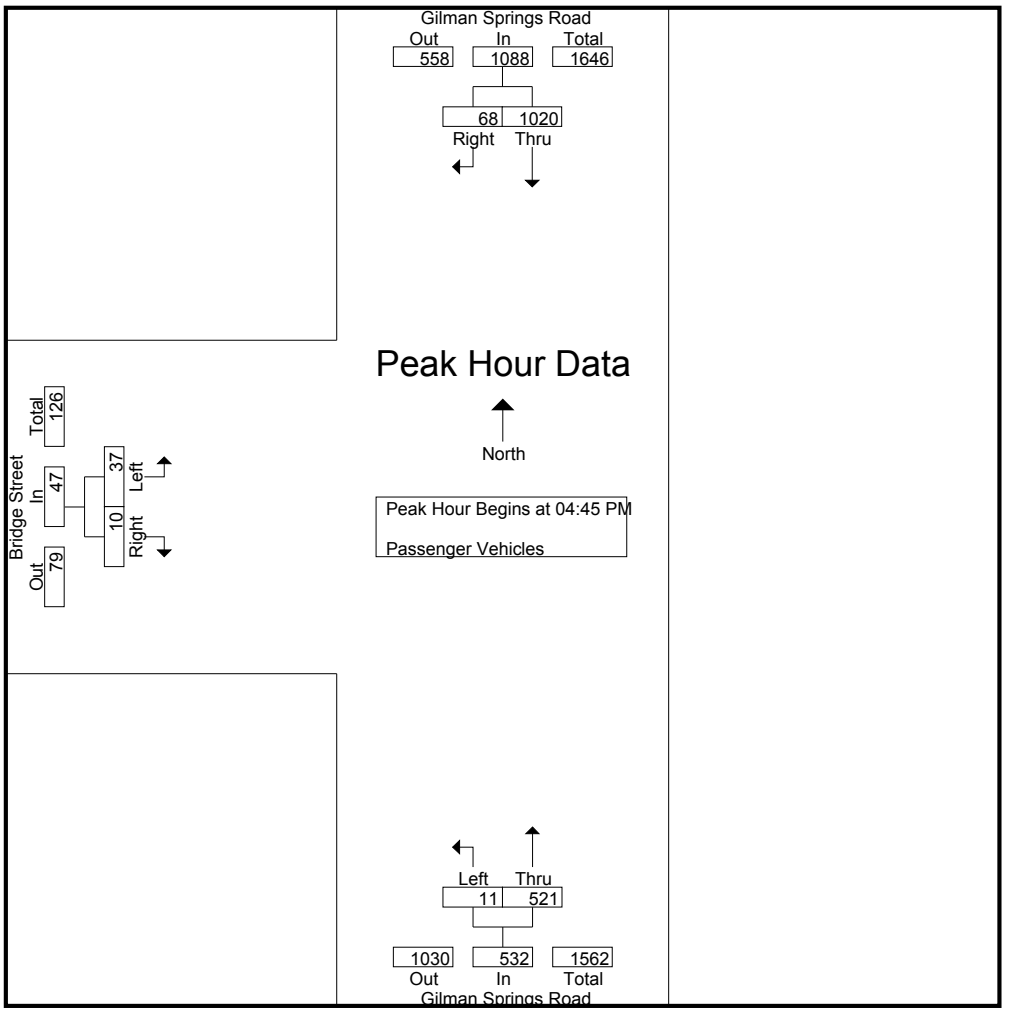
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	263	22	285	2	126	128	7	1	8	421
04:15 PM	230	18	248	2	138	140	11	4	15	403
04:30 PM	230	11	241	8	102	110	7	1	8	359
04:45 PM	259	21	280	5	137	142	7	3	10	432
Total	982	72	1054	17	503	520	32	9	41	1615
05:00 PM	260	17	277	2	109	111	14	3	17	405
05:15 PM	239	14	253	2	130	132	10	2	12	397
05:30 PM	262	16	278	2	145	147	6	2	8	433
05:45 PM	237	19	256	4	122	126	8	3	11	393
Total	998	66	1064	10	506	516	38	10	48	1628
Grand Total	1980	138	2118	27	1009	1036	70	19	89	3243
Apprch %	93.5	6.5		2.6	97.4		78.7	21.3		
Total %	61.1	4.3	65.3	0.8	31.1	31.9	2.2	0.6	2.7	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	259	**21**	**280**	**5**	137	142	7	**3**	10	432
05:00 PM	260	17	277	2	109	111	**14**	3	**17**	405
05:15 PM	239	14	253	2	130	132	10	2	12	397
05:30 PM	**262**	16	278	2	**145**	**147**	6	2	8	**433**
Total Volume	1020	68	1088	11	521	532	37	10	47	1667
% App. Total	93.8	6.2		2.1	97.9		78.7	21.3		
PHF	.973	.810	.971	.550	.898	.905	.661	.833	.691	.962

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County of Riverside
N/S: Gilman Springs Road
E/W: Bridge Street
Weather: Clear

File Name : 04_CRV_Gilman Springs_Bridge PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	259	**21**	**280**	**5**	137	142	7	**3**	10
+15 mins.	260	17	277	2	109	111	**14**	3	**17**
+30 mins.	239	14	253	2	130	132	10	2	12
+45 mins.	**262**	16	278	2	**145**	**147**	6	2	8
Total Volume	1020	68	1088	11	521	532	37	10	47
% App. Total	93.8	6.2		2.1	97.9		78.7	21.3	
PHF	.973	.810	.971	.550	.898	.905	.661	.833	.691

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County of Riverside
N/S: Gilman Springs Road
E/W: Bridge Street
Weather: Clear

File Name : 04_CRV_Gilman Springs_Bridge PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

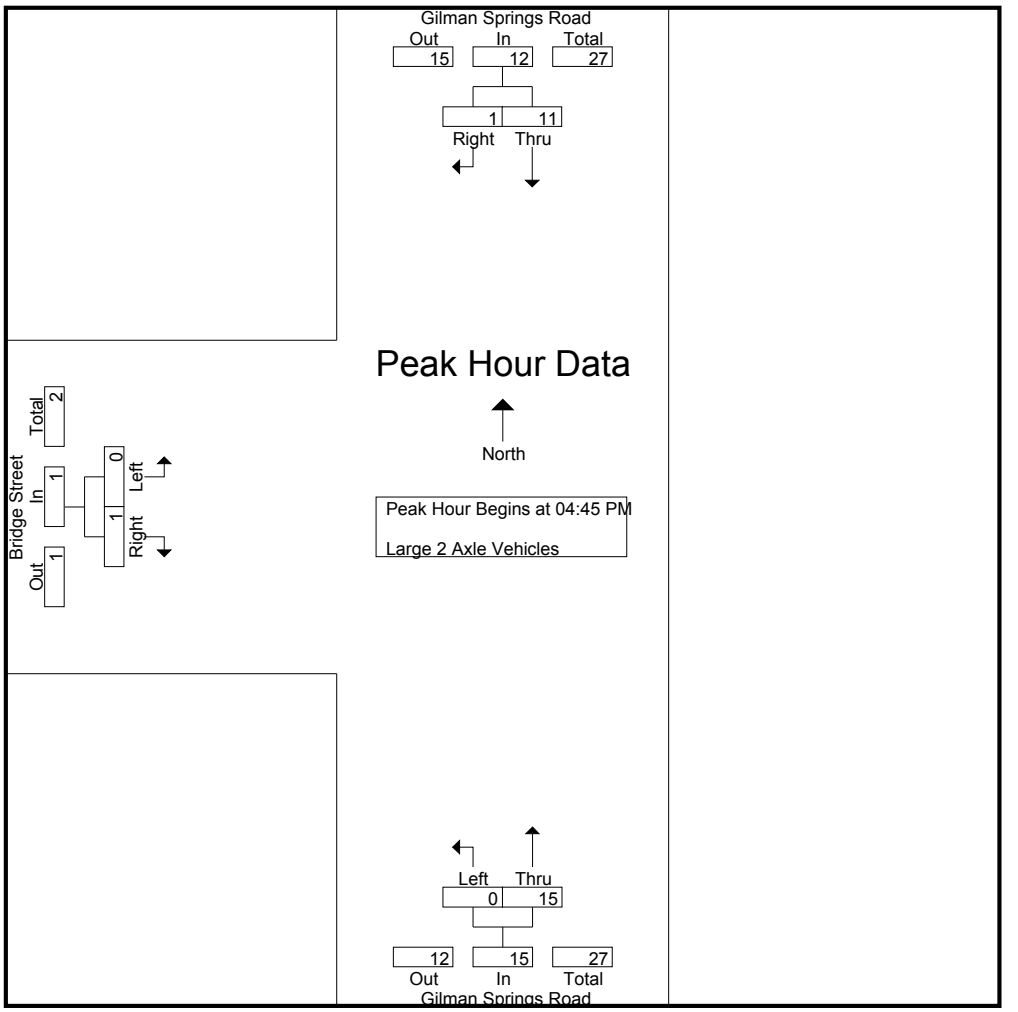
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	4	0	4	1	5	6	1	0	1	11
04:15 PM	3	0	3	0	3	3	0	0	0	6
04:30 PM	1	0	1	0	5	5	1	0	1	7
04:45 PM	2	1	3	0	7	7	0	0	0	10
Total	10	1	11	1	20	21	2	0	2	34
05:00 PM	4	0	4	0	1	1	0	0	0	5
05:15 PM	0	0	0	0	4	4	0	1	1	5
05:30 PM	5	0	5	0	3	3	0	0	0	8
05:45 PM	6	0	6	0	0	0	0	0	0	6
Total	15	0	15	0	8	8	0	1	1	24
Grand Total	25	1	26	1	28	29	2	1	3	58
Apprch %	96.2	3.8		3.4	96.6		66.7	33.3		
Total %	43.1	1.7	44.8	1.7	48.3	50	3.4	1.7	5.2	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	2	**1**	3	0	**7**	**7**	0	0	0	**10**
05:00 PM	4	0	4	0	1	1	0	0	0	5
05:15 PM	0	0	0	0	4	4	0	**1**	**1**	5
05:30 PM	**5**	0	**5**	0	3	3	0	0	0	8
Total Volume	11	1	12	0	15	15	0	1	1	28
% App. Total	91.7	8.3		0	100		0	100		
PHF	.550	.250	.600	.000	.536	.536	.000	.250	.250	.700

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County of Riverside
N/S: Gilman Springs Road
E/W: Bridge Street
Weather: Clear

File Name : 04_CRV_Gilman Springs_Bridge PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	2	**1**	3	0	**7**	**7**	0	0	0
+15 mins.	4	0	4	0	1	1	0	0	0
+30 mins.	0	0	0	0	4	4	0	**1**	**1**
+45 mins.	**5**	0	**5**	0	3	3	0	0	0
Total Volume	11	1	12	0	15	15	0	1	1
% App. Total	91.7	8.3		0	100		0	100	
PHF	.550	.250	.600	.000	.536	.536	.000	.250	.250

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County of Riverside
N/S: Gilman Springs Road
E/W: Bridge Street
Weather: Clear

File Name : 04_CRV_Gilman Springs_Bridge PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

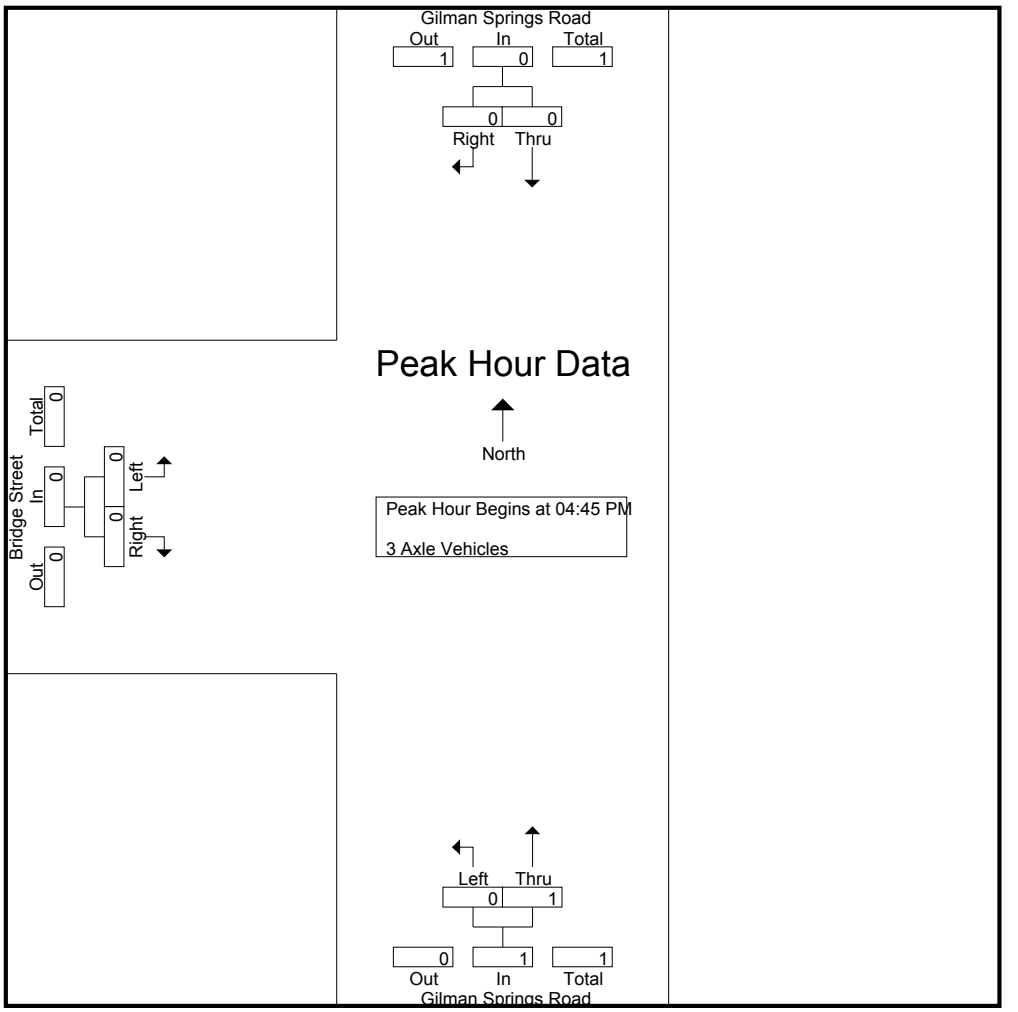
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	0	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	1	1	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	1	1	0	0	0	1
Total	0	0	0	0	2	2	0	0	0	2
Grand Total	1	0	1	0	2	2	0	0	0	3
Apprch %	100	0		0	100		0	0		
Total %	33.3	0	33.3	0	66.7	66.7	0	0	0	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	**1**	**1**	0	0	0	**1**
05:30 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	1	0	0	0	1
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000	.250

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County of Riverside
N/S: Gilman Springs Road
E/W: Bridge Street
Weather: Clear

File Name : 04_CRV_Gilman Springs_Bridge PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

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

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County of Riverside
N/S: Gilman Springs Road
E/W: Bridge Street
Weather: Clear

File Name : 04_CRV_Gilman Springs_Bridge PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

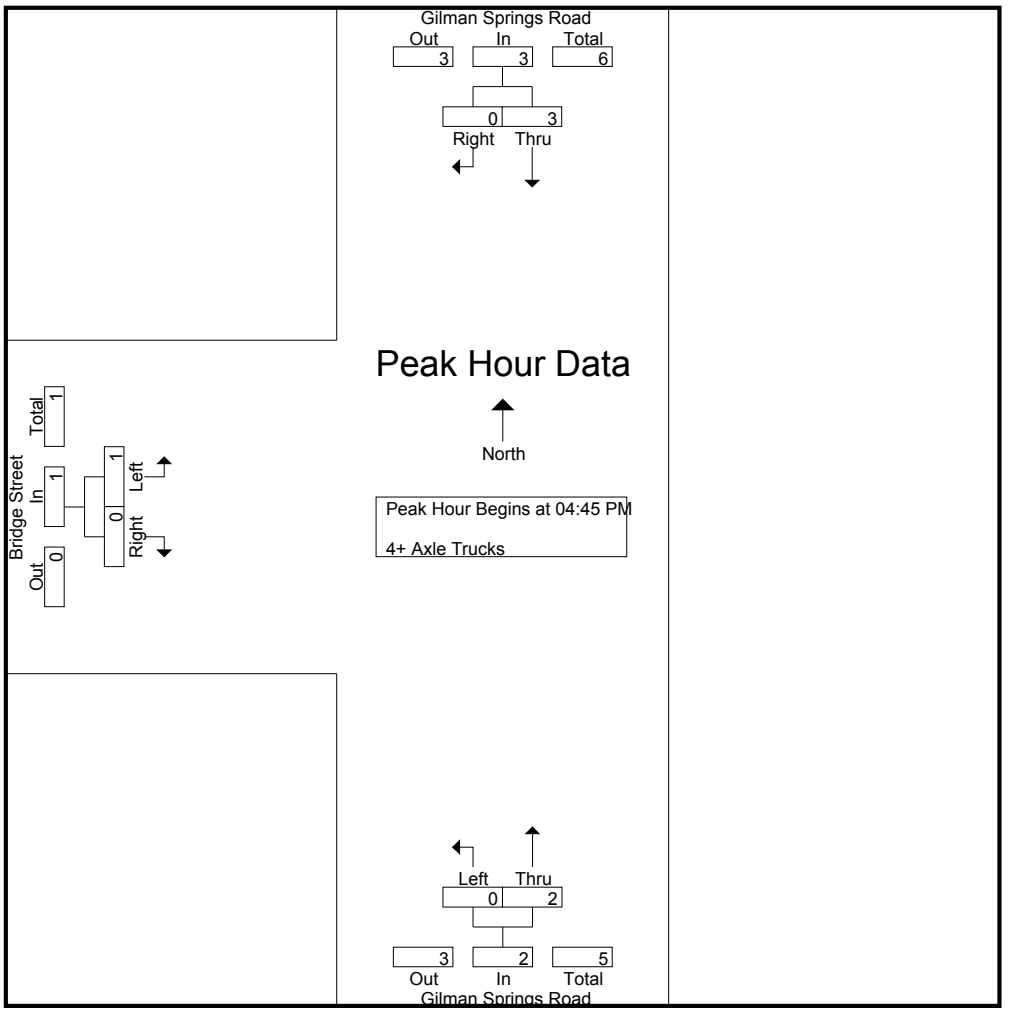
	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	1	1	2	0	2	2	1	0	1	5
04:15 PM	0	0	0	0	2	2	0	0	0	2
04:30 PM	0	1	1	0	3	3	0	0	0	4
04:45 PM	1	0	1	0	0	0	0	0	0	1
Total	2	2	4	0	7	7	1	0	1	12
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	1	0	1	1
05:30 PM	2	0	2	0	2	2	0	0	0	4
05:45 PM	1	0	1	0	1	1	1	0	1	3
Total	3	0	3	0	3	3	2	0	2	8
Grand Total	5	2	7	0	10	10	3	0	3	20
Apprch %	71.4	28.6		0	100		100	0		
Total %	25	10	35	0	50	50	15	0	15	

	Gilman Springs Road Southbound			Gilman Springs Road Northbound			Bridge Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	1	0	1	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	**1**	0	**1**	1
05:30 PM	**2**	0	**2**	0	**2**	**2**	0	0	0	**4**
Total Volume	3	0	3	0	2	2	1	0	1	6
% App. Total	100	0		0	100		100	0		
PHF	.375	.000	.375	.000	.250	.250	.250	.000	.250	.375

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County of Riverside
N/S: Gilman Springs Road
E/W: Bridge Street
Weather: Clear

File Name : 04_CRV_Gilman Springs_Bridge PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

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

Location: County of Riverside
N/S: Gilman Springs Road
E/W: Bridge Street

Date: 2/7/2018
Date: Wednesday

PEDESTRIANS

	North Leg Gilman Springs Road Pedestrians	East Leg Dead End Pedestrians	South Leg Gilman Springs Road Pedestrians	West Leg Bridge Street Eastbound	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Gilman Springs Road Pedestrians	East Leg Dead End Pedestrians	South Leg Gilman Springs Road Pedestrians	West Leg Bridge Street Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

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Location: County of Riverside
N/S: Gilman Springs Road
E/W: Bridge Street

2/7/2018

Date: 2/7/2018
Date: Wednesday

BICYCLES

	Southbound Gilman Springs Road			Westbound Dead End			Northbound Gilman Springs Road			Eastbound Bridge Street			
	Left	Thru	Right	Westbound	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Gilman Springs Road			Westbound Dead End			Northbound Gilman Springs Road			Eastbound Bridge Street			
	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

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County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

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

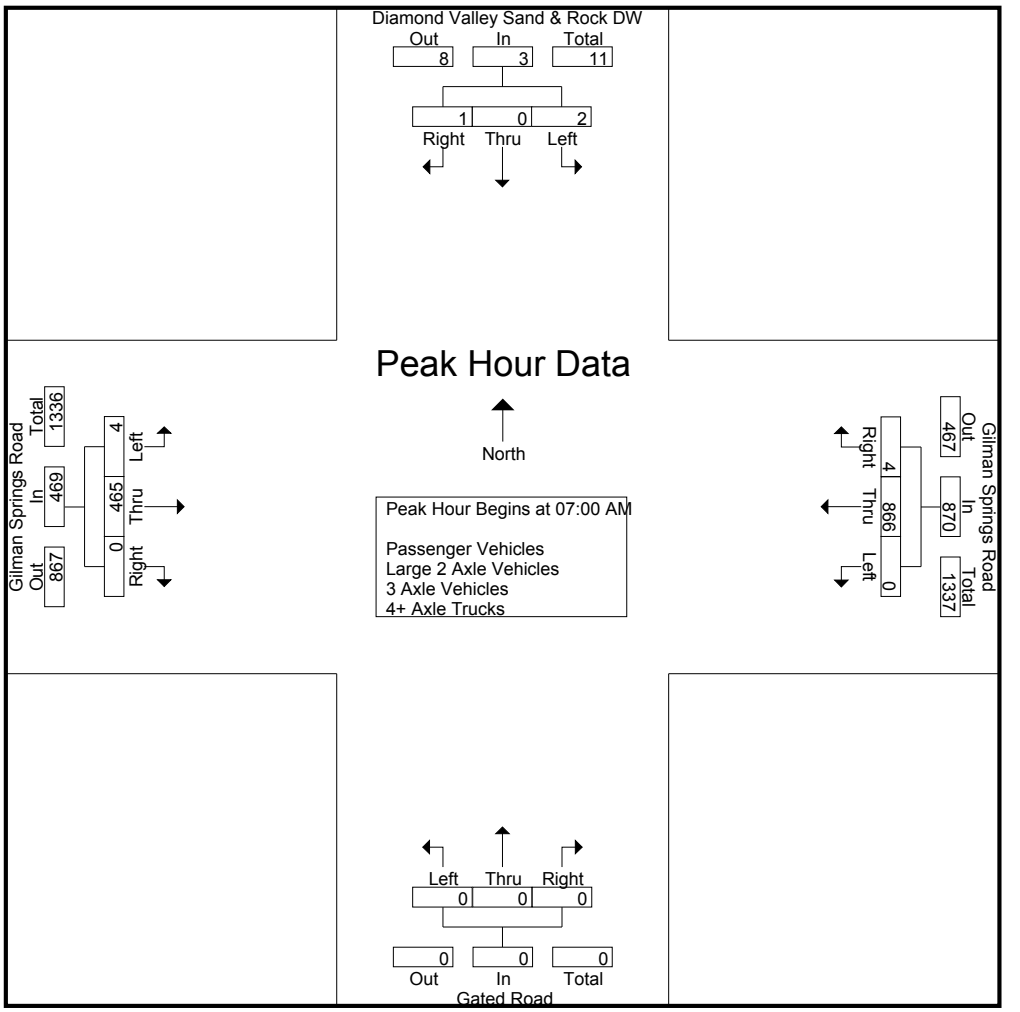
	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	240	0	240	0	0	0	0	0	108	0	108	348
07:15 AM	0	0	0	0	0	208	1	209	0	0	0	0	1	117	0	118	327
07:30 AM	0	0	1	1	0	237	1	238	0	0	0	0	2	119	0	121	360
07:45 AM	2	0	0	2	0	181	2	183	0	0	0	0	1	121	0	122	307
Total	2	0	1	3	0	866	4	870	0	0	0	0	4	465	0	469	1342
08:00 AM	0	0	2	2	0	169	1	170	0	0	0	0	2	116	0	118	290
08:15 AM	1	0	3	4	0	179	1	180	0	0	0	0	1	93	0	94	278
08:30 AM	2	0	1	3	0	165	2	167	0	0	0	0	3	95	0	98	268
08:45 AM	1	0	0	1	0	139	1	140	0	0	0	0	1	99	0	100	241
Total	4	0	6	10	0	652	5	657	0	0	0	0	7	403	0	410	1077
Grand Total	6	0	7	13	0	1518	9	1527	0	0	0	0	11	868	0	879	2419
Apprch %	46.2	0	53.8		0	99.4	0.6		0	0	0		1.3	98.7	0		
Total %	0.2	0	0.3	0.5	0	62.8	0.4	63.1	0	0	0	0	0.5	35.9	0	36.3	
Passenger Vehicles	0	0	1	1	0	1486	1	1487	0	0	0	0	1	813	0	814	2302
% Passenger Vehicles	0	0	14.3	7.7	0	97.9	11.1	97.4	0	0	0	0	9.1	93.7	0	92.6	95.2
Large 2 Axle Vehicles	0	0	0	0	0	13	0	13	0	0	0	0	0	34	0	34	47
% Large 2 Axle Vehicles	0	0	0	0	0	0.9	0	0.9	0	0	0	0	0	3.9	0	3.9	1.9
3 Axle Vehicles	3	0	0	3	0	3	4	7	0	0	0	0	0	3	0	3	13
% 3 Axle Vehicles	50	0	0	23.1	0	0.2	44.4	0.5	0	0	0	0	0	0.3	0	0.3	0.5
4+ Axle Trucks	3	0	6	9	0	16	4	20	0	0	0	0	10	18	0	28	57
% 4+ Axle Trucks	50	0	85.7	69.2	0	1.1	44.4	1.3	0	0	0	0	90.9	2.1	0	3.2	2.4

	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	**240**	0	**240**	0	0	0	0	0	108	0	108	348
07:15 AM	0	0	0	0	0	208	1	209	0	0	0	0	1	117	0	118	327
07:30 AM	0	0	**1**	1	0	237	1	238	0	0	0	0	**2**	119	0	121	**360**
07:45 AM	**2**	0	0	**2**	0	181	**2**	183	0	0	0	0	1	**121**	0	**122**	307
Total Volume	2	0	1	3	0	866	4	870	0	0	0	0	4	465	0	469	1342
% App. Total	66.7	0	33.3		0	99.5	0.5		0	0	0		0.9	99.1	0		
PHF	.250	.000	.250	.375	.000	.902	.500	.906	.000	.000	.000	.000	.500	.961	.000	.961	.932

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

County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018



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				07:00 AM				07:15 AM			
+0 mins.	**2**	0	0	2	0	**240**	0	**240**	0	0	0	0	1	117	0	118
+15 mins.	0	0	2	2	0	208	1	209	0	0	0	0	**2**	119	0	121
+30 mins.	1	0	**3**	**4**	0	237	1	238	0	0	0	0	1	**121**	0	**122**
+45 mins.	2	0	1	3	0	181	**2**	183	0	0	0	0	2	116	0	118
Total Volume	5	0	6	11	0	866	4	870	0	0	0	0	6	473	0	479
% App. Total	45.5	0	54.5		0	99.5	0.5		0	0	0		1.3	98.7	0	
PHF	.625	.000	.500	.688	.000	.902	.500	.906	.000	.000	.000	.000	.750	.977	.000	.982

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

County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Passenger Vehicles

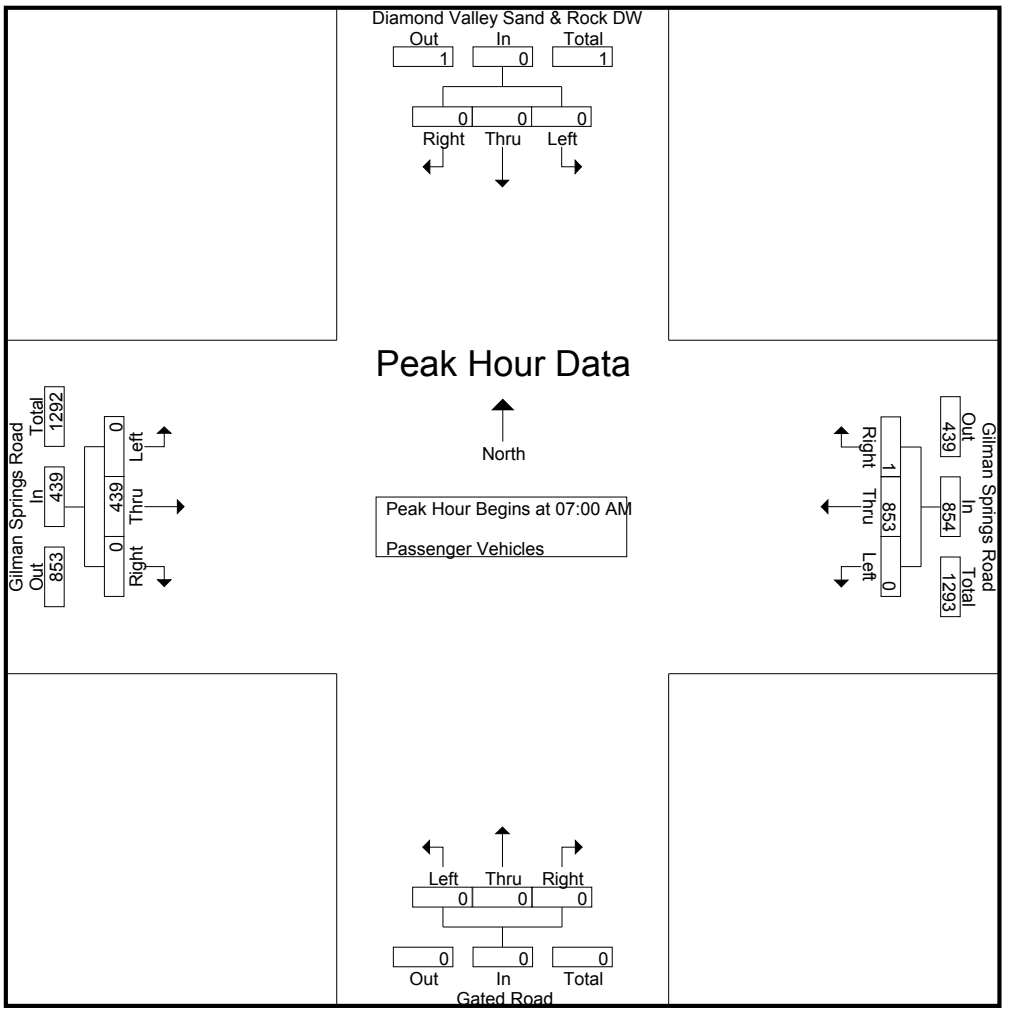
	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	239	0	239	0	0	0	0	0	97	0	97	336
07:15 AM	0	0	0	0	0	206	0	206	0	0	0	0	0	113	0	113	319
07:30 AM	0	0	0	0	0	234	1	235	0	0	0	0	0	114	0	114	349
07:45 AM	0	0	0	0	0	174	0	174	0	0	0	0	0	115	0	115	289
Total	0	0	0	0	0	853	1	854	0	0	0	0	0	439	0	439	1293
08:00 AM	0	0	0	0	0	165	0	165	0	0	0	0	0	108	0	108	273
08:15 AM	0	0	1	1	0	172	0	172	0	0	0	0	1	87	0	88	261
08:30 AM	0	0	0	0	0	160	0	160	0	0	0	0	0	87	0	87	247
08:45 AM	0	0	0	0	0	136	0	136	0	0	0	0	0	92	0	92	228
Total	0	0	1	1	0	633	0	633	0	0	0	0	1	374	0	375	1009
Grand Total	0	0	1	1	0	1486	1	1487	0	0	0	0	1	813	0	814	2302
Apprch %	0	0	100		0	99.9	0.1		0	0	0		0.1	99.9	0		
Total %	0	0	0	0	0	64.6	0	64.6	0	0	0	0	0	35.3	0	35.4	

	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	**239**	0	**239**	0	0	0	0	0	97	0	97	336
07:15 AM	0	0	0	0	0	206	0	206	0	0	0	0	0	113	0	113	319
07:30 AM	0	0	0	0	0	234	**1**	235	0	0	0	0	0	114	0	114	**349**
07:45 AM	0	0	0	0	0	174	0	174	0	0	0	0	0	**115**	0	**115**	289
Total Volume	0	0	0	0	0	853	1	854	0	0	0	0	0	439	0	439	1293
% App. Total	0	0	0		0	99.9	0.1		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.892	.250	.893	.000	.000	.000	.000	.000	.954	.000	.954	.926

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

County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	**239**	0	**239**	0	0	0	0	0	97	0	97
+15 mins.	0	0	0	0	0	206	0	206	0	0	0	0	0	113	0	113
+30 mins.	0	0	0	0	0	234	**1**	235	0	0	0	0	0	114	0	114
+45 mins.	0	0	0	0	0	174	0	174	0	0	0	0	0	**115**	0	**115**
Total Volume	0	0	0	0	0	853	1	854	0	0	0	0	0	439	0	439
% App. Total	0	0	0		0	99.9	0.1		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.892	.250	.893	.000	.000	.000	.000	.000	.954	.000	.954

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

County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

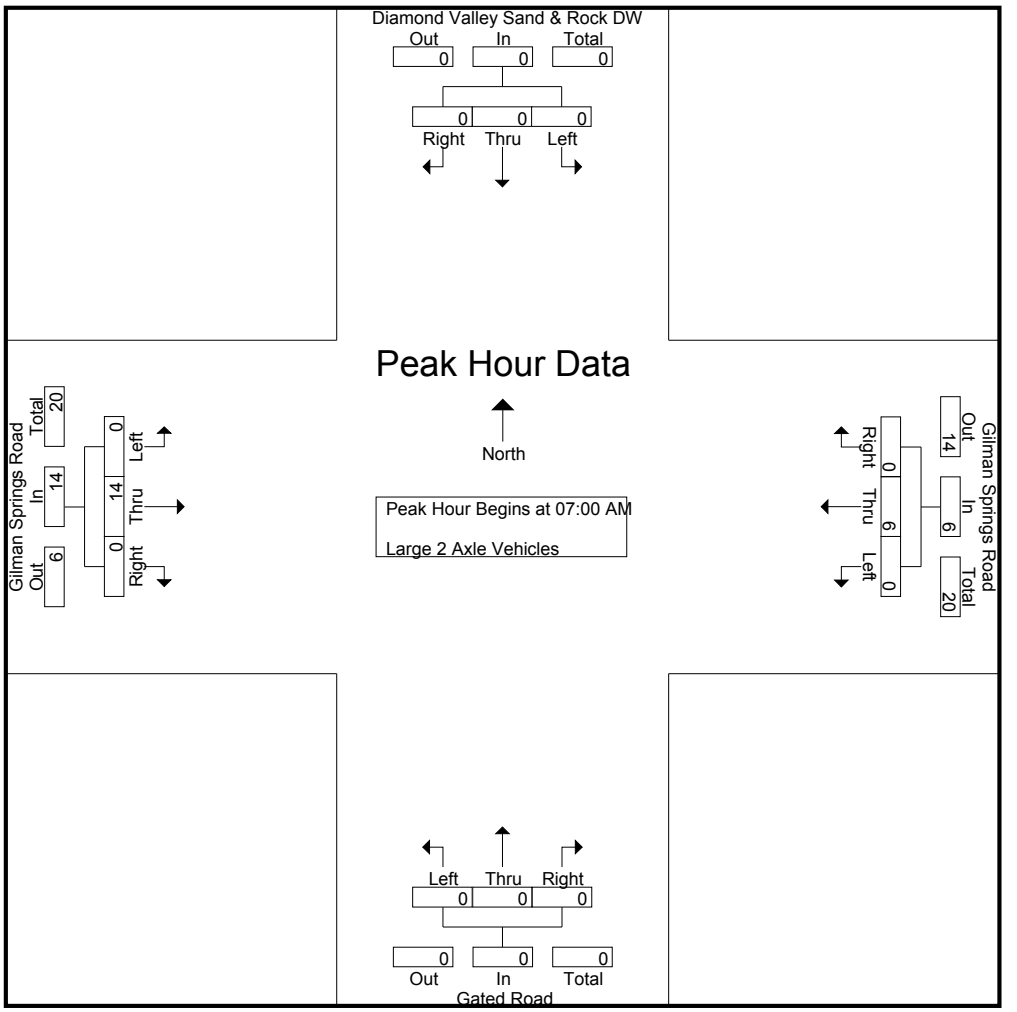
	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	6
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
07:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
Total	0	0	0	0	0	6	0	6	0	0	0	0	0	14	0	14	20
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
08:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4	7
08:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	6	0	6	9
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	5
Total	0	0	0	0	0	7	0	7	0	0	0	0	0	20	0	20	27
Grand Total	0	0	0	0	0	13	0	13	0	0	0	0	0	34	0	34	47
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	27.7	0	27.7	0	0	0	0	0	72.3	0	72.3	

	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**	0	**6**	**6**
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
07:45 AM	0	0	0	0	0	**3**	0	**3**	0	0	0	0	0	3	0	3	6
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	14	0	14	20
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.583	.000	.583	.833

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

County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**6**	0	**6**
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3
+45 mins.	0	0	0	0	0	**3**	0	**3**	0	0	0	0	0	3	0	3
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	14	0	14
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.583	.000	.583

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

County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

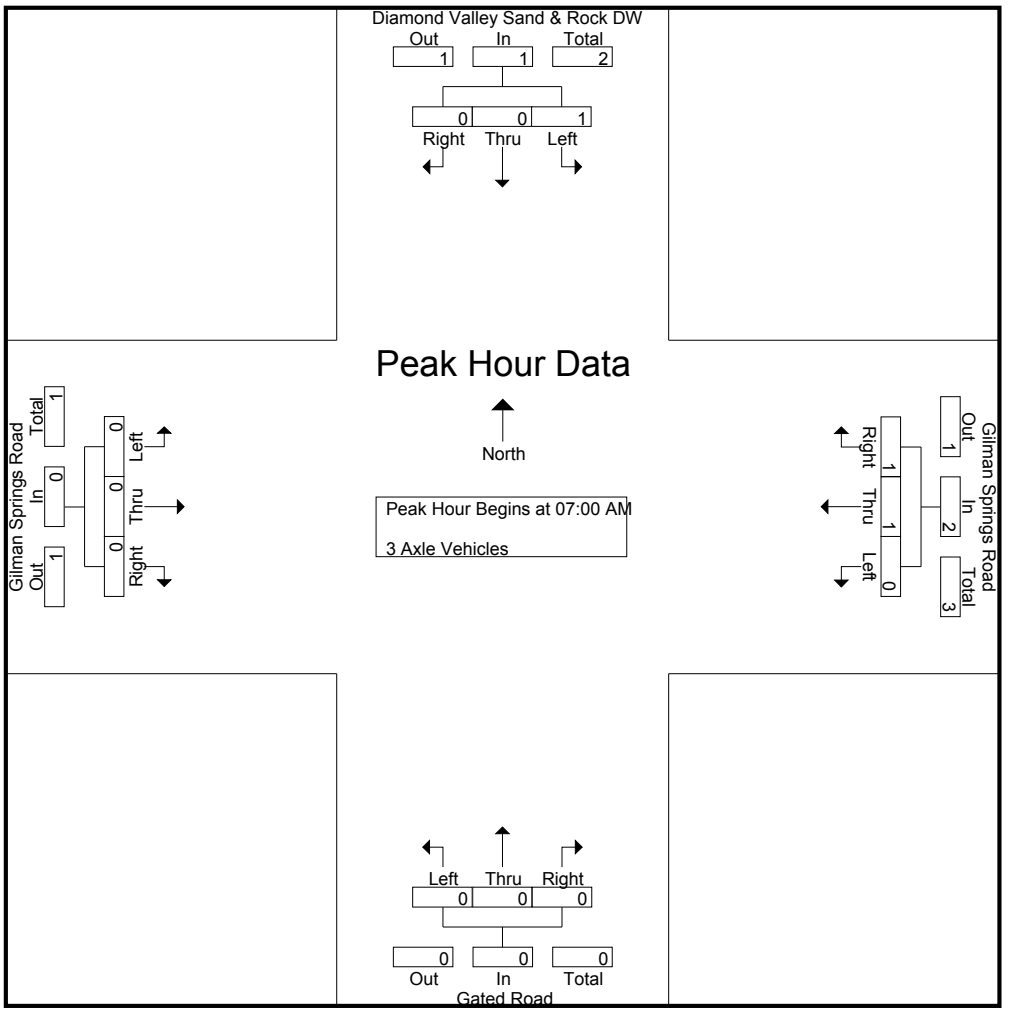
	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
Total	1	0	0	1	0	1	1	2	0	0	0	0	0	0	0	0	3
08:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	3
08:30 AM	2	0	0	2	0	0	0	0	0	0	0	0	0	1	0	1	3
08:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2
Total	2	0	0	2	0	2	3	5	0	0	0	0	0	3	0	3	10
Grand Total	3	0	0	3	0	3	4	7	0	0	0	0	0	3	0	3	13
Apprch %	100	0	0		0	42.9	57.1		0	0	0		0	100	0		
Total %	23.1	0	0	23.1	0	23.1	30.8	53.8	0	0	0	0	0	23.1	0	23.1	

	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	**1**	**1**	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	**1**	0	0	**1**	0	**1**	0	1	0	0	0	0	0	0	0	0	**2**
Total Volume	1	0	0	1	0	1	1	2	0	0	0	0	0	0	0	0	3
% App. Total	100	0	0		0	50	50		0	0	0		0	0	0		
PHF	.250	.000	.000	.250	.000	.250	.250	.500	.000	.000	.000	.000	.000	.000	.000	.000	.375

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

County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	**1**	**1**	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	**1**	0	0	**1**	0	**1**	0	1	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	1	1	2	0	0	0	0	0	0	0	0
% App. Total	100	0	0		0	50	50		0	0	0		0	0	0	
PHF	.250	.000	.000	.250	.000	.250	.250	.500	.000	.000	.000	.000	.000	.000	.000	.000

Counts Unlimited
PO Box 1178
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(951) 268-6268

County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

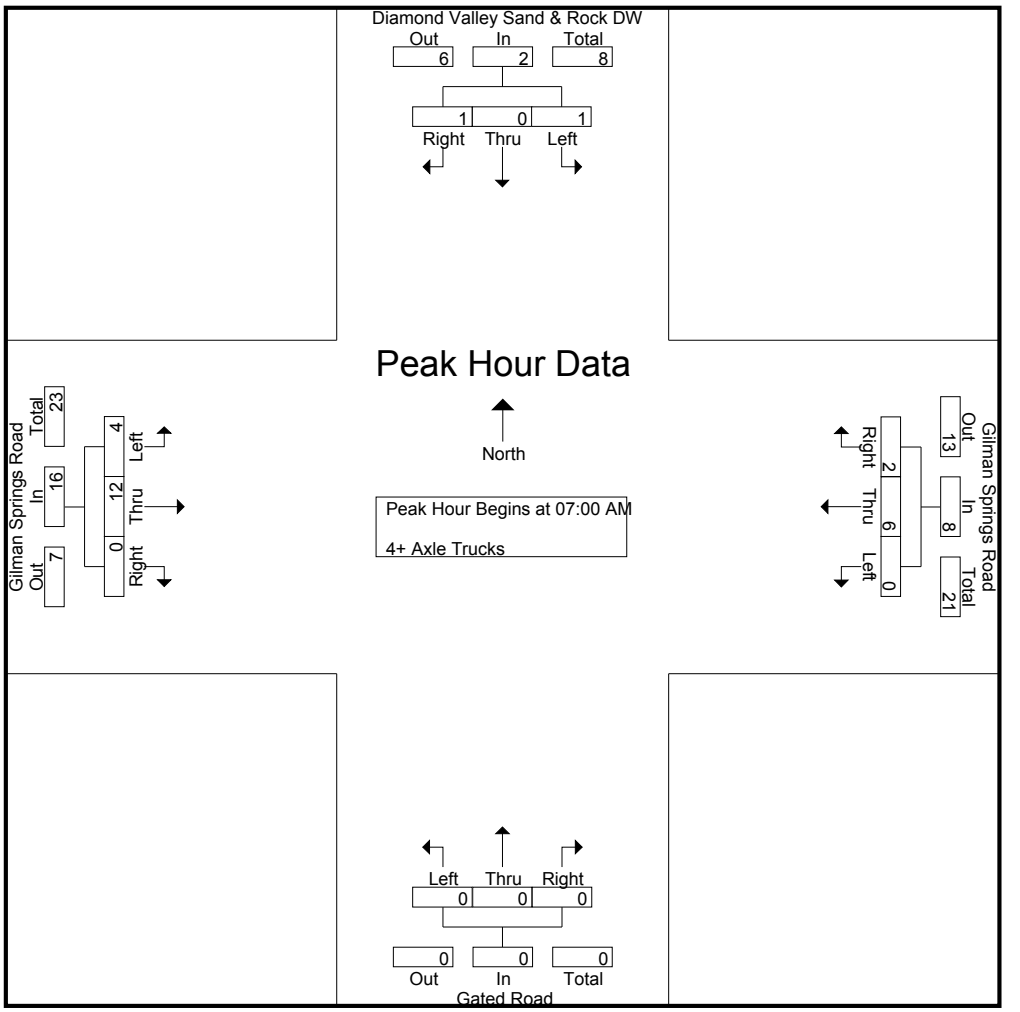
	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	5	0	5	6
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	3
07:30 AM	0	0	1	1	0	2	0	2	0	0	0	0	2	2	0	4	7
07:45 AM	1	0	0	1	0	3	2	5	0	0	0	0	1	3	0	4	10
Total	1	0	1	2	0	6	2	8	0	0	0	0	4	12	0	16	26
08:00 AM	0	0	2	2	0	3	0	3	0	0	0	0	2	2	0	4	9
08:15 AM	1	0	2	3	0	2	0	2	0	0	0	0	0	2	0	2	7
08:30 AM	0	0	1	1	0	2	2	4	0	0	0	0	3	1	0	4	9
08:45 AM	1	0	0	1	0	3	0	3	0	0	0	0	1	1	0	2	6
Total	2	0	5	7	0	10	2	12	0	0	0	0	6	6	0	12	31
Grand Total	3	0	6	9	0	16	4	20	0	0	0	0	10	18	0	28	57
Apprch %	33.3	0	66.7		0	80	20		0	0	0		35.7	64.3	0		
Total %	5.3	0	10.5	15.8	0	28.1	7	35.1	0	0	0	0	17.5	31.6	0	49.1	

	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	**5**	0	**5**	6
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	3
07:30 AM	0	0	**1**	**1**	0	2	0	2	0	0	0	0	**2**	2	0	4	7
07:45 AM	**1**	0	0	1	0	**3**	**2**	**5**	0	0	0	0	1	3	0	4	**10**
Total Volume	1	0	1	2	0	6	2	8	0	0	0	0	4	12	0	16	26
% App. Total	50	0	50		0	75	25		0	0	0		25	75	0		
PHF	.250	.000	.250	.500	.000	.500	.250	.400	.000	.000	.000	.000	.500	.600	.000	.800	.650

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

County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	**5**	0	**5**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
+30 mins.	0	0	**1**	**1**	0	2	0	2	0	0	0	0	**2**	2	0	4
+45 mins.	**1**	0	0	1	0	**3**	**2**	**5**	0	0	0	0	1	3	0	4
Total Volume	1	0	1	2	0	6	2	8	0	0	0	0	4	12	0	16
% App. Total	50	0	50		0	75	25		0	0	0		25	75	0	
PHF	.250	.000	.250	.500	.000	.500	.250	.400	.000	.000	.000	.000	.500	.600	.000	.800

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

County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018

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

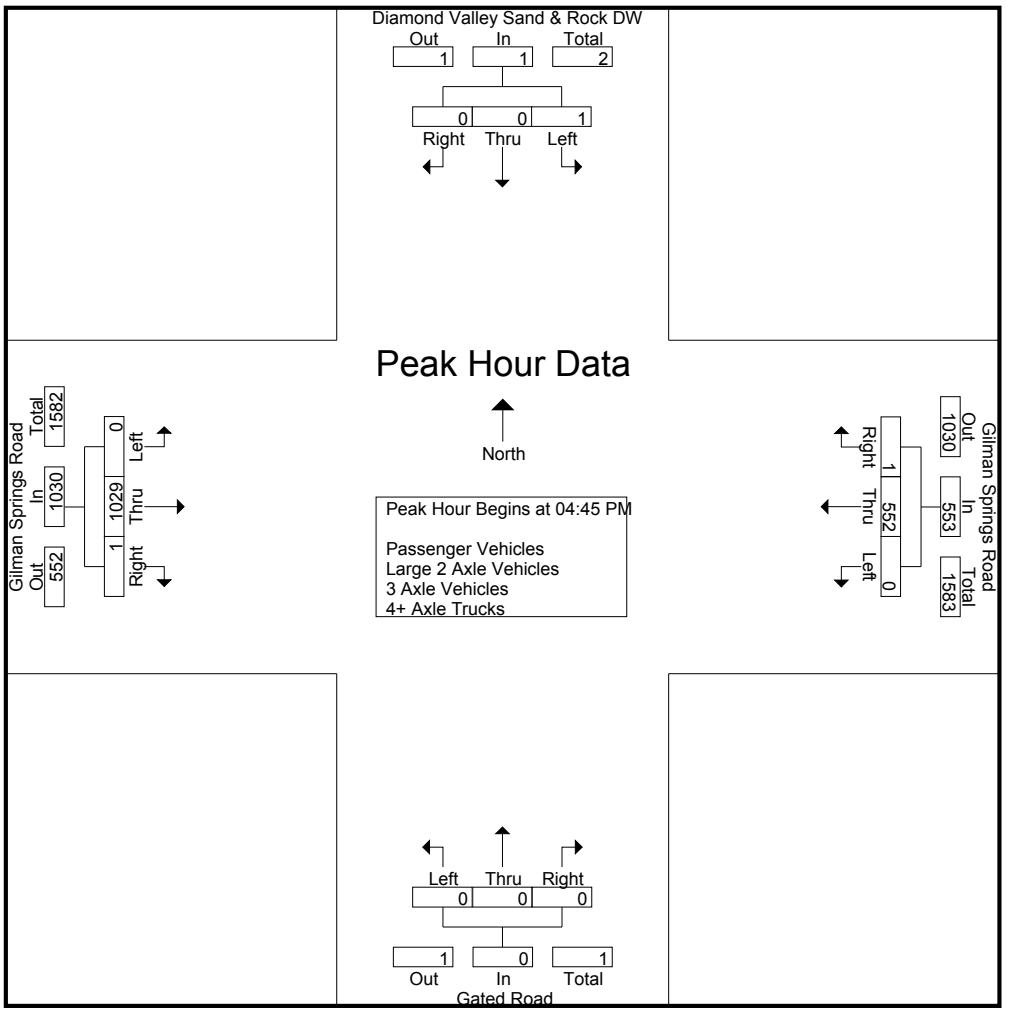
	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	0	1	5	0	135	0	135	0	0	0	0	0	246	0	246	386
04:15 PM	0	0	2	2	0	144	0	144	0	0	0	0	0	239	0	239	385
04:30 PM	2	0	2	4	0	116	0	116	0	0	0	0	2	242	0	244	364
04:45 PM	1	0	0	1	0	148	0	148	0	0	0	0	0	254	0	254	403
Total	7	0	5	12	0	543	0	543	0	0	0	0	2	981	0	983	1538
05:00 PM	0	0	0	0	0	113	0	113	0	0	0	0	0	270	0	270	383
05:15 PM	0	0	0	0	0	135	1	136	0	0	0	0	0	236	1	237	373
05:30 PM	0	0	0	0	0	156	0	156	0	0	0	0	0	269	0	269	425
05:45 PM	0	0	0	0	0	125	0	125	0	0	0	0	0	255	0	255	380
Total	0	0	0	0	0	529	1	530	0	0	0	0	0	1030	1	1031	1561
Grand Total	7	0	5	12	0	1072	1	1073	0	0	0	0	2	2011	1	2014	3099
Apprch %	58.3	0	41.7		0	99.9	0.1		0	0	0		0.1	99.9	0		
Total %	0.2	0	0.2	0.4	0	34.6	0	34.6	0	0	0	0	0.1	64.9	0	65	
Passenger Vehicles	5	0	5	10	0	1033	1	1034	0	0	0	0	2	1983	1	1986	3030
% Passenger Vehicles	71.4	0	100	83.3	0	96.4	100	96.4	0	0	0	0	100	98.6	100	98.6	97.8
Large 2 Axle Vehicles	2	0	0	2	0	27	0	27	0	0	0	0	0	23	0	23	52
% Large 2 Axle Vehicles	28.6	0	0	16.7	0	2.5	0	2.5	0	0	0	0	0	1.1	0	1.1	1.7
3 Axle Vehicles	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
% 3 Axle Vehicles	0	0	0	0	0	0.2	0	0.2	0	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	0	0	0	0	0	10	0	10	0	0	0	0	0	5	0	5	15
% 4+ Axle Trucks	0	0	0	0	0	0.9	0	0.9	0	0	0	0	0	0.2	0	0.2	0.5

	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**1**	0	0	**1**	0	148	0	148	0	0	0	0	0	254	0	254	403
05:00 PM	0	0	0	0	0	113	0	113	0	0	0	0	0	**270**	0	**270**	383
05:15 PM	0	0	0	0	0	135	**1**	136	0	0	0	0	0	236	**1**	237	373
05:30 PM	0	0	0	0	0	**156**	0	**156**	0	0	0	0	0	269	0	269	**425**
Total Volume	1	0	0	1	0	552	1	553	0	0	0	0	0	1029	1	1030	1584
% App. Total	100	0	0		0	99.8	0.2		0	0	0		0	99.9	0.1		
PHF	.250	.000	.000	.250	.000	.885	.250	.886	.000	.000	.000	.000	.000	.953	.250	.954	.932

Counts Unlimited
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(951) 268-6268

County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
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:

	04:00 PM				04:45 PM				04:00 PM				05:00 PM			
+0 mins.	**4**	0	1	**5**	0	148	0	148	0	0	0	0	0	**270**	0	**270**
+15 mins.	0	0	**2**	2	0	113	0	113	0	0	0	0	0	236	**1**	237
+30 mins.	2	0	2	4	0	135	**1**	136	0	0	0	0	0	269	0	269
+45 mins.	1	0	0	1	0	**156**	0	**156**	0	0	0	0	0	255	0	255
Total Volume	7	0	5	12	0	552	1	553	0	0	0	0	0	1030	1	1031
% App. Total	58.3	0	41.7		0	99.8	0.2		0	0	0		0	99.9	0.1	
PHF	.438	.000	.625	.600	.000	.885	.250	.886	.000	.000	.000	.000	.000	.954	.250	.955

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County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Passenger Vehicles

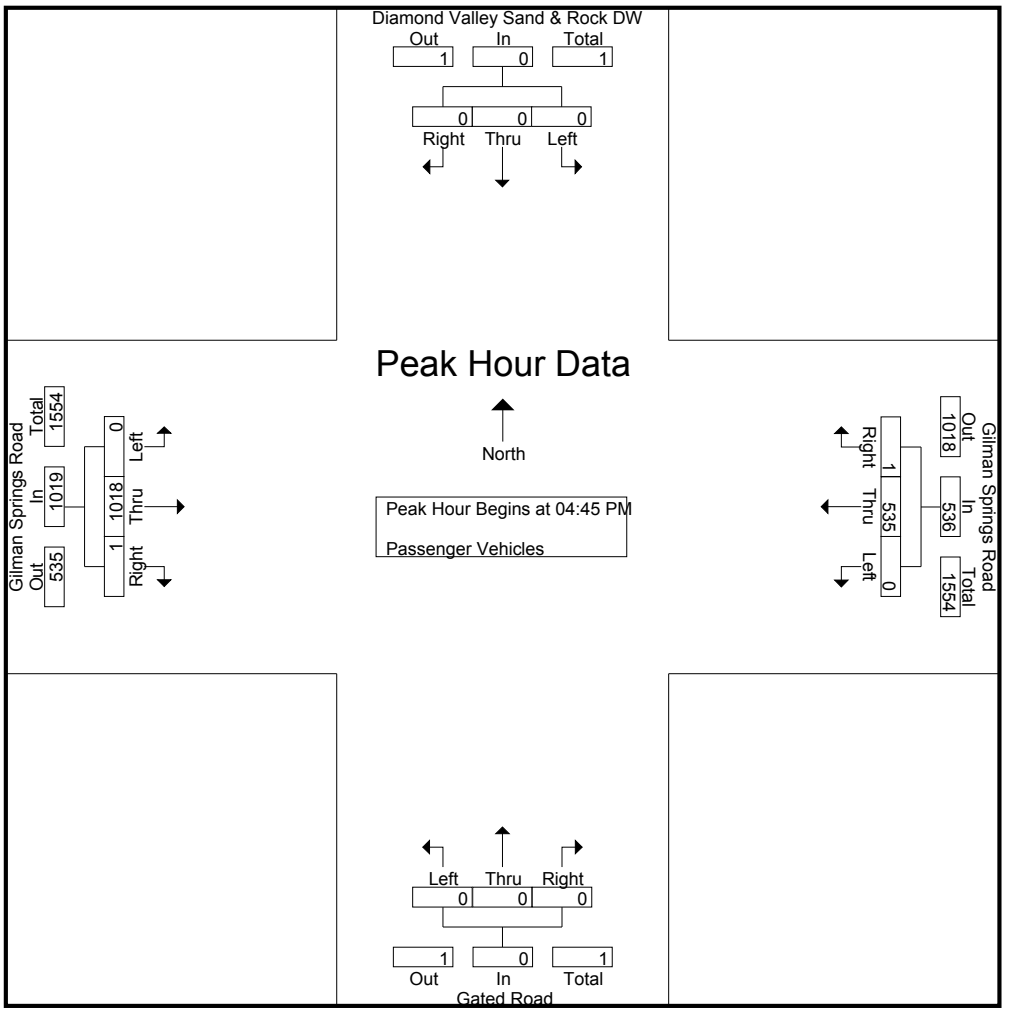
	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	3	0	1	4	0	126	0	126	0	0	0	0	0	240	0	240	370
04:15 PM	0	0	2	2	0	140	0	140	0	0	0	0	0	237	0	237	379
04:30 PM	2	0	2	4	0	109	0	109	0	0	0	0	2	239	0	241	354
04:45 PM	0	0	0	0	0	141	0	141	0	0	0	0	0	251	0	251	392
Total	5	0	5	10	0	516	0	516	0	0	0	0	2	967	0	969	1495
05:00 PM	0	0	0	0	0	112	0	112	0	0	0	0	0	268	0	268	380
05:15 PM	0	0	0	0	0	131	1	132	0	0	0	0	0	234	1	235	367
05:30 PM	0	0	0	0	0	151	0	151	0	0	0	0	0	265	0	265	416
05:45 PM	0	0	0	0	0	123	0	123	0	0	0	0	0	249	0	249	372
Total	0	0	0	0	0	517	1	518	0	0	0	0	0	1016	1	1017	1535
Grand Total	5	0	5	10	0	1033	1	1034	0	0	0	0	2	1983	1	1986	3030
Apprch %	50	0	50		0	99.9	0.1		0	0	0		0.1	99.8	0.1		
Total %	0.2	0	0.2	0.3	0	34.1	0	34.1	0	0	0	0	0.1	65.4	0	65.5	

	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	141	0	141	0	0	0	0	0	251	0	251	392
05:00 PM	0	0	0	0	0	112	0	112	0	0	0	0	0	**268**	0	**268**	380
05:15 PM	0	0	0	0	0	131	**1**	132	0	0	0	0	0	234	**1**	235	367
05:30 PM	0	0	0	0	0	**151**	0	**151**	0	0	0	0	0	265	0	265	**416**
Total Volume	0	0	0	0	0	535	1	536	0	0	0	0	0	1018	1	1019	1555
% App. Total	0	0	0		0	99.8	0.2		0	0	0		0	99.9	0.1		
PHF	.000	.000	.000	.000	.000	.886	.250	.887	.000	.000	.000	.000	.000	.950	.250	.951	.934

Counts Unlimited
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(951) 268-6268

County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	141	0	141	0	0	0	0	0	251	0	251
+15 mins.	0	0	0	0	0	112	0	112	0	0	0	0	0	**268**	0	**268**
+30 mins.	0	0	0	0	0	131	**1**	132	0	0	0	0	0	234	**1**	235
+45 mins.	0	0	0	0	0	**151**	0	**151**	0	0	0	0	0	265	0	265
Total Volume	0	0	0	0	0	535	1	536	0	0	0	0	0	1018	1	1019
% App. Total	0	0	0		0	99.8	0.2		0	0	0		0	99.9	0.1	
PHF	.000	.000	.000	.000	.000	.886	.250	.887	.000	.000	.000	.000	.000	.950	.250	.951

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County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

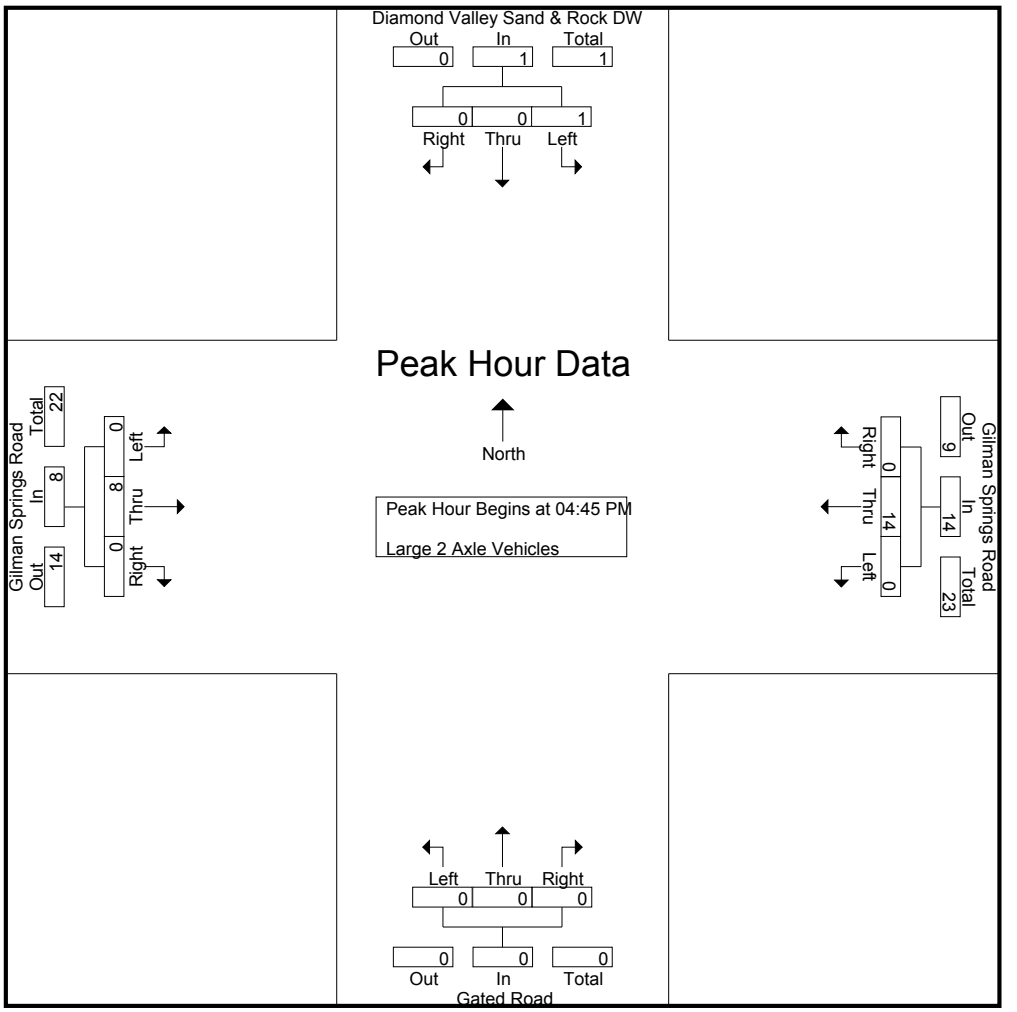
	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	0	1	0	7	0	7	0	0	0	0	0	5	0	5	13
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:30 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
04:45 PM	1	0	0	1	0	7	0	7	0	0	0	0	0	2	0	2	10
Total	2	0	0	2	0	20	0	20	0	0	0	0	0	12	0	12	34
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	5
Total	0	0	0	0	0	7	0	7	0	0	0	0	0	11	0	11	18
Grand Total	2	0	0	2	0	27	0	27	0	0	0	0	0	23	0	23	52
Apprch %	100	0	0		0	100	0		0	0	0		0	100	0		
Total %	3.8	0	0	3.8	0	51.9	0	51.9	0	0	0	0	0	44.2	0	44.2	

	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**1**	0	0	**1**	0	**7**	0	**7**	0	0	0	0	0	**2**	0	**2**	**10**
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:15 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
Total Volume	1	0	0	1	0	14	0	14	0	0	0	0	0	8	0	8	23
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000	.000	1.00	.000	1.00	.575

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(951) 268-6268

County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	**1**	0	0	**1**	0	**7**	0	**7**	0	0	0	0	0	**2**	0	**2**
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
+45 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
Total Volume	1	0	0	1	0	14	0	14	0	0	0	0	0	8	0	8
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0	
PHF	.250	.000	.000	.250	.000	.500	.000	.500	.000	.000	.000	.000	.000	1.000	.000	1.000

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County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

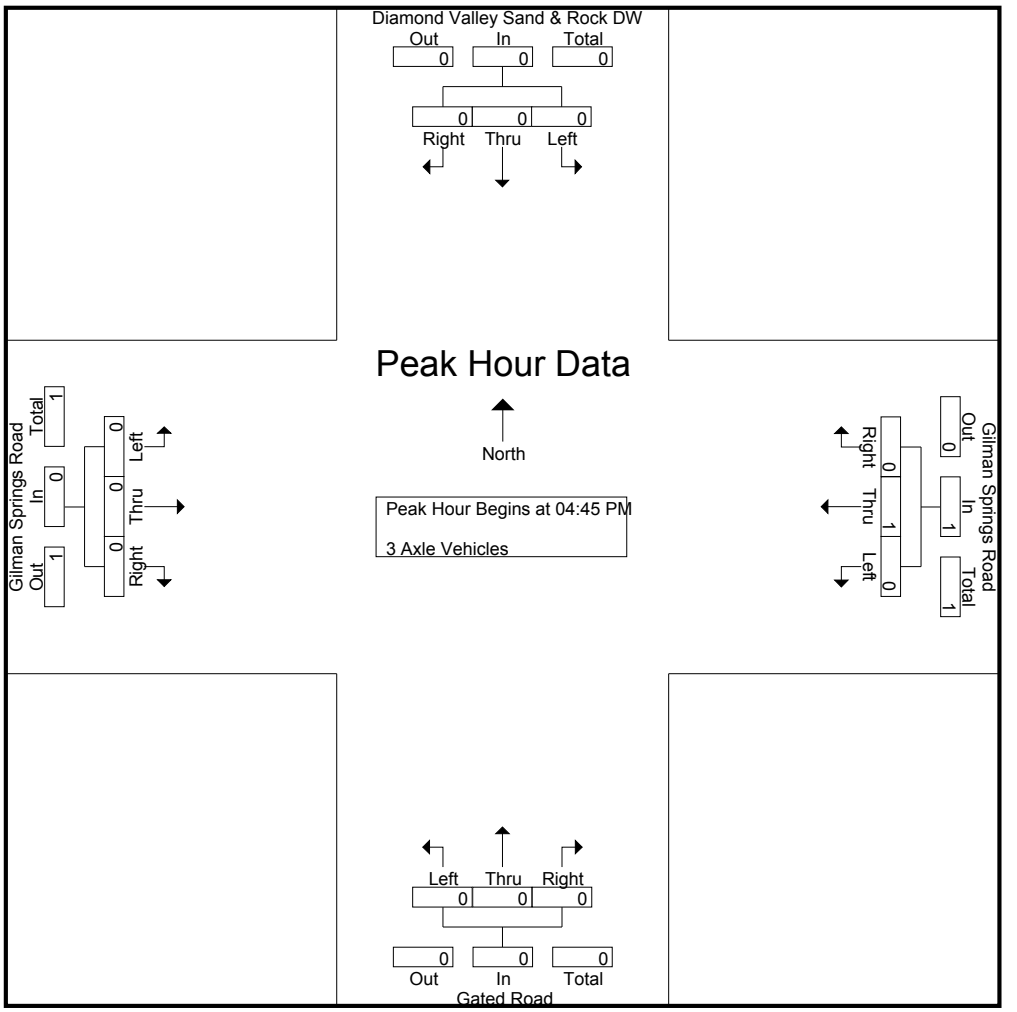
	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	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	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Grand Total	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Apprch %	0	0	0		0	100	0		0	0	0		0	0	0		
Total %	0	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0	

	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
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	**1**	0	**1**	0	0	0	0	0	0	0	0	**1**
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% App. Total	0	0	0		0	100	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250

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County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 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	**1**	0	**1**	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	0	0	0
% App. Total	0	0	0		0	100	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000

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County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

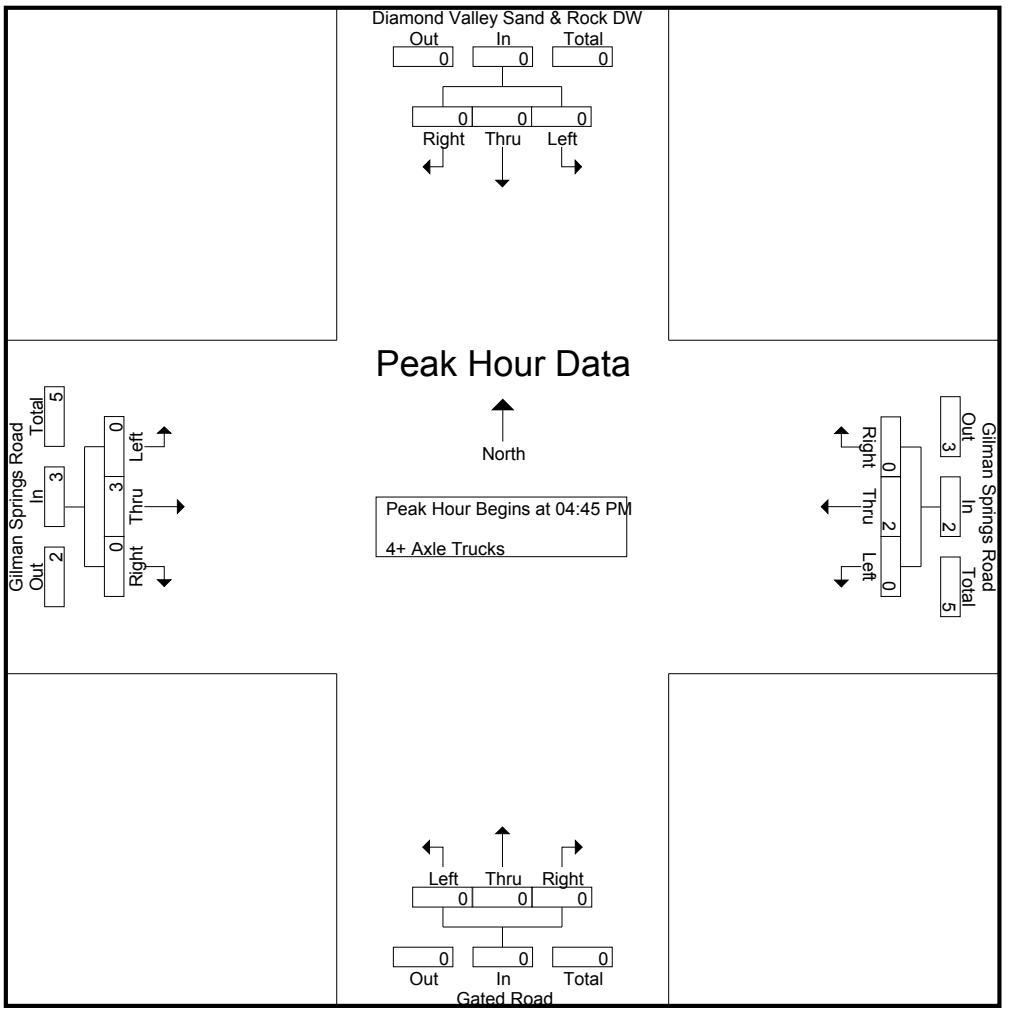
	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	7	0	7	0	0	0	0	0	2	0	2	9
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	2	0	2	0	0	0	0	0	2	0	2	4
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
Grand Total	0	0	0	0	0	10	0	10	0	0	0	0	0	5	0	5	15
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	66.7	0	66.7	0	0	0	0	0	33.3	0	33.3	

	Diamond Valley Sand & Rock DW Southbound				Gilman Springs Road Westbound				Gated Road Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	**2**	0	**2**	**4**
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
% 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	.375	.000	.375	.313

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County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road
Weather: Clear

File Name : 05_CRV_Diamond Valley S&R_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	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	**2**	0	**2**	0	0	0	0	0	**2**	0	**2**
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3
% 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	.375	.000	.375

Location: County of Riverside
N/S: Diamond Valley Sand & Rock DW
E/W: Gilman Springs Road

Date: 2/7/2018
Date: Wednesday

PEDESTRIANS

	North Leg Commercial Driveway	East Leg Gilman Springs Road	South Leg Gated Road	West Leg Gilman Springs Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Commercial Driveway	East Leg Gilman Springs Road	South Leg Gated Road	West Leg Gilman Springs Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: County of Riverside
N/S: Diamond Valley Sand
E/W: Gilman Springs Road

2/7/2018
Wednesda

Date: 2/7/2018
Date: Wednesday

BICYCLES

	Southbound Commercial Driveway			Westbound Gilman Springs Road			Northbound Gated Road			Eastbound Gilman Springs Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Commercial Driveway			Westbound Gilman Springs Road			Northbound Gated Road			Eastbound Gilman Springs Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

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

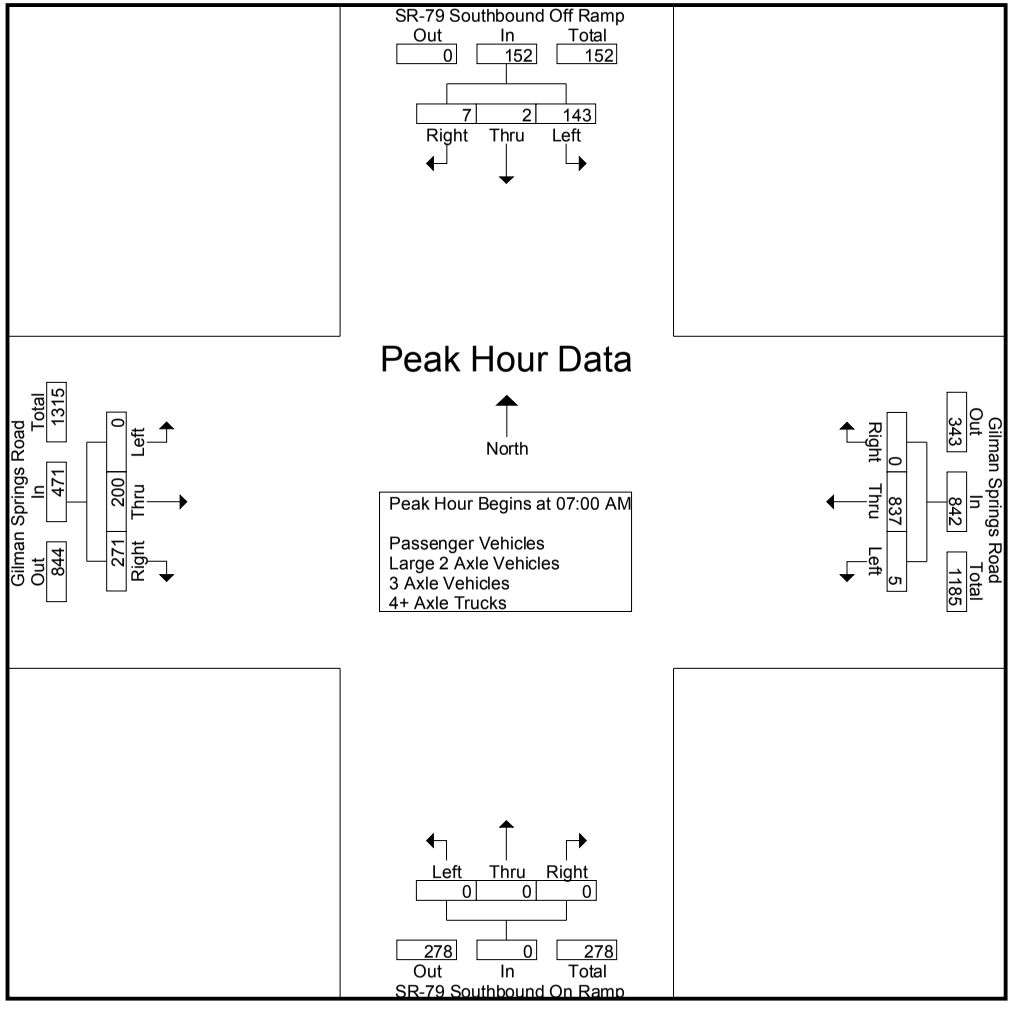
	SR-79 Southbound Off Ramp Southbound					Gilman Springs Road Westbound					SR-79 Southbound On Ramp Northbound					Gilman Springs Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	34	0	0	0	34	0	230	0	0	230	0	0	0	0	0	0	47	59	12	106	12	370	382
07:15 AM	27	2	2	2	31	2	216	0	0	218	0	0	0	0	0	0	41	67	7	108	9	357	366
07:30 AM	32	0	2	1	34	0	214	0	0	214	0	0	0	0	0	0	57	80	26	137	27	385	412
07:45 AM	50	0	3	3	53	3	177	0	0	180	0	0	0	0	0	0	55	65	21	120	24	353	377
Total	143	2	7	6	152	5	837	0	0	842	0	0	0	0	0	0	200	271	66	471	72	1465	1537
08:00 AM	33	0	3	1	36	1	160	0	0	161	0	0	0	0	0	0	34	79	12	113	13	310	323
08:15 AM	23	0	2	0	25	0	175	0	0	175	0	0	0	0	0	0	25	66	40	91	40	291	331
08:30 AM	35	1	1	1	37	0	162	0	0	162	0	0	0	0	0	0	33	65	20	98	21	297	318
08:45 AM	25	0	0	0	25	2	137	0	0	139	0	0	0	0	0	0	41	71	19	112	19	276	295
Total	116	1	6	2	123	3	634	0	0	637	0	0	0	0	0	0	133	281	91	414	93	1174	1267
Grand Total	259	3	13	8	275	8	1471	0	0	1479	0	0	0	0	0	0	333	552	157	885	165	2639	2804
Apprch %	94.2	1.1	4.7			0.5	99.5	0			0	0	0			0	37.6	62.4					
Total %	9.8	0.1	0.5		10.4	0.3	55.7	0		56	0	0	0		0	0	12.6	20.9		33.5	5.9	94.1	
Passenger Vehicles	247	3	6		262	8	1437	0		1445	0	0	0		0	0	311	515		975	0	0	2682
% Passenger Vehicles	95.4	100	46.2	75	92.6	100	97.7	0	0	97.7	0	0	0	0	0	0	93.4	93.3	94.9	93.6	0	0	95.6
Large 2 Axle Vehicles	10	0	1		11	0	10	0		10	0	0	0		0	0	10	25		40	0	0	61
% Large 2 Axle Vehicles	3.9	0	7.7	0	3.9	0	0.7	0	0	0.7	0	0	0	0	0	0	3	4.5	3.2	3.8	0	0	2.2
3 Axle Vehicles	1	0	2		3	0	9	0		9	0	0	0		0	0	4	2		7	0	0	19
% 3 Axle Vehicles	0.4	0	15.4	0	1.1	0	0.6	0	0	0.6	0	0	0	0	0	0	1.2	0.4	0.6	0.7	0	0	0.7
4+ Axle Trucks	1	0	4		7	0	15	0		15	0	0	0		0	0	8	10		20	0	0	42
% 4+ Axle Trucks	0.4	0	30.8	25	2.5	0	1	0	0	1	0	0	0	0	0	0	2.4	1.8	1.3	1.9	0	0	1.5

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	34	0	0	34	0	**230**	0	**230**	0	0	0	0	0	47	59	106	370
07:15 AM	27	**2**	2	31	2	216	0	218	0	0	0	0	0	41	67	108	357
07:30 AM	32	0	2	34	0	214	0	214	0	0	0	0	0	**57**	**80**	**137**	**385**
07:45 AM	**50**	0	**3**	**53**	**3**	177	0	180	0	0	0	0	0	55	65	120	353
Total Volume	143	2	7	152	5	837	0	842	0	0	0	0	0	200	271	471	1465
% App. Total	94.1	1.3	4.6		0.6	99.4	0		0	0	0		0	42.5	57.5		
PHF	.715	.250	.583	.717	.417	.910	.000	.915	.000	.000	.000	.000	.000	.877	.847	.859	.951

Counts Unlimited
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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
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File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 3

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:00 AM				07:00 AM				07:15 AM				
+0 mins.	27	**2**	2	31	0	**230**	0	**230**	0	0	0	0	0	41	67	108	
+15 mins.	32	0	2	34	2	216	0	218	0	0	0	0	0	**57**	**80**	**137**	
+30 mins.	**50**	0	**3**	**53**	0	214	0	214	0	0	0	0	0	55	65	120	
+45 mins.	33	0	3	36	**3**	177	0	180	0	0	0	0	0	34	79	113	
Total Volume	142	2	10	154	5	837	0	842	0	0	0	0	0	187	291	478	
% App. Total	92.2	1.3	6.5		0.6	99.4	0		0	0	0		0	39.1	60.9		
PHF	.710	.250	.833	.726	.417	.910	.000	.915	.000	.000	.000	.000	.000	.820	.909	.872	

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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Passenger Vehicles

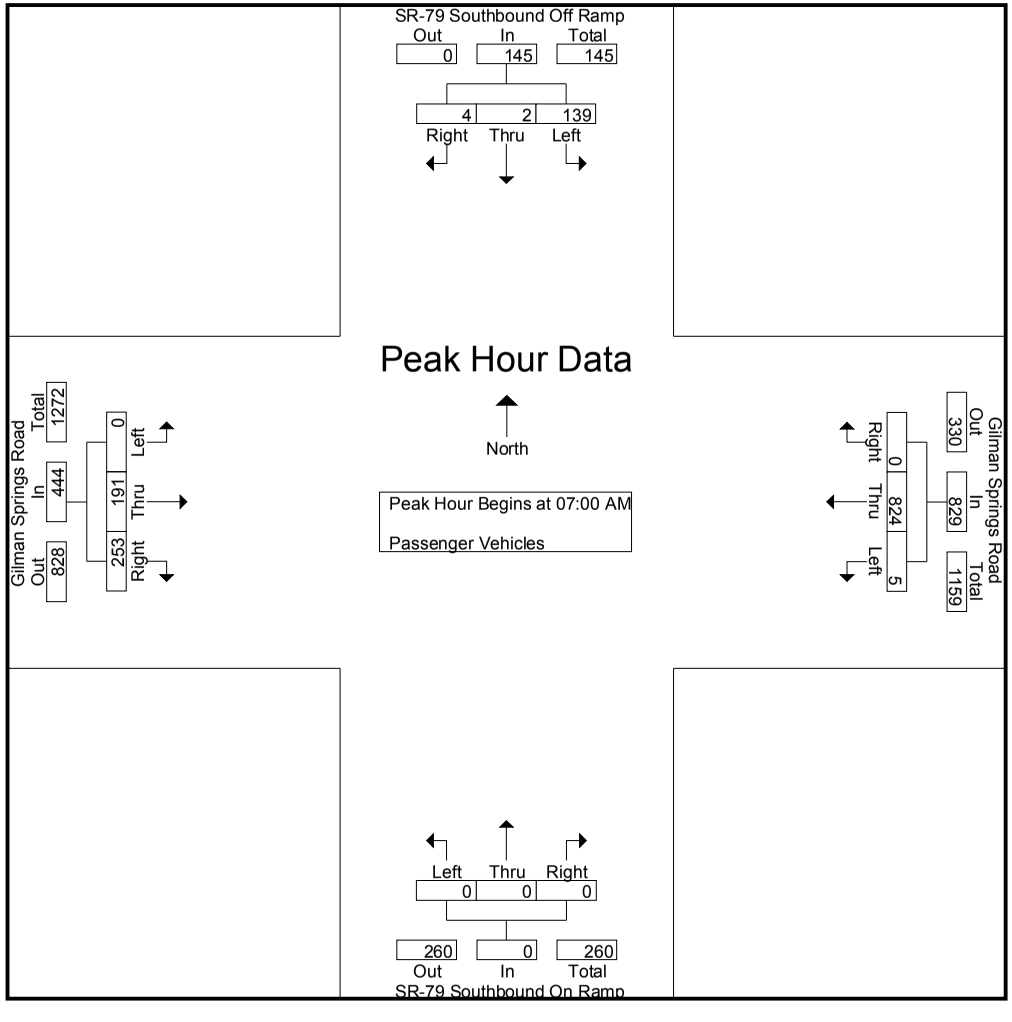
	SR-79 Southbound Off Ramp Southbound					Gilman Springs Road Westbound					SR-79 Southbound On Ramp Northbound					Gilman Springs Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	34	0	0	0	34	0	229	0	0	229	0	0	0	0	0	0	42	52	12	94	12	357	369
07:15 AM	26	2	2	2	30	2	214	0	0	216	0	0	0	0	0	0	40	63	7	103	9	349	358
07:30 AM	29	0	1	1	30	0	213	0	0	213	0	0	0	0	0	0	55	77	25	132	26	375	401
07:45 AM	50	0	1	1	51	3	168	0	0	171	0	0	0	0	0	0	54	61	20	115	21	337	358
Total	139	2	4	4	145	5	824	0	0	829	0	0	0	0	0	0	191	253	64	444	68	1418	1486
08:00 AM	33	0	1	1	34	1	155	0	0	156	0	0	0	0	0	0	28	73	10	101	11	291	302
08:15 AM	21	0	0	0	21	0	170	0	0	170	0	0	0	0	0	0	24	62	37	86	37	277	314
08:30 AM	32	1	1	1	34	0	156	0	0	156	0	0	0	0	0	0	29	60	19	89	20	279	299
08:45 AM	22	0	0	0	22	2	132	0	0	134	0	0	0	0	0	0	39	67	19	106	19	262	281
Total	108	1	2	2	111	3	613	0	0	616	0	0	0	0	0	0	120	262	85	382	87	1109	1196
Grand Total	247	3	6	6	256	8	1437	0	0	1445	0	0	0	0	0	0	311	515	149	826	155	2527	2682
Apprch %	96.5	1.2	2.3			0.6	99.4	0			0	0	0			0	37.7	62.3					
Total %	9.8	0.1	0.2		10.1	0.3	56.9	0		57.2	0	0	0		0	0	12.3	20.4		32.7	5.8	94.2	

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	34	0	0	34	0	**229**	0	**229**	0	0	0	0	0	42	52	94	357
07:15 AM	26	**2**	**2**	30	2	214	0	216	0	0	0	0	0	40	63	103	349
07:30 AM	29	0	1	30	0	213	0	213	0	0	0	0	0	**55**	**77**	**132**	**375**
07:45 AM	**50**	0	1	**51**	**3**	168	0	171	0	0	0	0	0	54	61	115	337
Total Volume	139	2	4	145	5	824	0	829	0	0	0	0	0	191	253	444	1418
% App. Total	95.9	1.4	2.8		0.6	99.4	0		0	0	0		0	43	57		
PHF	.695	.250	.500	.711	.417	.900	.000	.905	.000	.000	.000	.000	.000	.868	.821	.841	.945

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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 3

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	34	0	0	34	0	**229**	0	**229**	0	0	0	0	0	42	52	94	
+15 mins.	26	**2**	**2**	30	2	214	0	216	0	0	0	0	0	40	63	103	
+30 mins.	29	0	1	30	0	213	0	213	0	0	0	0	0	**55**	**77**	**132**	
+45 mins.	**50**	0	1	**51**	**3**	168	0	171	0	0	0	0	0	54	61	115	
Total Volume	139	2	4	145	5	824	0	829	0	0	0	0	0	191	253	444	
% App. Total	95.9	1.4	2.8		0.6	99.4	0		0	0	0		0	43	57		
PHF	.695	.250	.500	.711	.417	.900	.000	.905	.000	.000	.000	.000	.000	.868	.821	.841	

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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

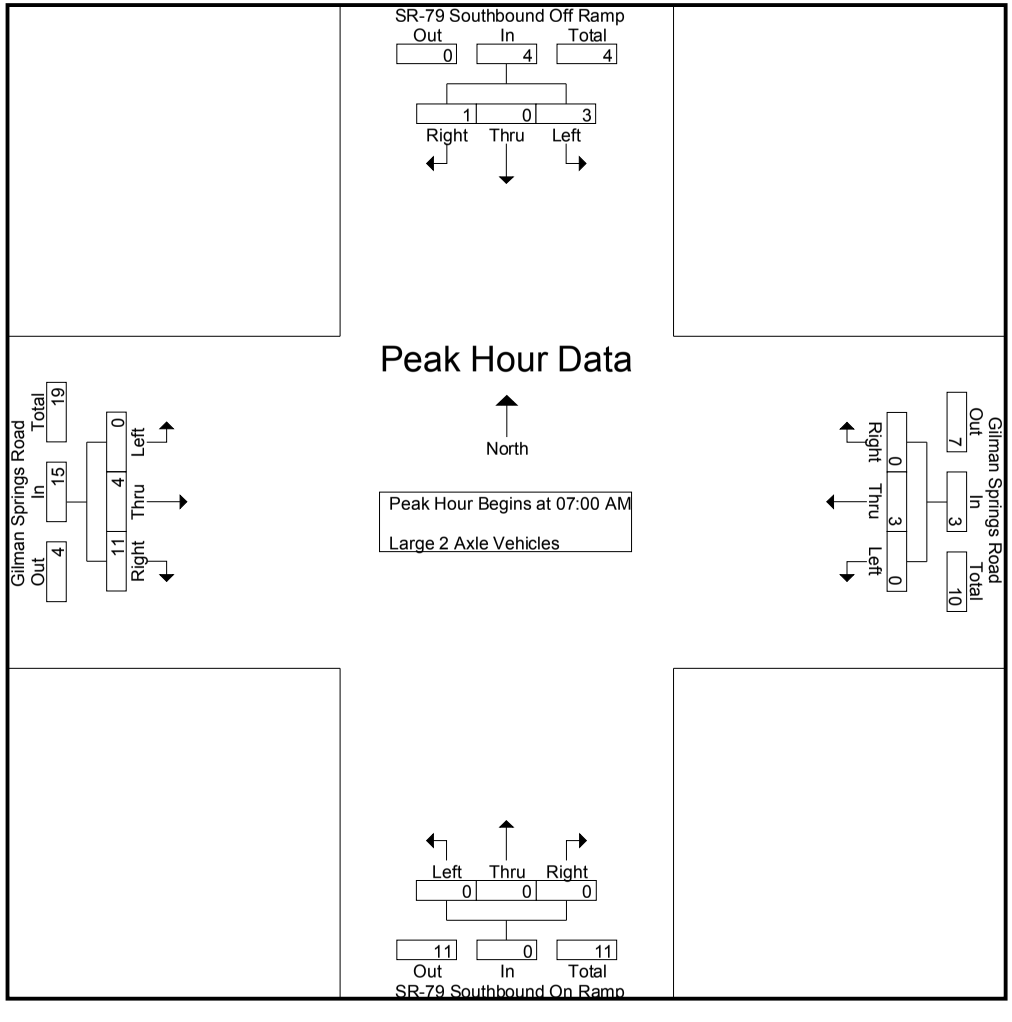
	SR-79 Southbound Off Ramp Southbound					Gilman Springs Road Westbound					SR-79 Southbound On Ramp Northbound					Gilman Springs Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	7	0	7	7
07:15 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	3	0	4	0	6	6
07:30 AM	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	1	5	6
07:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	2	0	2	0	4	4
Total	3	0	1	0	4	0	3	0	0	3	0	0	0	0	0	0	4	11	1	15	1	22	23
08:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	3	1	8	1	10	11
08:15 AM	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0	0	0	3	3	3	3	8	11
08:30 AM	3	0	0	0	3	0	2	0	0	2	0	0	0	0	0	0	1	4	0	5	0	10	10
08:45 AM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	6	6
Total	7	0	0	0	7	0	7	0	0	7	0	0	0	0	0	0	6	14	4	20	4	34	38
Grand Total	10	0	1	0	11	0	10	0	0	10	0	0	0	0	0	0	10	25	5	35	5	56	61
Apprch %	90.9	0	9.1			0	100	0			0	0	0			0	28.6	71.4					
Total %	17.9	0	1.8		19.6	0	17.9	0		17.9	0	0	0		0	0	17.9	44.6		62.5	8.2	91.8	

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	**4**	**7**	**7**
07:15 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	3	4	6
07:30 AM	**2**	0	**1**	**3**	0	0	0	0	0	0	0	0	0	0	2	2	5
07:45 AM	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	0	2	2	4
Total Volume	3	0	1	4	0	3	0	3	0	0	0	0	0	4	11	15	22
% App. Total	75	0	25		0	100	0		0	0	0		0	26.7	73.3		
PHF	.375	.000	.250	.333	.000	.375	.000	.375	.000	.000	.000	.000	.000	.333	.688	.536	.786

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

County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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(951) 268-6268

County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 3

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	**4**	**7**	
+15 mins.	1	0	0	1	0	1	0	1	0	0	0	0	0	1	3	4	
+30 mins.	**2**	0	**1**	**3**	0	0	0	0	0	0	0	0	0	0	2	2	
+45 mins.	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	0	2	2	
Total Volume	3	0	1	4	0	3	0	3	0	0	0	0	0	4	11	15	
% App. Total	75	0	25		0	100	0		0	0	0		0	26.7	73.3		
PHF	.375	.000	.250	.333	.000	.375	.000	.375	.000	.000	.000	.000	.000	.333	.688	.536	

Counts Unlimited
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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

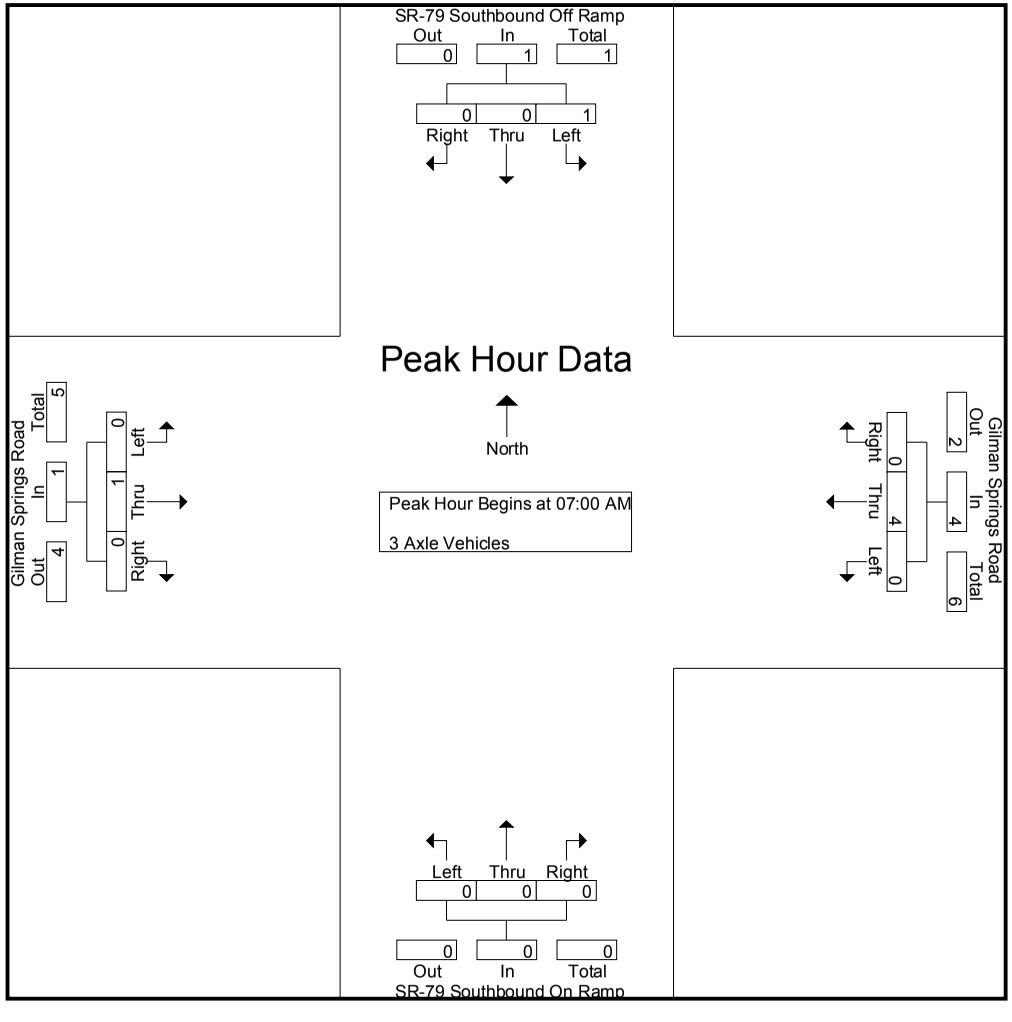
	SR-79 Southbound Off Ramp Southbound					Gilman Springs Road Westbound					SR-79 Southbound On Ramp Northbound					Gilman Springs Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
07:30 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	4	4
Total	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	6	6
08:00 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
08:15 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	3	3
08:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	1	1	3	1	4	5
08:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	3	3
Total	0	0	2	0	2	0	5	0	0	5	0	0	0	0	0	0	3	2	1	5	1	12	13
Grand Total	1	0	2	0	3	0	9	0	0	9	0	0	0	0	0	0	4	2	1	6	1	18	19
Apprch %	33.3	0	66.7			0	100	0			0	0	0			0	66.7	33.3					
Total %	5.6	0	11.1		16.7	0	50	0		50	0	0	0		0	0	22.2	11.1		33.3	5.3	94.7	

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	**3**	0	**3**	0	0	0	0	0	**1**	0	**1**	**4**
Total Volume	1	0	0	1	0	4	0	4	0	0	0	0	0	1	0	1	6
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.333	.000	.333	.000	.000	.000	.000	.000	.250	.000	.250	.375

Counts Unlimited
PO Box 1178
Corona, CA 92878
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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
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File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 3

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	
+30 mins.	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	**3**	0	**3**	0	0	0	0	0	**1**	0	**1**	
Total Volume	1	0	0	1	0	4	0	4	0	0	0	0	0	1	0	1	
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.333	.000	.333	.000	.000	.000	.000	.000	.250	.000	.250	

Counts Unlimited
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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

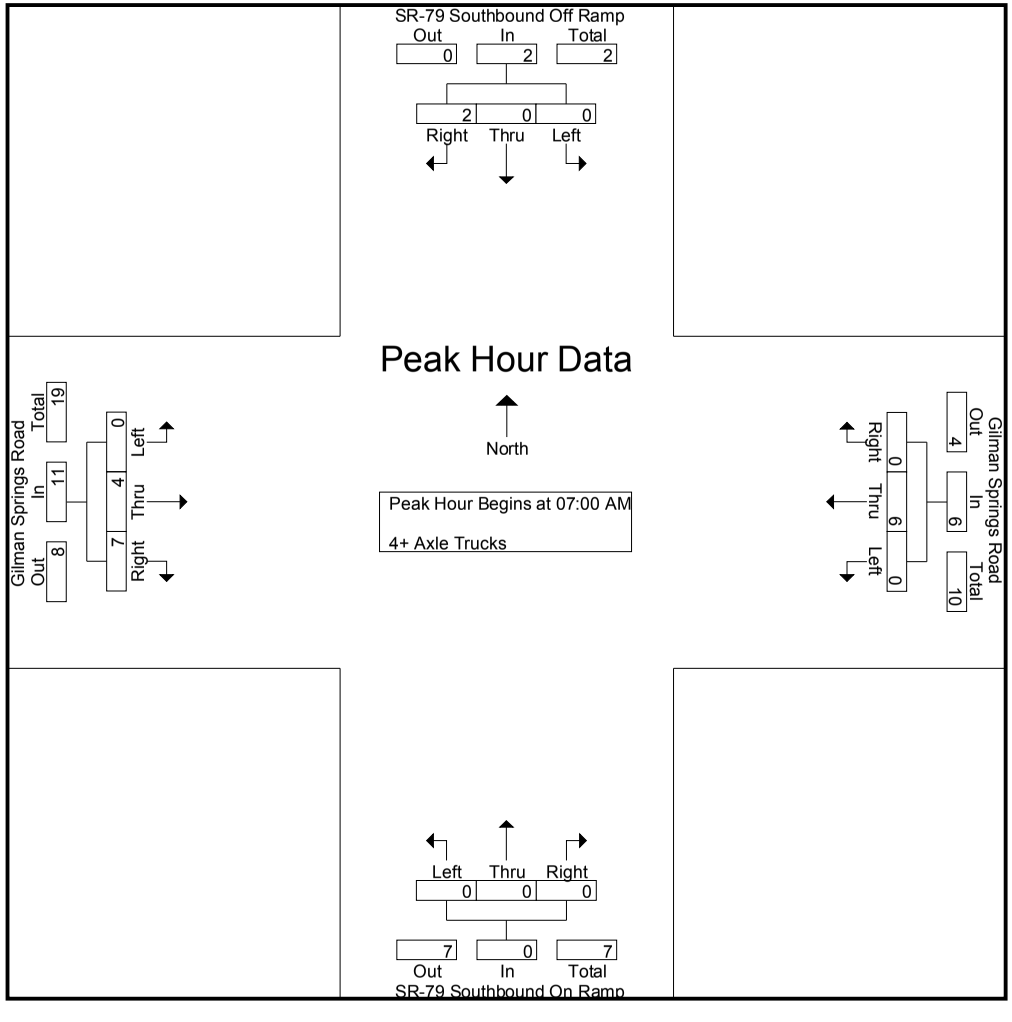
	SR-79 Southbound Off Ramp Southbound					Gilman Springs Road Westbound					SR-79 Southbound On Ramp Northbound					Gilman Springs Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	3	0	5	0	6	6
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1
07:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	0	4	4
07:45 AM	0	0	2	2	2	0	4	0	0	4	0	0	0	0	0	0	0	2	1	2	3	8	11
Total	0	0	2	2	2	0	6	0	0	6	0	0	0	0	0	0	4	7	1	11	3	19	22
08:00 AM	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	1	3	1	4	1	7	8
08:15 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	3	3
08:30 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	4	4
08:45 AM	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	5	5
Total	1	0	2	0	3	0	9	0	0	9	0	0	0	0	0	0	4	3	1	7	1	19	20
Grand Total	1	0	4	2	5	0	15	0	0	15	0	0	0	0	0	0	8	10	2	18	4	38	42
Apprch %	20	0	80			0	100	0			0	0	0			0	44.4	55.6					
Total %	2.6	0	10.5		13.2	0	39.5	0		39.5	0	0	0		0	0	21.1	26.3		47.4	9.5	90.5	

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	**2**	**3**	**5**	6
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	1	3	4
07:45 AM	0	0	**2**	**2**	0	**4**	0	**4**	0	0	0	0	0	0	2	2	**8**
Total Volume	0	0	2	2	0	6	0	6	0	0	0	0	0	4	7	11	19
% App. Total	0	0	100		0	100	0		0	0	0		0	36.4	63.6		
PHF	.000	.000	.250	.250	.000	.375	.000	.375	.000	.000	.000	.000	.000	.500	.583	.550	.594

Counts Unlimited
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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 3

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	**2**	**3**	**5**	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	2	1	3	
+45 mins.	0	0	**2**	**2**	0	**4**	0	**4**	0	0	0	0	0	0	2	2	
Total Volume	0	0	2	2	0	6	0	6	0	0	0	0	0	4	7	11	
% App. Total	0	0	100		0	100	0		0	0	0		0	36.4	63.6		
PHF	.000	.000	.250	.250	.000	.375	.000	.375	.000	.000	.000	.000	.000	.500	.583	.550	

Counts Unlimited
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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

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

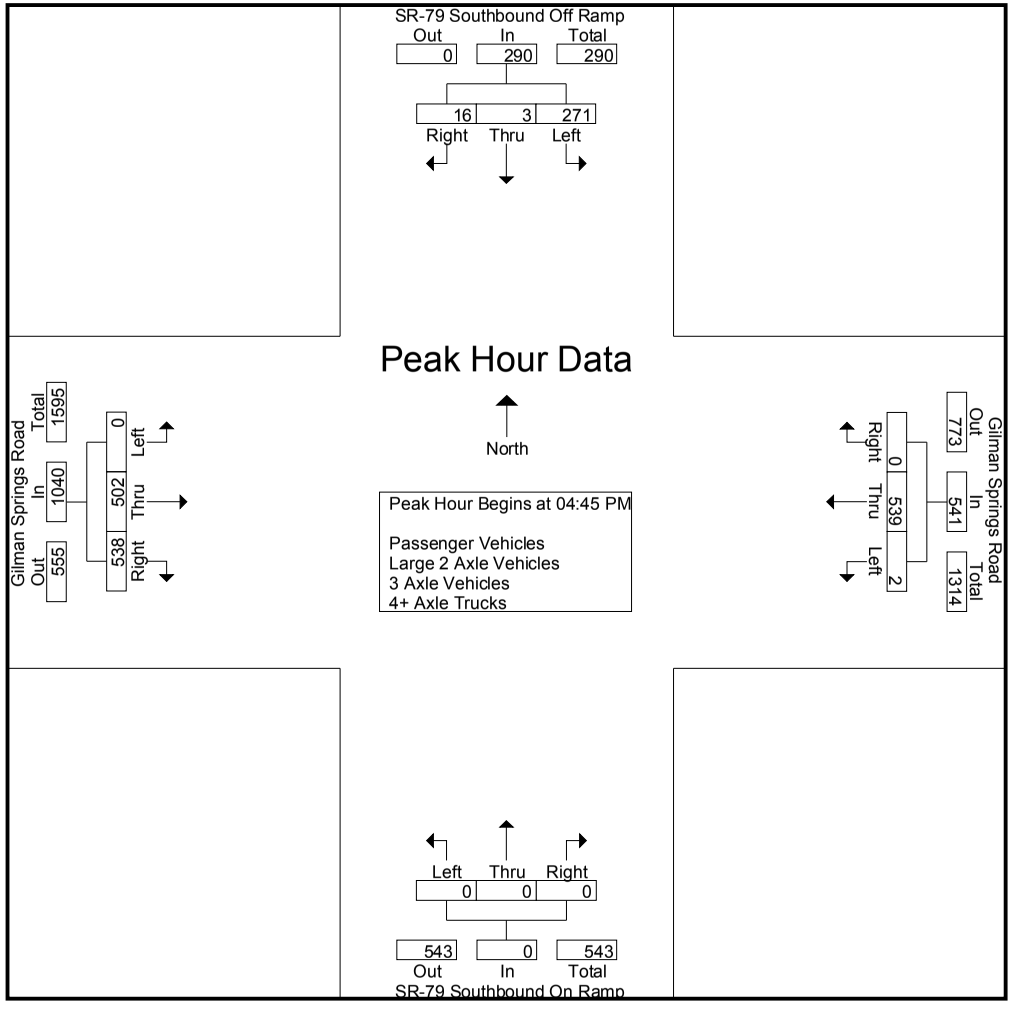
	SR-79 Southbound Off Ramp Southbound					Gilman Springs Road Westbound					SR-79 Southbound On Ramp Northbound					Gilman Springs Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	54	1	3	1	58	2	136	0	0	138	0	0	0	0	0	0	120	139	35	259	36	455	491
04:15 PM	60	1	2	0	63	1	136	0	0	137	0	0	0	0	0	0	114	136	33	250	33	450	483
04:30 PM	67	1	3	3	71	0	107	0	0	107	0	0	0	0	0	0	89	132	35	221	38	399	437
04:45 PM	63	1	8	6	72	1	141	0	0	142	0	0	0	0	0	0	150	133	28	283	34	497	531
Total	244	4	16	10	264	4	520	0	0	524	0	0	0	0	0	0	473	540	131	1013	141	1801	1942
05:00 PM	73	1	3	2	77	0	112	0	0	112	0	0	0	0	0	0	127	134	41	261	43	450	493
05:15 PM	66	1	2	2	69	0	146	0	0	146	0	0	0	0	0	0	109	136	32	245	34	460	494
05:30 PM	69	0	3	1	72	1	140	0	0	141	0	0	0	0	0	0	116	135	41	251	42	464	506
05:45 PM	63	1	4	0	68	1	120	0	0	121	0	0	0	0	0	0	120	133	40	253	40	442	482
Total	271	3	12	5	286	2	518	0	0	520	0	0	0	0	0	0	472	538	154	1010	159	1816	1975
Grand Total	515	7	28	15	550	6	1038	0	0	1044	0	0	0	0	0	0	945	1078	285	2023	300	3617	3917
Apprch %	93.6	1.3	5.1			0.6	99.4	0			0	0	0			0	46.7	53.3					
Total %	14.2	0.2	0.8		15.2	0.2	28.7	0		28.9	0	0	0		0	0	26.1	29.8		55.9	7.7	92.3	
Passenger Vehicles	503	7	24		546	6	1012	0		1018	0	0	0		0	0	935	1064		2276	0	0	3840
% Passenger Vehicles	97.7	100	85.7	80	96.6	100	97.5	0	0	97.5	0	0	0	0	0	0	98.9	98.7	97.2	98.6	0	0	98
Large 2 Axle Vehicles	9	0	2		12	0	15	0		15	0	0	0		0	0	9	11		26	0	0	53
% Large 2 Axle Vehicles	1.7	0	7.1	6.7	2.1	0	1.4	0	0	1.4	0	0	0	0	0	0	1	1	2.1	1.1	0	0	1.4
3 Axle Vehicles	0	0	0		0	0	2	0		2	0	0	0		0	0	0	0		0	0	0	2
% 3 Axle Vehicles	0	0	0	0	0	0	0.2	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	3	0	2		7	0	9	0		9	0	0	0		0	0	1	3		6	0	0	22
% 4+ Axle Trucks	0.6	0	7.1	13.3	1.2	0	0.9	0	0	0.9	0	0	0	0	0	0	0.1	0.3	0.7	0.3	0	0	0.6

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	63	**1**	**8**	72	**1**	141	0	142	0	0	0	0	0	**150**	133	**283**	**497**
05:00 PM	**73**	1	3	**77**	0	112	0	112	0	0	0	0	0	127	134	261	450
05:15 PM	66	1	2	69	0	**146**	0	**146**	0	0	0	0	0	109	**136**	245	460
05:30 PM	69	0	3	72	1	140	0	141	0	0	0	0	0	116	135	251	464
Total Volume	271	3	16	290	2	539	0	541	0	0	0	0	0	502	538	1040	1871
% App. Total	93.4	1	5.5		0.4	99.6	0		0	0	0		0	48.3	51.7		
PHF	.928	.750	.500	.942	.500	.923	.000	.926	.000	.000	.000	.000	.000	.837	.989	.919	.941

Counts Unlimited
PO Box 1178
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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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County of Riverside
N/S: SR-79 Southbound Ramps
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Page No : 3

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:00 PM				04:45 PM				
+0 mins.	63	**1**	**8**	72	**1**	141	0	142	0	0	0	0	0	**150**	133	**283**	
+15 mins.	**73**	1	3	**77**	0	112	0	112	0	0	0	0	0	127	134	261	
+30 mins.	66	1	2	69	0	**146**	0	**146**	0	0	0	0	0	109	**136**	245	
+45 mins.	69	0	3	72	1	140	0	141	0	0	0	0	0	116	135	251	
Total Volume	271	3	16	290	2	539	0	541	0	0	0	0	0	502	538	1040	
% App. Total	93.4	1	5.5		0.4	99.6	0		0	0	0		0	48.3	51.7		
PHF	.928	.750	.500	.942	.500	.923	.000	.926	.000	.000	.000	.000	.000	.837	.989	.919	

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County of Riverside
N/S: SR-79 Southbound Ramps
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File Name : 06_CRV_79S_Gilman Springs PM
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Groups Printed- Passenger Vehicles

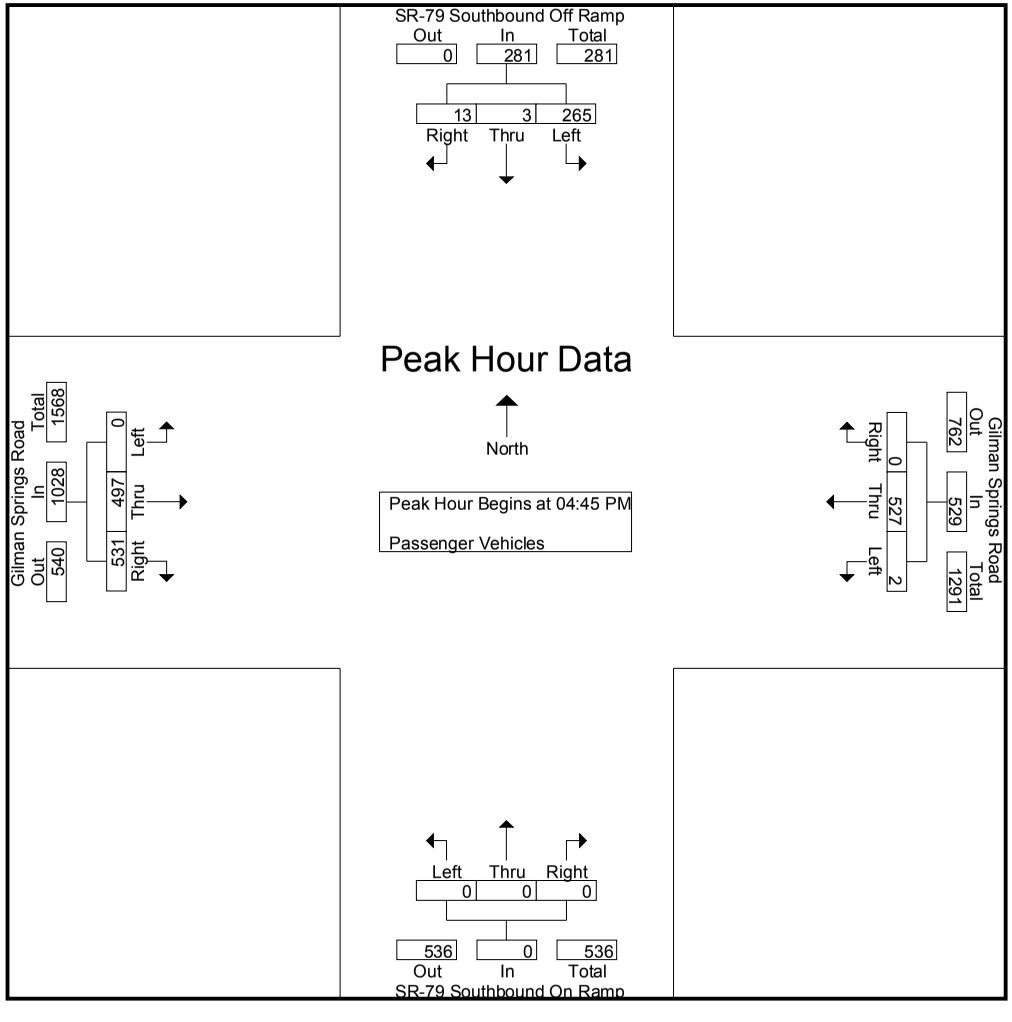
	SR-79 Southbound Off Ramp Southbound					Gilman Springs Road Westbound					SR-79 Southbound On Ramp Northbound					Gilman Springs Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	52	1	2	1	55	2	132	0	0	134	0	0	0	0	0	0	119	136	33	255	34	444	478
04:15 PM	59	1	2	0	62	1	132	0	0	133	0	0	0	0	0	0	113	134	33	247	33	442	475
04:30 PM	64	1	3	3	68	0	103	0	0	103	0	0	0	0	0	0	88	132	35	220	38	391	429
04:45 PM	61	1	6	4	68	1	137	0	0	138	0	0	0	0	0	0	147	132	28	279	32	485	517
Total	236	4	13	8	253	4	504	0	0	508	0	0	0	0	0	0	467	534	129	1001	137	1762	1899
05:00 PM	72	1	2	1	75	0	111	0	0	111	0	0	0	0	0	0	126	132	40	258	41	444	485
05:15 PM	66	1	2	2	69	0	143	0	0	143	0	0	0	0	0	0	109	135	31	244	33	456	489
05:30 PM	66	0	3	1	69	1	136	0	0	137	0	0	0	0	0	0	115	132	39	247	40	453	493
05:45 PM	63	1	4	0	68	1	118	0	0	119	0	0	0	0	0	0	118	131	38	249	38	436	474
Total	267	3	11	4	281	2	508	0	0	510	0	0	0	0	0	0	468	530	148	998	152	1789	1941
Grand Total	503	7	24	12	534	6	1012	0	0	1018	0	0	0	0	0	0	935	1064	277	1999	289	3551	3840
Apprch %	94.2	1.3	4.5			0.6	99.4	0			0	0	0			0	46.8	53.2					
Total %	14.2	0.2	0.7		15	0.2	28.5	0		28.7	0	0	0		0	0	26.3	30		56.3	7.5	92.5	

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	61	**1**	**6**	68	**1**	137	0	138	0	0	0	0	0	**147**	132	**279**	**485**
05:00 PM	**72**	1	2	**75**	0	111	0	111	0	0	0	0	0	126	132	258	444
05:15 PM	66	1	2	69	0	**143**	0	**143**	0	0	0	0	0	109	**135**	244	456
05:30 PM	66	0	3	69	1	136	0	137	0	0	0	0	0	115	132	247	453
Total Volume	265	3	13	281	2	527	0	529	0	0	0	0	0	497	531	1028	1838
% App. Total	94.3	1.1	4.6		0.4	99.6	0		0	0	0		0	48.3	51.7		
PHF	.920	.750	.542	.937	.500	.921	.000	.925	.000	.000	.000	.000	.000	.845	.983	.921	.947

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

County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 3

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	61	**1**	**6**	68	**1**	137	0	138	0	0	0	0	0	**147**	132	**279**	
+15 mins.	**72**	1	2	**75**	0	111	0	111	0	0	0	0	0	126	132	258	
+30 mins.	66	1	2	69	0	**143**	0	**143**	0	0	0	0	0	109	**135**	244	
+45 mins.	66	0	3	69	1	136	0	137	0	0	0	0	0	115	132	247	
Total Volume	265	3	13	281	2	527	0	529	0	0	0	0	0	497	531	1028	
% App. Total	94.3	1.1	4.6		0.4	99.6	0		0	0	0		0	48.3	51.7		
PHF	.920	.750	.542	.937	.500	.921	.000	.925	.000	.000	.000	.000	.000	.845	.983	.921	

Counts Unlimited
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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

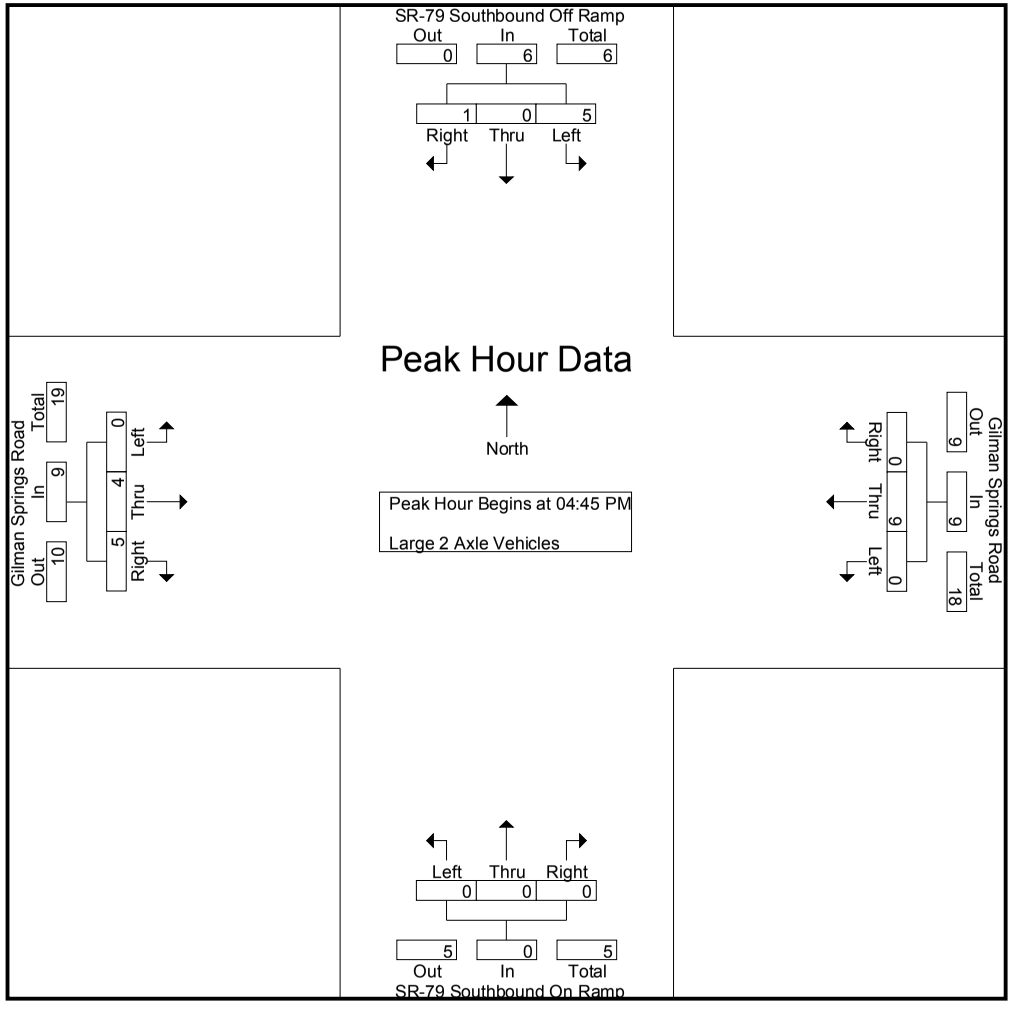
	SR-79 Southbound Off Ramp Southbound					Gilman Springs Road Westbound					SR-79 Southbound On Ramp Northbound					Gilman Springs Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	0	1	0	2	0	3	0	0	3	0	0	0	0	0	0	1	2	1	3	1	8	9
04:15 PM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	2	0	3	0	5	5
04:30 PM	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	5	5
04:45 PM	2	0	1	1	3	0	4	0	0	4	0	0	0	0	0	0	2	1	0	3	1	10	11
Total	6	0	2	1	8	0	10	0	0	10	0	0	0	0	0	0	5	5	1	10	2	28	30
05:00 PM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	2	1	3	1	5	6
05:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	1	1	1	1	3	4
05:30 PM	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	1	1	1	2	1	6	7
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	4	2	4	6
Total	3	0	0	0	3	0	5	0	0	5	0	0	0	0	0	0	4	6	5	10	5	18	23
Grand Total	9	0	2	1	11	0	15	0	0	15	0	0	0	0	0	0	9	11	6	20	7	46	53
Apprch %	81.8	0	18.2			0	100	0			0	0	0			0	45	55					
Total %	19.6	0	4.3		23.9	0	32.6	0		32.6	0	0	0		0	0	19.6	23.9		43.5	13.2	86.8	

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**2**	0	**1**	**3**	0	**4**	0	**4**	0	0	0	0	0	**2**	1	**3**	**10**
05:00 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	**2**	3	5
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1	3
05:30 PM	2	0	0	2	0	2	0	2	0	0	0	0	0	1	1	2	6
Total Volume	5	0	1	6	0	9	0	9	0	0	0	0	0	4	5	9	24
% App. Total	83.3	0	16.7		0	100	0		0	0	0		0	44.4	55.6		
PHF	.625	.000	.250	.500	.000	.563	.000	.563	.000	.000	.000	.000	.000	.500	.625	.750	.600

Counts Unlimited
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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 3

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	**2**	0	**1**	**3**	0	**4**	0	**4**	0	0	0	0	0	**2**	1	**3**	
+15 mins.	1	0	0	1	0	1	0	1	0	0	0	0	0	1	**2**	3	
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1	
+45 mins.	2	0	0	2	0	2	0	2	0	0	0	0	0	1	1	2	
Total Volume	5	0	1	6	0	9	0	9	0	0	0	0	0	4	5	9	
% App. Total	83.3	0	16.7		0	100	0		0	0	0		0	44.4	55.6		
PHF	.625	.000	.250	.500	.000	.563	.000	.563	.000	.000	.000	.000	.000	.500	.625	.750	

Counts Unlimited
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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

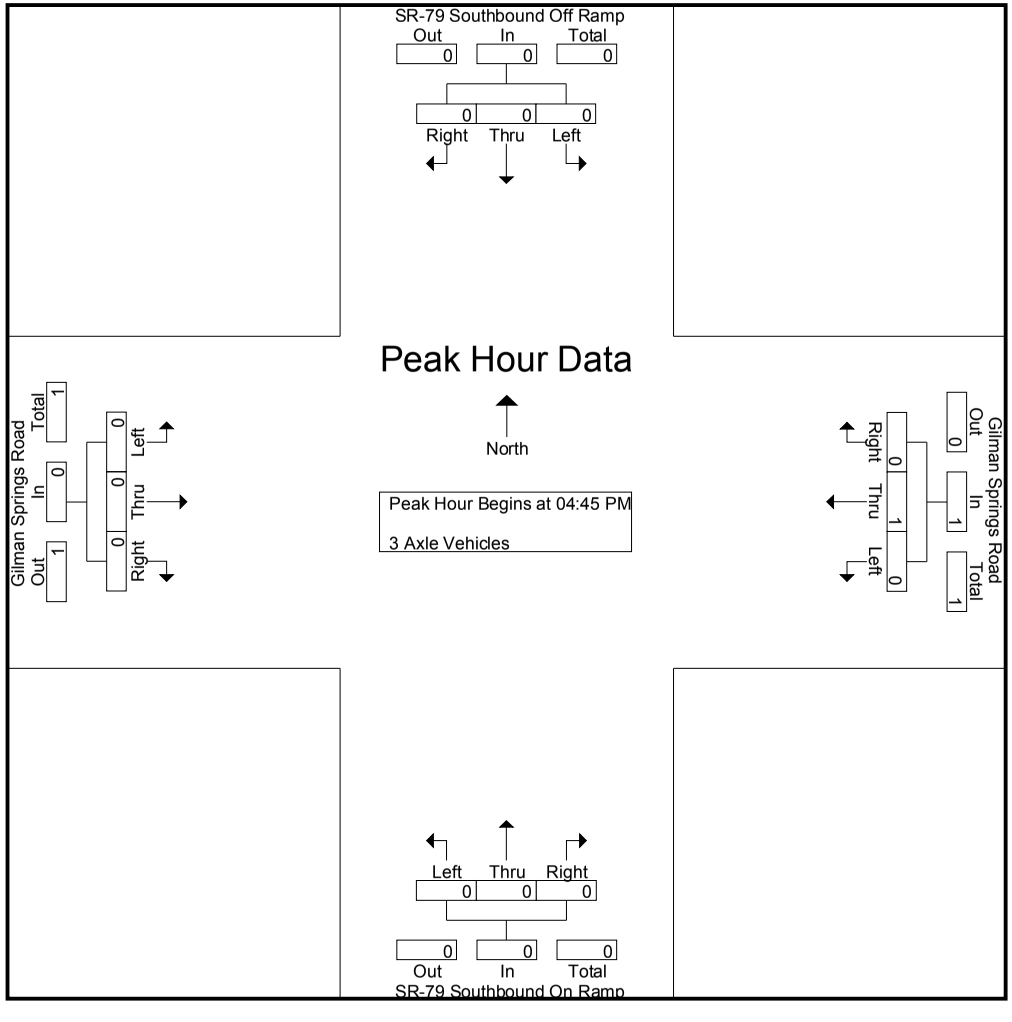
	SR-79 Southbound Off Ramp Southbound					Gilman Springs Road Westbound					SR-79 Southbound On Ramp Northbound					Gilman Springs Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	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	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	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	0	0	0	0	0	0
Total	0	0	0	0	0	0	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	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
Grand Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
Apprch %	0	0	0			0	100	0			0	0	0			0	0	0					
Total %	0	0	0		0	0	100	0		100	0	0	0		0	0	0	0		0	0	100	

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
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	**1**	0	**1**	0	0	0	0	0	0	0	0	**1**
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% App. Total	0	0	0		0	100	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250

Counts Unlimited
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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 3

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 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	**1**	0	**1**	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	0	0	0	
% App. Total	0	0	0		0	100	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	

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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

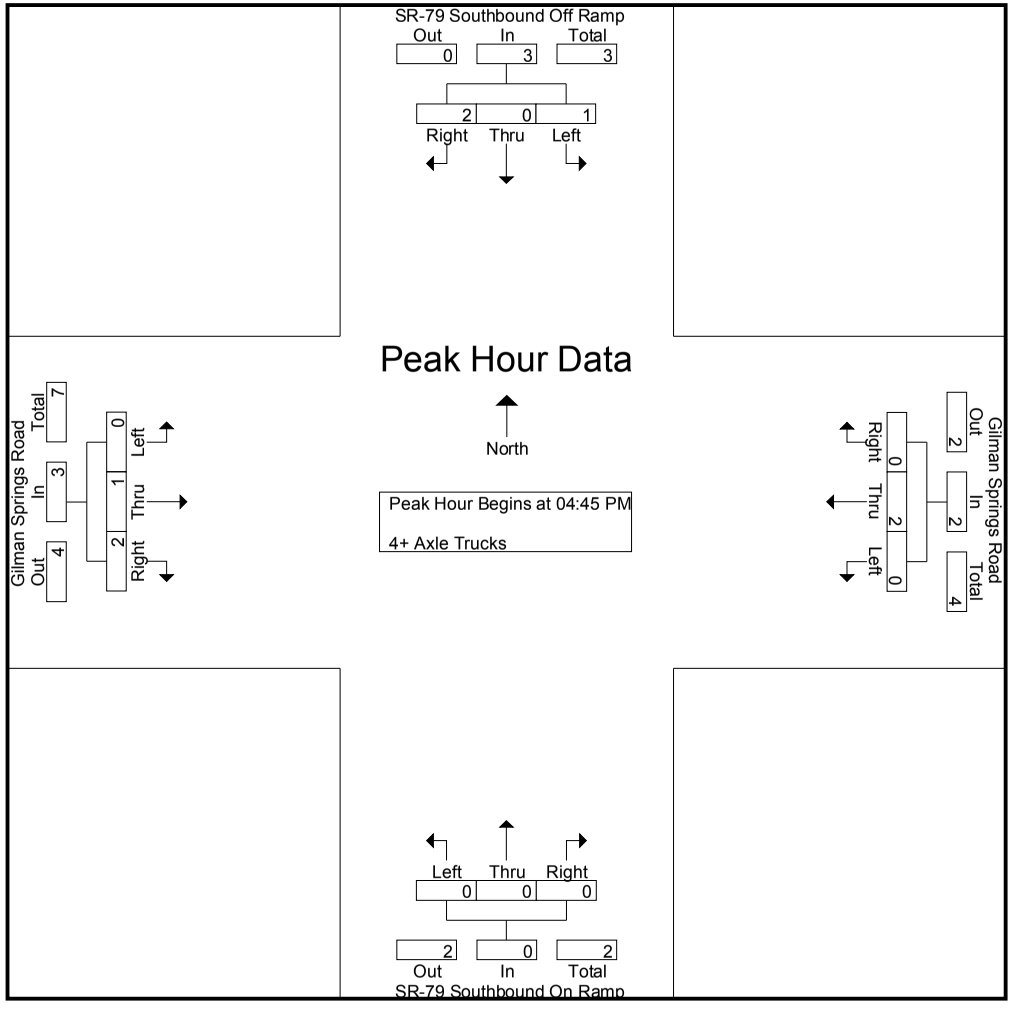
	SR-79 Southbound Off Ramp Southbound					Gilman Springs Road Westbound					SR-79 Southbound On Ramp Northbound					Gilman Springs Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	1	1	1	1	3	4
04:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	3
04:30 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	3
04:45 PM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	2	3
Total	2	0	1	1	3	0	6	0	0	6	0	0	0	0	0	0	1	1	1	2	2	11	13
05:00 PM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	2	1	2	1	5	6
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	1	0	1	1	2	0	3	0	0	3	0	0	0	0	0	0	0	2	1	2	2	7	9
Grand Total	3	0	2	2	5	0	9	0	0	9	0	0	0	0	0	0	1	3	2	4	4	18	22
Apprch %	60	0	40			0	100	0			0	0	0			0	25	75					
Total %	16.7	0	11.1		27.8	0	50	0		50	0	0	0		0	0	5.6	16.7		22.2	18.2	81.8	

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	**1**	**1**	0	0	0	0	0	0	0	0	0	**1**	0	1	2
05:00 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	**1**	0	0	1	0	**2**	0	**2**	0	0	0	0	0	0	**2**	**2**	**5**
Total Volume	1	0	2	3	0	2	0	2	0	0	0	0	0	1	2	3	8
% App. Total	33.3	0	66.7		0	100	0		0	0	0		0	33.3	66.7		
PHF	.250	.000	.500	.750	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.250	.375	.400

Counts Unlimited
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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 06_CRV_79S_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 3

	SR-79 Southbound Off Ramp Southbound				Gilman Springs Road Westbound				SR-79 Southbound On Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	**1**	**1**	0	0	0	0	0	0	0	0	0	**1**	0	1	
+15 mins.	0	0	1	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.	**1**	0	0	1	0	**2**	0	**2**	0	0	0	0	0	0	**2**	**2**	
Total Volume	1	0	2	3	0	2	0	2	0	0	0	0	0	1	2	3	
% App. Total	33.3	0	66.7		0	100	0		0	0	0		0	33.3	66.7		
PHF	.250	.000	.500	.750	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.250	.375	

Location: County of Riverside
N/S: SR-79 Southbound Ramps
E/W: Gilman Springs Road

Date: 2/7/2018
Date: Wednesday

PEDESTRIANS

	North Leg SR-79 Southbound Ramps	East Leg Gilman Springs Road	South Leg SR-79 Southbound Ramps	West Leg Gilman Springs Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg SR-79 Southbound Ramps	East Leg Gilman Springs Road	South Leg SR-79 Southbound Ramps	West Leg Gilman Springs Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: County of Riverside
N/S: SR-79 Southbound
E/W: Gilman Springs Road

2/7/2018

Date: 2/7/2018
Date: Wednesday

BICYCLES

	Southbound SR-79 Southbound Ramps			Westbound Gilman Springs Road			Northbound SR-79 Southbound Ramps			Eastbound Gilman Springs Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound SR-79 Southbound Ramps			Westbound Gilman Springs Road			Northbound SR-79 Southbound Ramps			Eastbound Gilman Springs Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

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

County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018

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

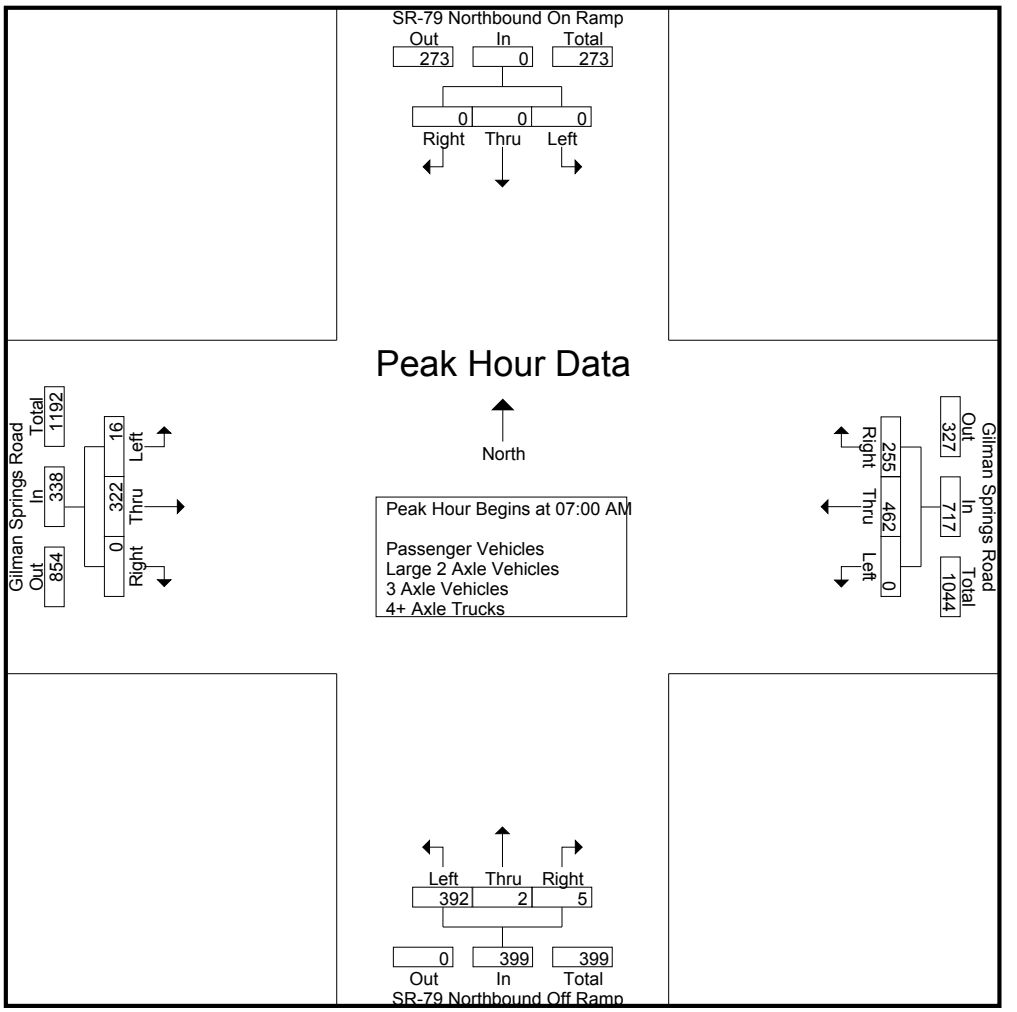
	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	121	72	193	106	1	0	107	2	79	0	81	381
07:15 AM	0	0	0	0	0	125	81	206	104	0	1	105	2	67	0	69	380
07:30 AM	0	0	0	0	0	127	63	190	93	1	2	96	5	82	0	87	373
07:45 AM	0	0	0	0	0	89	39	128	89	0	2	91	7	94	0	101	320
Total	0	0	0	0	0	462	255	717	392	2	5	399	16	322	0	338	1454
08:00 AM	0	0	0	0	0	94	52	146	66	1	0	67	4	64	0	68	281
08:15 AM	0	0	0	0	0	88	62	150	93	1	0	94	3	51	0	54	298
08:30 AM	0	0	0	0	0	85	52	137	82	0	1	83	2	62	0	64	284
08:45 AM	0	0	0	0	0	73	50	123	59	0	2	61	4	62	0	66	250
Total	0	0	0	0	0	340	216	556	300	2	3	305	13	239	0	252	1113
Grand Total	0	0	0	0	0	802	471	1273	692	4	8	704	29	561	0	590	2567
Apprch %	0	0	0		0	63	37		98.3	0.6	1.1		4.9	95.1	0		
Total %	0	0	0	0	0	31.2	18.3	49.6	27	0.2	0.3	27.4	1.1	21.9	0	23	
Passenger Vehicles	0	0	0	0	0	773	454	1227	677	4	6	687	21	533	0	554	2468
% Passenger Vehicles	0	0	0	0	0	96.4	96.4	96.4	97.8	100	75	97.6	72.4	95	0	93.9	96.1
Large 2 Axle Vehicles	0	0	0	0	0	13	15	28	8	0	1	9	2	20	0	22	59
% Large 2 Axle Vehicles	0	0	0	0	0	1.6	3.2	2.2	1.2	0	12.5	1.3	6.9	3.6	0	3.7	2.3
3 Axle Vehicles	0	0	0	0	0	5	0	5	2	0	0	2	2	3	0	5	12
% 3 Axle Vehicles	0	0	0	0	0	0.6	0	0.4	0.3	0	0	0.3	6.9	0.5	0	0.8	0.5
4+ Axle Trucks	0	0	0	0	0	11	2	13	5	0	1	6	4	5	0	9	28
% 4+ Axle Trucks	0	0	0	0	0	1.4	0.4	1	0.7	0	12.5	0.9	13.8	0.9	0	1.5	1.1

	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	121	72	193	**106**	**1**	0	**107**	2	79	0	81	**381**
07:15 AM	0	0	0	0	0	125	**81**	**206**	104	0	1	105	2	67	0	69	380
07:30 AM	0	0	0	0	0	**127**	63	190	93	1	**2**	96	5	82	0	87	373
07:45 AM	0	0	0	0	0	89	39	128	89	0	2	91	**7**	**94**	0	**101**	320
Total Volume	0	0	0	0	0	462	255	717	392	2	5	399	16	322	0	338	1454
% App. Total	0	0	0		0	64.4	35.6		98.2	0.5	1.3		4.7	95.3	0		
PHF	.000	.000	.000	.000	.000	.909	.787	.870	.925	.500	.625	.932	.571	.856	.000	.837	.954

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

County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	121	72	193	**106**	**1**	0	**107**	2	79	0	81
+15 mins.	0	0	0	0	0	125	**81**	**206**	104	0	1	105	2	67	0	69
+30 mins.	0	0	0	0	0	**127**	63	190	93	1	**2**	96	5	82	0	87
+45 mins.	0	0	0	0	0	89	39	128	89	0	2	91	**7**	**94**	0	**101**
Total Volume	0	0	0	0	0	462	255	717	392	2	5	399	16	322	0	338
% App. Total	0	0	0		0	64.4	35.6		98.2	0.5	1.3		4.7	95.3	0	
PHF	.000	.000	.000	.000	.000	.909	.787	.870	.925	.500	.625	.932	.571	.856	.000	.837

Counts Unlimited
PO Box 1178
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(951) 268-6268

County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Passenger Vehicles

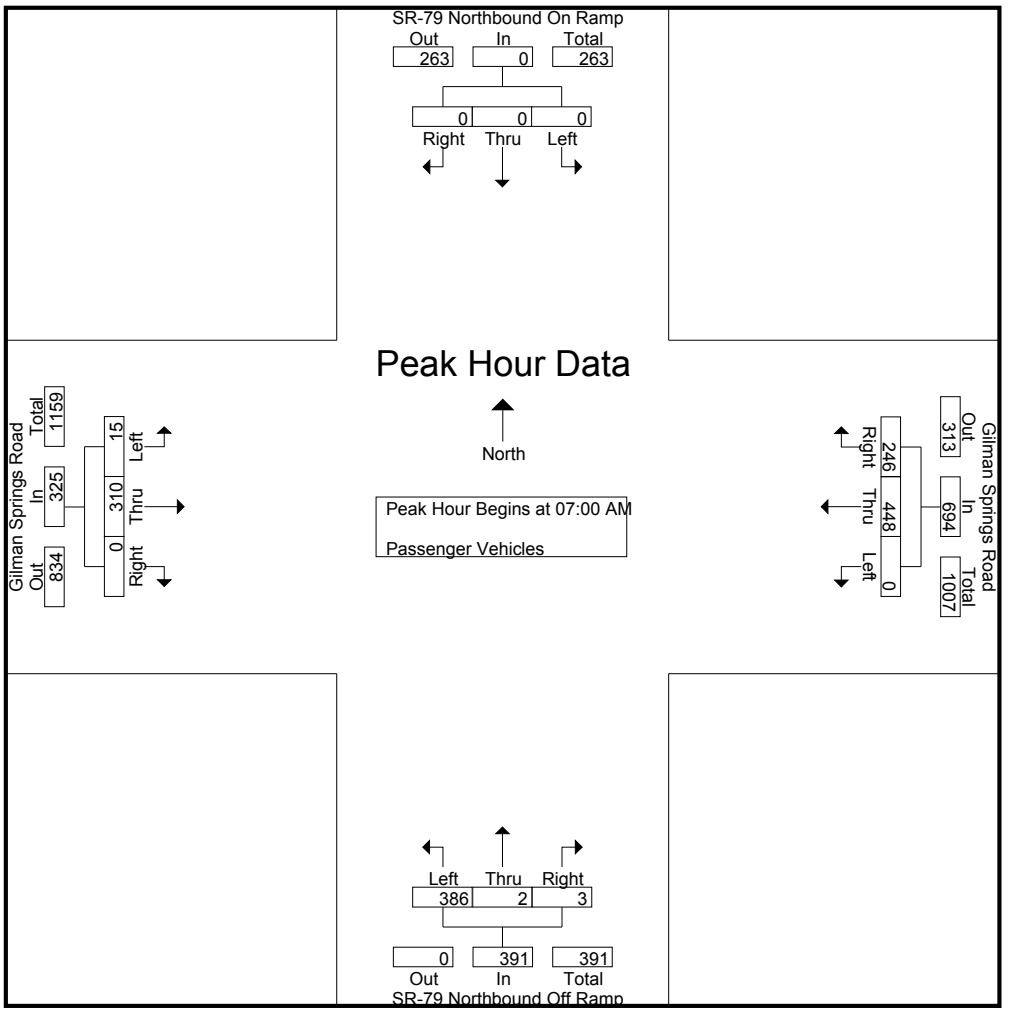
	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	116	67	183	106	1	0	107	2	75	0	77	367
07:15 AM	0	0	0	0	0	124	81	205	102	0	1	103	2	65	0	67	375
07:30 AM	0	0	0	0	0	124	61	185	92	1	0	93	5	77	0	82	360
07:45 AM	0	0	0	0	0	84	37	121	86	0	2	88	6	93	0	99	308
Total	0	0	0	0	0	448	246	694	386	2	3	391	15	310	0	325	1410
08:00 AM	0	0	0	0	0	91	49	140	64	1	0	65	1	61	0	62	267
08:15 AM	0	0	0	0	0	86	60	146	90	1	0	91	1	49	0	50	287
08:30 AM	0	0	0	0	0	80	52	132	80	0	1	81	1	57	0	58	271
08:45 AM	0	0	0	0	0	68	47	115	57	0	2	59	3	56	0	59	233
Total	0	0	0	0	0	325	208	533	291	2	3	296	6	223	0	229	1058
Grand Total	0	0	0	0	0	773	454	1227	677	4	6	687	21	533	0	554	2468
Apprch %	0	0	0		0	63	37		98.5	0.6	0.9		3.8	96.2	0		
Total %	0	0	0	0	0	31.3	18.4	49.7	27.4	0.2	0.2	27.8	0.9	21.6	0	22.4	

	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	116	67	183	**106**	**1**	0	**107**	2	75	0	77	367
07:15 AM	0	0	0	0	0	**124**	**81**	**205**	102	0	1	103	2	65	0	67	**375**
07:30 AM	0	0	0	0	0	124	61	185	92	1	0	93	5	77	0	82	360
07:45 AM	0	0	0	0	0	84	37	121	86	0	**2**	88	**6**	**93**	0	**99**	308
Total Volume	0	0	0	0	0	448	246	694	386	2	3	391	15	310	0	325	1410
% App. Total	0	0	0		0	64.6	35.4		98.7	0.5	0.8		4.6	95.4	0		
PHF	.000	.000	.000	.000	.000	.903	.759	.846	.910	.500	.375	.914	.625	.833	.000	.821	.940

Counts Unlimited
PO Box 1178
Corona, CA 92878
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County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	116	67	183	**106**	**1**	0	**107**	2	75	0	77
+15 mins.	0	0	0	0	0	**124**	**81**	**205**	102	0	1	103	2	65	0	67
+30 mins.	0	0	0	0	0	124	61	185	92	1	0	93	5	77	0	82
+45 mins.	0	0	0	0	0	84	37	121	86	0	**2**	88	**6**	**93**	0	**99**
Total Volume	0	0	0	0	0	448	246	694	386	2	3	391	15	310	0	325
% App. Total	0	0	0		0	64.6	35.4		98.7	0.5	0.8		4.6	95.4	0	
PHF	.000	.000	.000	.000	.000	.903	.759	.846	.910	.500	.375	.914	.625	.833	.000	.821

Counts Unlimited
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County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018

Groups Printed- Large 2 Axle Vehicles

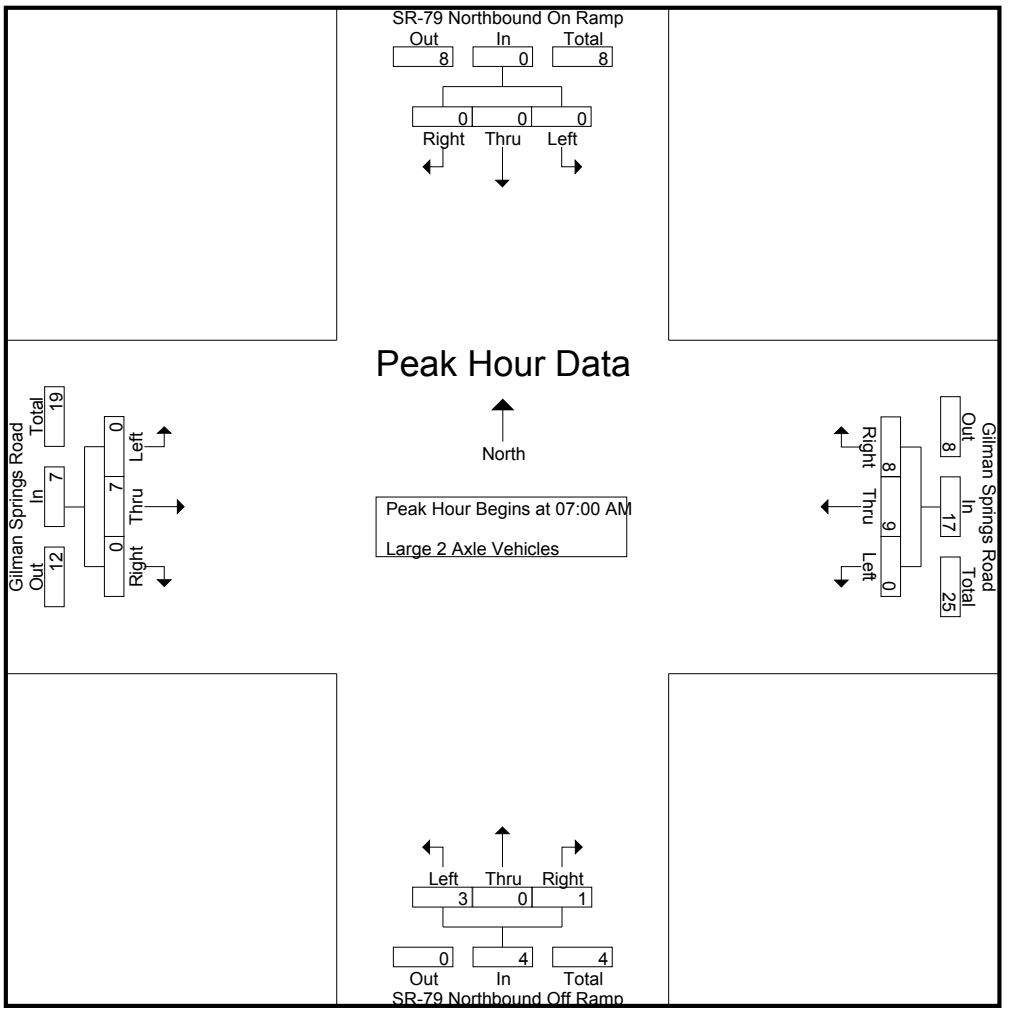
	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	4	4	8	0	0	0	0	0	2	0	2	10
07:15 AM	0	0	0	0	0	1	0	1	1	0	0	1	0	2	0	2	4
07:30 AM	0	0	0	0	0	3	2	5	0	0	1	1	0	2	0	2	8
07:45 AM	0	0	0	0	0	1	2	3	2	0	0	2	0	1	0	1	6
Total	0	0	0	0	0	9	8	17	3	0	1	4	0	7	0	7	28
08:00 AM	0	0	0	0	0	1	2	3	1	0	0	1	2	3	0	5	9
08:15 AM	0	0	0	0	0	1	2	3	2	0	0	2	0	2	0	2	7
08:30 AM	0	0	0	0	0	1	0	1	2	0	0	2	0	4	0	4	7
08:45 AM	0	0	0	0	0	1	3	4	0	0	0	0	0	4	0	4	8
Total	0	0	0	0	0	4	7	11	5	0	0	5	2	13	0	15	31
Grand Total	0	0	0	0	0	13	15	28	8	0	1	9	2	20	0	22	59
Apprch %	0	0	0		0	46.4	53.6		88.9	0	11.1		9.1	90.9	0		
Total %	0	0	0	0	0	22	25.4	47.5	13.6	0	1.7	15.3	3.4	33.9	0	37.3	

	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	**4**	**4**	**8**	0	0	0	0	0	**2**	0	**2**	**10**
07:15 AM	0	0	0	0	0	1	0	1	1	0	0	1	0	2	0	2	4
07:30 AM	0	0	0	0	0	3	2	5	0	0	**1**	1	0	2	0	2	8
07:45 AM	0	0	0	0	0	1	2	3	**2**	0	0	**2**	0	1	0	1	6
Total Volume	0	0	0	0	0	9	8	17	3	0	1	4	0	7	0	7	28
% App. Total	0	0	0		0	52.9	47.1		75	0	25		0	100	0		
PHF	.000	.000	.000	.000	.000	.563	.500	.531	.375	.000	.250	.500	.000	.875	.000	.875	.700

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

County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	**4**	**4**	**8**	0	0	0	0	0	**2**	0	**2**
+15 mins.	0	0	0	0	0	1	0	1	1	0	0	1	0	2	0	2
+30 mins.	0	0	0	0	0	3	2	5	0	0	**1**	1	0	2	0	2
+45 mins.	0	0	0	0	0	1	2	3	**2**	0	0	**2**	0	1	0	1
Total Volume	0	0	0	0	0	9	8	17	3	0	1	4	0	7	0	7
% App. Total	0	0	0		0	52.9	47.1		75	0	25		0	100	0	
PHF	.000	.000	.000	.000	.000	.563	.500	.531	.375	.000	.250	.500	.000	.875	.000	.875

Counts Unlimited
PO Box 1178
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(951) 268-6268

County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

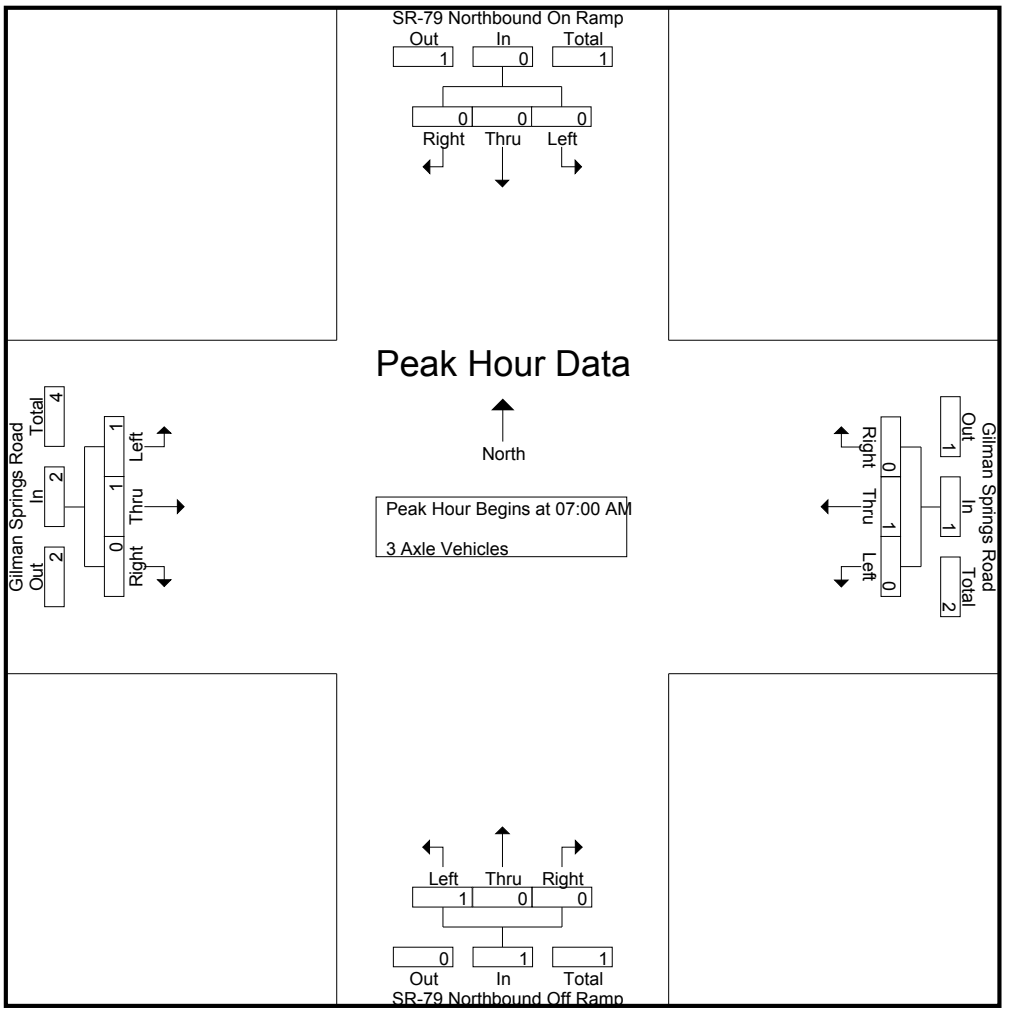
	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
Total	0	0	0	0	0	1	0	1	1	0	0	1	1	1	0	2	4
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	1	0	2	3
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	0	0	0	0	4	0	4	1	0	0	1	1	2	0	3	8
Grand Total	0	0	0	0	0	5	0	5	2	0	0	2	2	3	0	5	12
Apprch %	0	0	0		0	100	0		100	0	0		40	60	0		
Total %	0	0	0	0	0	41.7	0	41.7	16.7	0	0	16.7	16.7	25	0	41.7	

	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	1
07:45 AM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**1**	0	0	1	**2**
Total Volume	0	0	0	0	0	1	0	1	1	0	0	1	1	1	0	2	4
% App. Total	0	0	0		0	100	0		100	0	0		50	50	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	.250	.250	.000	.500	.500

Counts Unlimited
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County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**
+45 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**1**	0	0	1
Total Volume	0	0	0	0	0	1	0	1	1	0	0	1	1	1	0	2
% App. Total	0	0	0		0	100	0		100	0	0		50	50	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	.250	.250	.000	.500

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County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

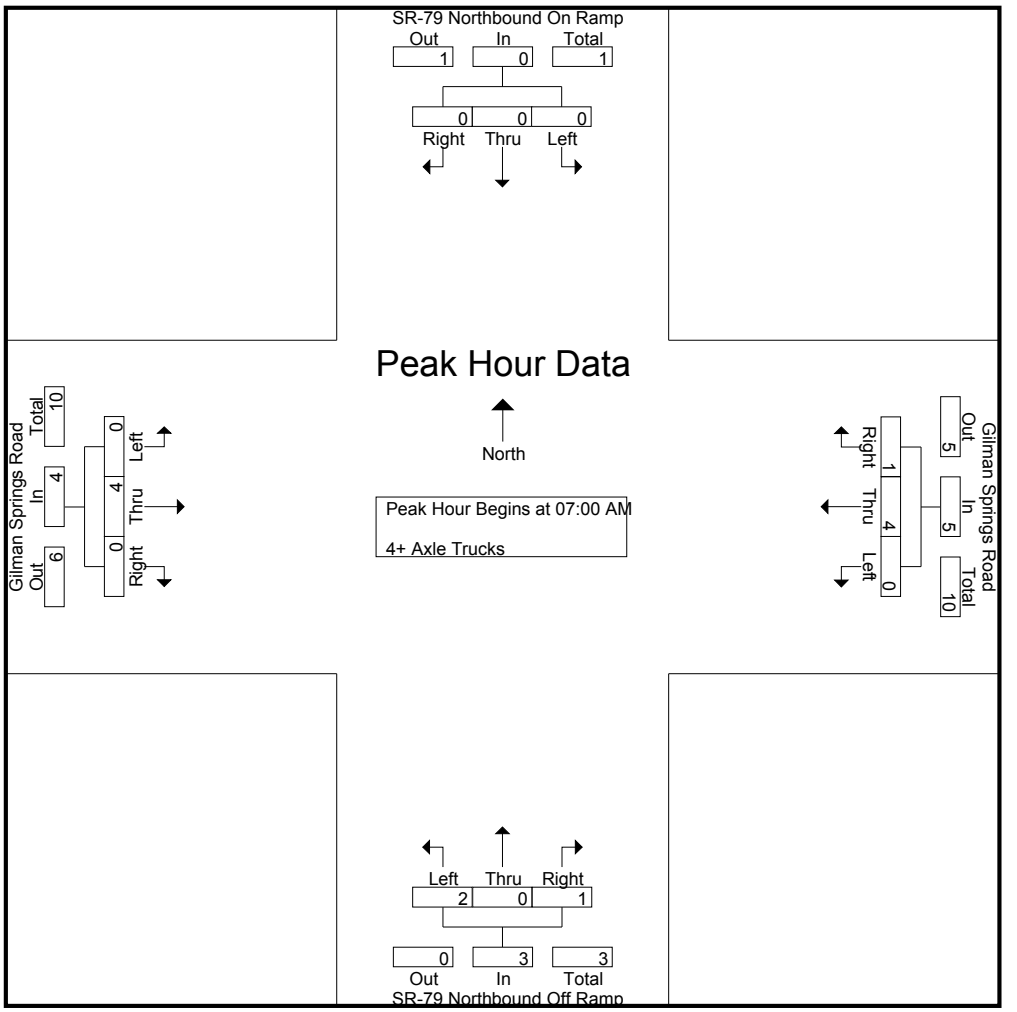
	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	2	0	2	4
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	1	0	1	2	0	2	0	2	4
07:45 AM	0	0	0	0	0	3	0	3	1	0	0	1	0	0	0	0	4
Total	0	0	0	0	0	4	1	5	2	0	1	3	0	4	0	4	12
08:00 AM	0	0	0	0	0	1	1	2	1	0	0	1	1	0	0	1	4
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	2	0	0	2	3
08:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
08:45 AM	0	0	0	0	0	2	0	2	2	0	0	2	1	1	0	2	6
Total	0	0	0	0	0	7	1	8	3	0	0	3	4	1	0	5	16
Grand Total	0	0	0	0	0	11	2	13	5	0	1	6	4	5	0	9	28
Apprch %	0	0	0		0	84.6	15.4		83.3	0	16.7		44.4	55.6	0		
Total %	0	0	0	0	0	39.3	7.1	46.4	17.9	0	3.6	21.4	14.3	17.9	0	32.1	

	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	1	**1**	2	0	0	0	0	0	**2**	0	**2**	**4**
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	**1**	0	**1**	**2**	0	2	0	2	4
07:45 AM	0	0	0	0	0	**3**	0	**3**	1	0	0	1	0	0	0	0	4
Total Volume	0	0	0	0	0	4	1	5	2	0	1	3	0	4	0	4	12
% App. Total	0	0	0		0	80	20		66.7	0	33.3		0	100	0		
PHF	.000	.000	.000	.000	.000	.333	.250	.417	.500	.000	.250	.375	.000	.500	.000	.500	.750

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County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs AM
Site Code : 05118094
Start Date : 2/7/2018



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	1	**1**	2	0	0	0	0	0	**2**	0	**2**
+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	**1**	0	**1**	**2**	0	2	0	2
+45 mins.	0	0	0	0	0	**3**	0	**3**	1	0	0	1	0	0	0	0
Total Volume	0	0	0	0	0	4	1	5	2	0	1	3	0	4	0	4
% App. Total	0	0	0		0	80	20		66.7	0	33.3		0	100	0	
PHF	.000	.000	.000	.000	.000	.333	.250	.417	.500	.000	.250	.375	.000	.500	.000	.500

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County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

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

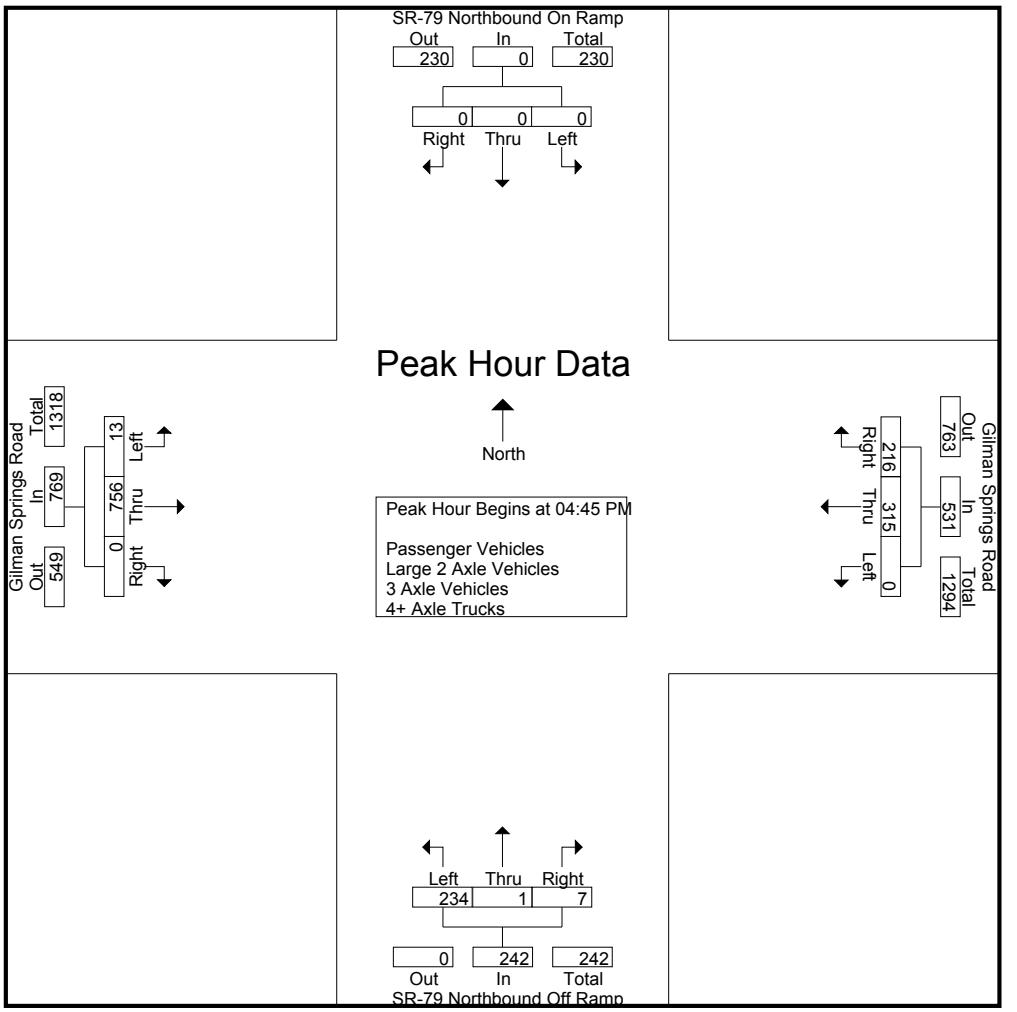
	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	71	59	130	73	0	2	75	2	171	0	173	378
04:15 PM	0	0	0	0	0	73	52	125	56	1	3	60	4	175	0	179	364
04:30 PM	0	0	0	0	0	62	57	119	52	2	1	55	1	154	0	155	329
04:45 PM	0	0	0	0	0	89	58	147	52	1	2	55	3	210	0	213	415
Total	0	0	0	0	0	295	226	521	233	4	8	245	10	710	0	720	1486
05:00 PM	0	0	0	0	0	66	56	122	51	0	1	52	3	195	0	198	372
05:15 PM	0	0	0	0	0	81	53	134	72	0	0	72	4	179	0	183	389
05:30 PM	0	0	0	0	0	79	49	128	59	0	4	63	3	172	0	175	366
05:45 PM	0	0	0	0	0	68	45	113	54	1	1	56	3	188	0	191	360
Total	0	0	0	0	0	294	203	497	236	1	6	243	13	734	0	747	1487
Grand Total	0	0	0	0	0	589	429	1018	469	5	14	488	23	1444	0	1467	2973
Apprch %	0	0	0		0	57.9	42.1		96.1	1	2.9		1.6	98.4	0		
Total %	0	0	0	0	0	19.8	14.4	34.2	15.8	0.2	0.5	16.4	0.8	48.6	0	49.3	
Passenger Vehicles	0	0	0	0	0	571	422	993	451	5	14	470	22	1413	0	1435	2898
% Passenger Vehicles	0	0	0	0	0	96.9	98.4	97.5	96.2	100	100	96.3	95.7	97.9	0	97.8	97.5
Large 2 Axle Vehicles	0	0	0	0	0	9	5	14	16	0	0	16	1	27	0	28	58
% Large 2 Axle Vehicles	0	0	0	0	0	1.5	1.2	1.4	3.4	0	0	3.3	4.3	1.9	0	1.9	2
3 Axle Vehicles	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
% 3 Axle Vehicles	0	0	0	0	0	0.3	0	0.2	0	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	0	0	0	0	0	7	2	9	2	0	0	2	0	4	0	4	15
% 4+ Axle Trucks	0	0	0	0	0	1.2	0.5	0.9	0.4	0	0	0.4	0	0.3	0	0.3	0.5

	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	**89**	**58**	**147**	52	**1**	2	55	3	**210**	0	**213**	**415**
05:00 PM	0	0	0	0	0	66	56	122	51	0	1	52	3	195	0	198	372
05:15 PM	0	0	0	0	0	81	53	134	**72**	0	0	**72**	**4**	179	0	183	389
05:30 PM	0	0	0	0	0	79	49	128	59	0	**4**	63	3	172	0	175	366
Total Volume	0	0	0	0	0	315	216	531	234	1	7	242	13	756	0	769	1542
% App. Total	0	0	0		0	59.3	40.7		96.7	0.4	2.9		1.7	98.3	0		
PHF	.000	.000	.000	.000	.000	.885	.931	.903	.813	.250	.438	.840	.813	.900	.000	.903	.929

Counts Unlimited
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County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018



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

	04:00 PM				04:45 PM				04:00 PM				04:45 PM			
+0 mins.	0	0	0	0	0	**89**	**58**	**147**	**73**	0	2	**75**	3	**210**	0	**213**
+15 mins.	0	0	0	0	0	66	56	122	56	1	**3**	60	3	195	0	198
+30 mins.	0	0	0	0	0	81	53	134	52	**2**	1	55	**4**	179	0	183
+45 mins.	0	0	0	0	0	79	49	128	52	1	2	55	3	172	0	175
Total Volume	0	0	0	0	0	315	216	531	233	4	8	245	13	756	0	769
% App. Total	0	0	0		0	59.3	40.7		95.1	1.6	3.3		1.7	98.3	0	
PHF	.000	.000	.000	.000	.000	.885	.931	.903	.798	.500	.667	.817	.813	.900	.000	.903

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County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Passenger Vehicles

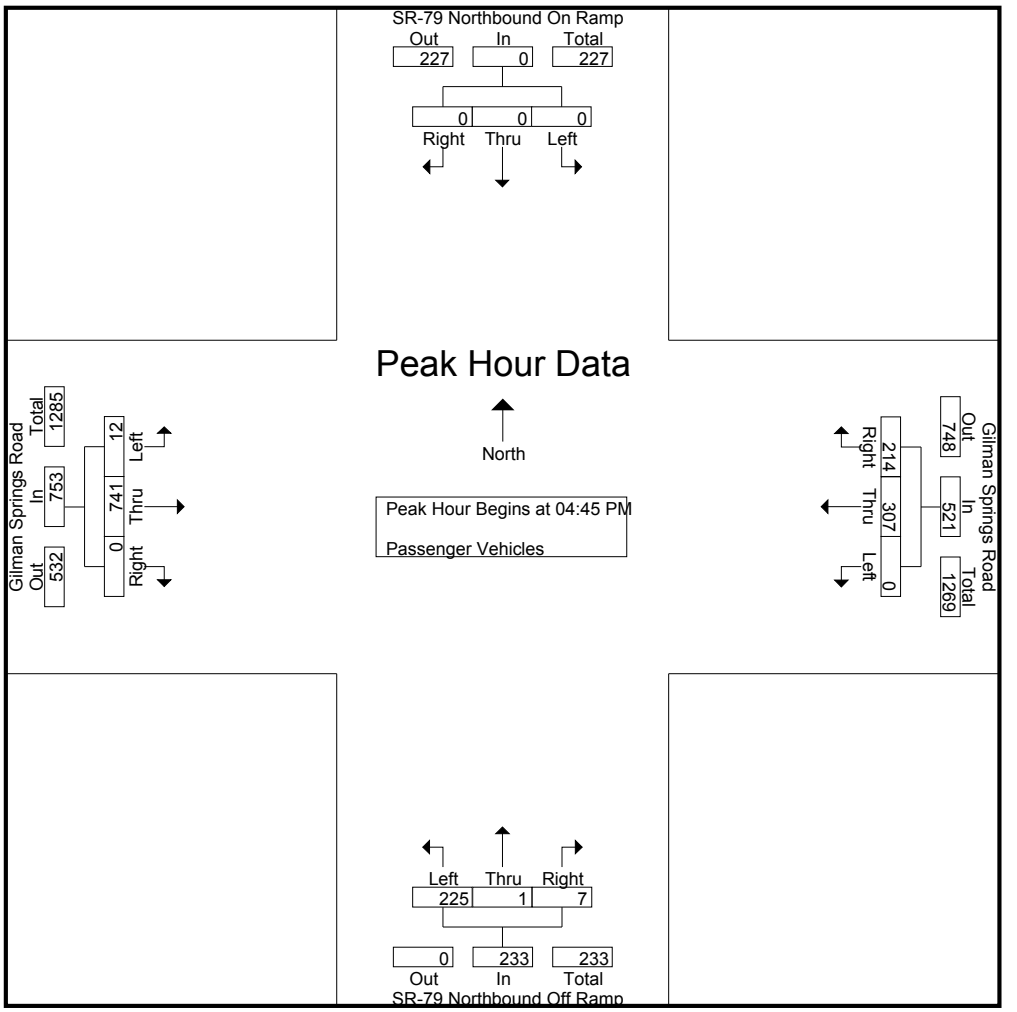
	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	67	57	124	69	0	2	71	2	167	0	169	364
04:15 PM	0	0	0	0	0	71	52	123	55	1	3	59	4	173	0	177	359
04:30 PM	0	0	0	0	0	60	55	115	48	2	1	51	1	148	0	149	315
04:45 PM	0	0	0	0	0	86	58	144	51	1	2	54	2	204	0	206	404
Total	0	0	0	0	0	284	222	506	223	4	8	235	9	692	0	701	1442
05:00 PM	0	0	0	0	0	64	55	119	50	0	1	51	3	192	0	195	365
05:15 PM	0	0	0	0	0	79	52	131	67	0	0	67	4	177	0	181	379
05:30 PM	0	0	0	0	0	78	49	127	57	0	4	61	3	168	0	171	359
05:45 PM	0	0	0	0	0	66	44	110	54	1	1	56	3	184	0	187	353
Total	0	0	0	0	0	287	200	487	228	1	6	235	13	721	0	734	1456
Grand Total	0	0	0	0	0	571	422	993	451	5	14	470	22	1413	0	1435	2898
Apprch %	0	0	0		0	57.5	42.5		96	1.1	3		1.5	98.5	0		
Total %	0	0	0	0	0	19.7	14.6	34.3	15.6	0.2	0.5	16.2	0.8	48.8	0	49.5	

	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	**86**	**58**	**144**	51	**1**	2	54	2	**204**	0	**206**	**404**
05:00 PM	0	0	0	0	0	64	55	119	50	0	1	51	3	192	0	195	365
05:15 PM	0	0	0	0	0	79	52	131	**67**	0	0	**67**	**4**	177	0	181	379
05:30 PM	0	0	0	0	0	78	49	127	57	0	**4**	61	3	168	0	171	359
Total Volume	0	0	0	0	0	307	214	521	225	1	7	233	12	741	0	753	1507
% App. Total	0	0	0		0	58.9	41.1		96.6	0.4	3		1.6	98.4	0		
PHF	.000	.000	.000	.000	.000	.892	.922	.905	.840	.250	.438	.869	.750	.908	.000	.914	.933

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County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	**86**	**58**	**144**	51	**1**	2	54	2	**204**	0	**206**
+15 mins.	0	0	0	0	0	64	55	119	50	0	1	51	3	192	0	195
+30 mins.	0	0	0	0	0	79	52	131	**67**	0	0	**67**	**4**	177	0	181
+45 mins.	0	0	0	0	0	78	49	127	57	0	**4**	61	3	168	0	171
Total Volume	0	0	0	0	0	307	214	521	225	1	7	233	12	741	0	753
% App. Total	0	0	0		0	58.9	41.1		96.6	0.4	3		1.6	98.4	0	
PHF	.000	.000	.000	.000	.000	.892	.922	.905	.840	.250	.438	.869	.750	.908	.000	.914

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County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- Large 2 Axle Vehicles

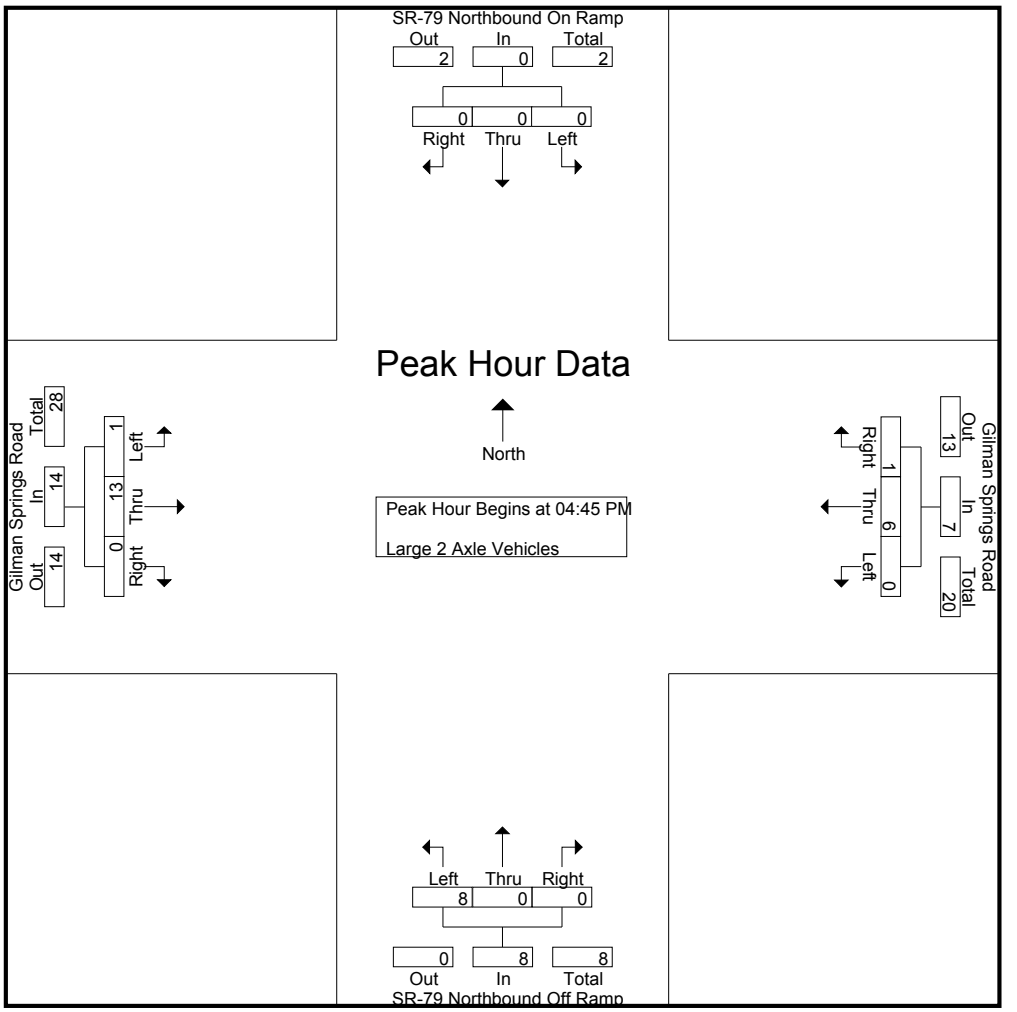
	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	2	2	4	4	0	0	4	0	3	0	3	11
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:30 PM	0	0	0	0	0	1	1	2	4	0	0	4	0	5	0	5	11
04:45 PM	0	0	0	0	0	3	0	3	1	0	0	1	1	5	0	6	10
Total	0	0	0	0	0	6	3	9	9	0	0	9	1	15	0	16	34
05:00 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	3	0	3	5
05:15 PM	0	0	0	0	0	2	1	3	5	0	0	5	0	2	0	2	10
05:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0	3	4
05:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	4	0	4	5
Total	0	0	0	0	0	3	2	5	7	0	0	7	0	12	0	12	24
Grand Total	0	0	0	0	0	9	5	14	16	0	0	16	1	27	0	28	58
Apprch %	0	0	0		0	64.3	35.7		100	0	0		3.6	96.4	0		
Total %	0	0	0	0	0	15.5	8.6	24.1	27.6	0	0	27.6	1.7	46.6	0	48.3	

	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	**3**	0	**3**	1	0	0	1	**1**	**5**	0	**6**	**10**
05:00 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	3	0	3	5
05:15 PM	0	0	0	0	0	2	**1**	3	**5**	0	0	**5**	0	2	0	2	10
05:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0	3	4
Total Volume	0	0	0	0	0	6	1	7	8	0	0	8	1	13	0	14	29
% App. Total	0	0	0		0	85.7	14.3		100	0	0		7.1	92.9	0		
PHF	.000	.000	.000	.000	.000	.500	.250	.583	.400	.000	.000	.400	.250	.650	.000	.583	.725

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

County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	**3**	0	**3**	1	0	0	1	**1**	**5**	0	**6**
+15 mins.	0	0	0	0	0	1	0	1	1	0	0	1	0	3	0	3
+30 mins.	0	0	0	0	0	2	**1**	3	**5**	0	0	**5**	0	2	0	2
+45 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0	3
Total Volume	0	0	0	0	0	6	1	7	8	0	0	8	1	13	0	14
% App. Total	0	0	0		0	85.7	14.3		100	0	0		7.1	92.9	0	
PHF	.000	.000	.000	.000	.000	.500	.250	.583	.400	.000	.000	.400	.250	.650	.000	.583

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

County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 3 Axle Vehicles

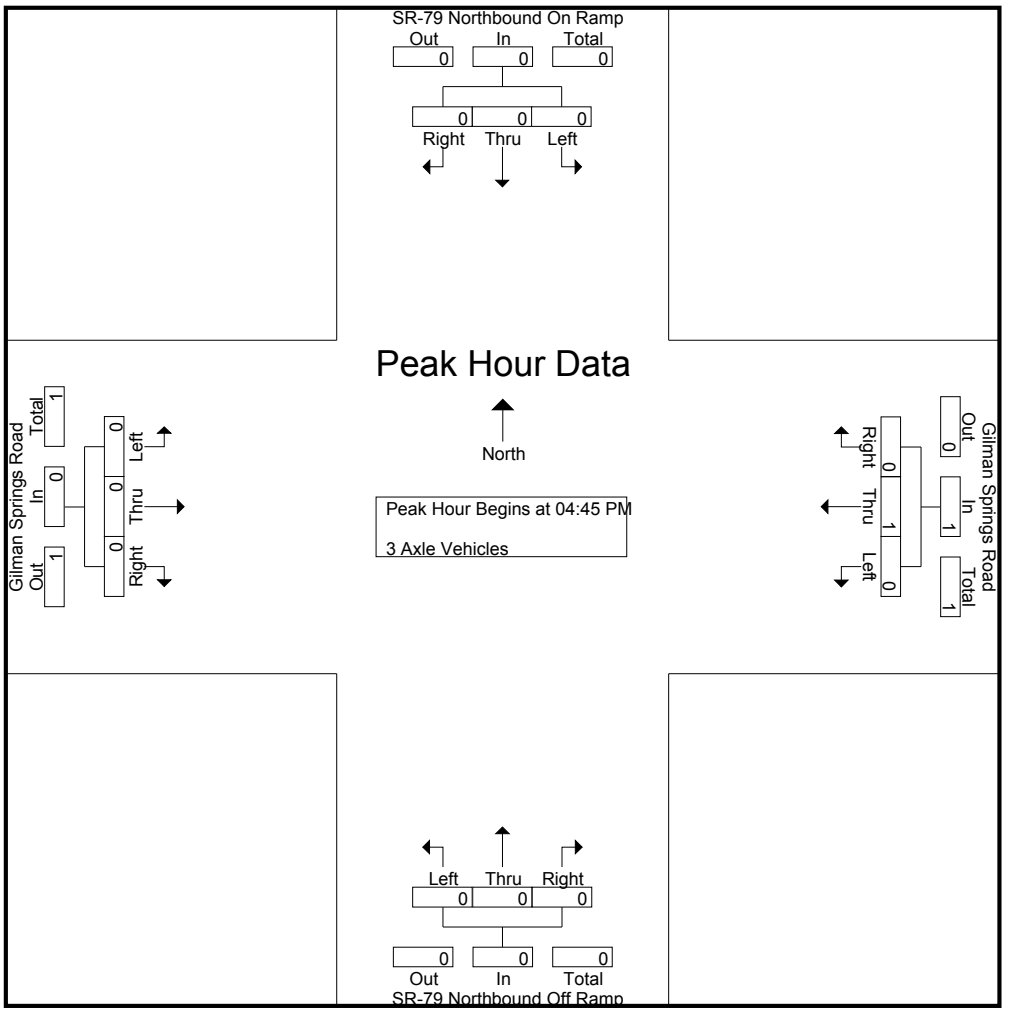
	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	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	1	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	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Grand Total	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Apprch %	0	0	0		0	100	0		0	0	0		0	0	0		
Total %	0	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0	

	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
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	**1**	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	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
% App. Total	0	0	0		0	100	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250

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

County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

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

Counts Unlimited
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County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018
Page No : 1

Groups Printed- 4+ Axle Trucks

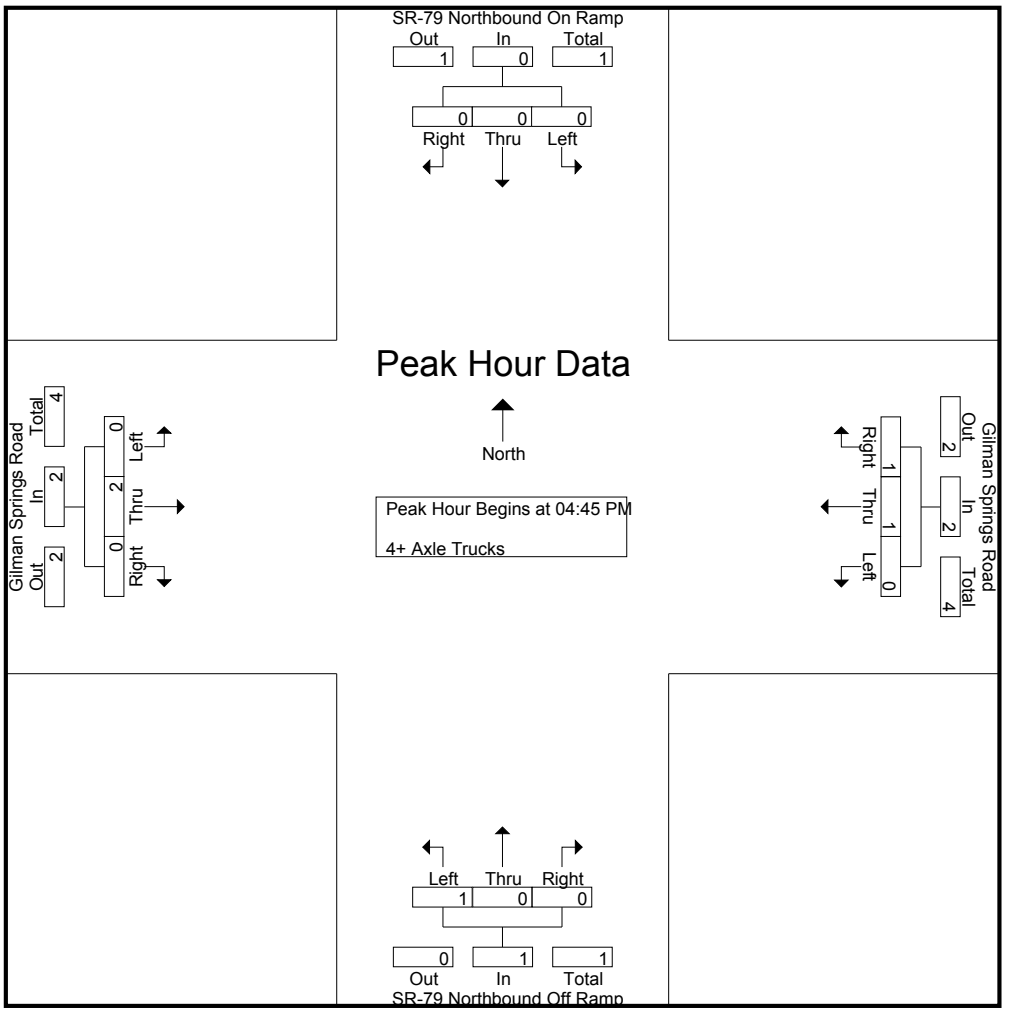
	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
04:15 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	0	0	0	3
04:30 PM	0	0	0	0	0	1	1	2	0	0	0	0	0	1	0	1	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	5	1	6	1	0	0	1	0	3	0	3	10
05:00 PM	0	0	0	0	0	0	1	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	1	0	1	1	0	0	1	0	1	0	1	3
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	1	3	1	0	0	1	0	1	0	1	5
Grand Total	0	0	0	0	0	7	2	9	2	0	0	2	0	4	0	4	15
Apprch %	0	0	0		0	77.8	22.2		100	0	0		0	100	0		
Total %	0	0	0	0	0	46.7	13.3	60	13.3	0	0	13.3	0	26.7	0	26.7	

	SR-79 Northbound On Ramp Southbound				Gilman Springs Road Westbound				SR-79 Northbound Off Ramp Northbound				Gilman Springs Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	1
05:00 PM	0	0	0	0	0	0	**1**	**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	**1**	0	1	**1**	0	0	**1**	0	1	0	1	**3**
Total Volume	0	0	0	0	0	1	1	2	1	0	0	1	0	2	0	2	5
% App. Total	0	0	0		0	50	50		100	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.250	.500	.250	.000	.000	.250	.000	.500	.000	.500	.417

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County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road
Weather: Clear

File Name : 07_CRV_79N_Gilman Springs PM
Site Code : 05118094
Start Date : 2/7/2018



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

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

Location: County of Riverside
N/S: SR-79 Northbound Ramps
E/W: Gilman Springs Road

Date: 2/7/2018
Date: Wednesday

PEDESTRIANS

	North Leg SR-79 Northbound Ramps	East Leg Gilman Springs Road	South Leg SR-79 Northbound Ramps	West Leg Gilman Springs Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg SR-79 Northbound Ramps	East Leg Gilman Springs Road	South Leg SR-79 Northbound Ramps	West Leg Gilman Springs Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: County of Riverside
N/S: SR-79 Northbound
E/W: Gilman Springs Road

Date: 2/7/2018
Date: Wednesday

BICYCLES

	Southbound SR-79 Northbound Ramps			Westbound Gilman Springs Road			Northbound SR-79 Northbound Ramps			Eastbound Gilman Springs Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound SR-79 Northbound Ramps			Westbound Gilman Springs Road			Northbound SR-79 Northbound Ramps			Eastbound Gilman Springs Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
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951-268-6268

Counts Unlimited, Inc.

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

County of Riverside
Bridge Street
W/ Gilman Springs Road
24 Hour Directional Classification Count

CRV002
Site Code: 051-18094

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/07/18	1	4	1	0	0	1	0	0	0	0	0	0	0	7
01:00	0	0	0	0	0	0	0	0	2	0	0	0	0	2
02:00	0	2	0	0	0	0	0	0	1	0	0	0	0	3
03:00	0	4	4	0	0	0	0	0	3	0	0	0	0	11
04:00	2	17	5	0	2	0	0	0	1	0	0	0	0	27
05:00	0	31	11	0	3	0	0	1	5	0	1	0	0	52
06:00	1	55	**14**	0	**7**	0	0	1	3	0	1	0	0	82
07:00	2	**72**	11	0	5	**2**	0	**2**	6	0	1	0	0	**101**
08:00	0	46	11	**1**	3	0	0	0	**8**	0	**3**	0	0	72
09:00	1	40	8	0	5	2	0	1	6	0	2	0	0	65
10:00	**3**	26	12	1	1	1	0	0	7	0	1	0	0	52
11:00	1	25	6	0	1	1	0	0	2	0	2	0	0	38
12 PM	0	31	6	**1**	**3**	2	0	0	4	0	**5**	0	0	**52**
13:00	**2**	24	6	1	3	**3**	0	**2**	**5**	0	4	0	0	50
14:00	2	19	6	0	3	2	0	1	4	0	2	0	0	39
15:00	1	28	**16**	0	3	0	0	0	2	0	0	0	0	50
16:00	0	33	9	0	3	0	0	0	1	0	0	0	0	46
17:00	1	**37**	8	1	1	1	0	0	1	0	0	0	0	50
18:00	1	20	3	0	2	1	0	0	0	0	0	0	0	27
19:00	0	6	2	0	0	0	0	0	1	0	1	0	0	10
20:00	0	14	2	0	0	0	0	0	0	0	0	0	0	16
21:00	0	4	0	1	0	0	0	0	1	0	0	0	0	6
22:00	1	7	1	1	0	1	0	0	2	0	0	0	0	13
23:00	0	31	0	0	0	0	0	0	1	0	0	0	0	32
Total	19	576	142	7	45	17	0	8	66	0	23	0	0	903
Percent	2.1%	63.8%	15.7%	0.8%	5.0%	1.9%	0.0%	0.9%	7.3%	0.0%	2.5%	0.0%	0.0%	
AM Peak	10:00	07:00	06:00	08:00	06:00	07:00		07:00	08:00		08:00			07:00
Vol.	3	72	14	1	7	2		2	8		3			101
PM Peak	13:00	17:00	15:00	12:00	12:00	13:00		13:00	13:00		12:00			12:00
Vol.	2	37	16	1	3	3		2	5		5			52
Grand Total	19	576	142	7	45	17	0	8	66	0	23	0	0	903
Percent	2.1%	63.8%	15.7%	0.8%	5.0%	1.9%	0.0%	0.9%	7.3%	0.0%	2.5%	0.0%	0.0%	

Counts Unlimited, Inc.

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

County of Riverside
Bridge Street
W/ Gilman Springs Road
24 Hour Directional Classification Count

CRV002
Site Code: 051-18094

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/07/18	0	6	0	0	0	0	0	0	2	0	0	0	0	8
01:00	0	5	2	0	0	0	0	0	1	0	0	0	0	8
02:00	0	1	0	0	0	0	0	0	2	0	0	0	0	3
03:00	1	3	0	0	0	1	0	1	1	0	0	0	0	7
04:00	1	1	1	0	2	1	0	0	4	0	0	0	0	10
05:00	1	8	5	0	1	1	0	0	1	0	0	0	0	17
06:00	2	18	7	**1**	2	2	0	0	1	0	1	0	0	34
07:00	1	**19**	10	1	3	2	0	0	3	0	**2**	0	0	41
08:00	0	16	9	0	3	0	0	**2**	7	0	2	0	0	39
09:00	**7**	14	2	1	**4**	1	0	0	6	0	2	0	0	37
10:00	0	14	7	0	3	0	0	0	**8**	0	2	0	0	34
11:00	1	18	**12**	0	2	**3**	**2**	2	3	0	1	0	0	**44**
12 PM	1	27	10	1	3	**2**	0	**2**	**7**	0	**4**	0	0	57
13:00	2	29	9	**2**	5	1	0	0	3	0	2	0	0	53
14:00	0	31	10	0	4	0	0	0	3	0	1	0	0	49
15:00	**3**	52	15	0	4	0	0	2	4	0	1	0	0	81
16:00	1	58	**20**	0	**8**	1	0	2	1	0	0	0	0	91
17:00	0	**71**	18	0	4	0	0	0	0	0	0	0	0	**93**
18:00	0	46	11	1	3	0	0	0	1	0	0	0	0	62
19:00	0	38	7	0	7	0	0	1	0	0	0	0	0	53
20:00	0	26	5	0	2	0	0	1	2	0	0	0	0	36
21:00	0	29	10	0	1	0	0	0	1	0	0	0	0	41
22:00	0	42	6	1	0	0	0	0	2	0	0	0	0	51
23:00	0	8	3	1	0	0	0	0	1	0	0	0	0	13
Total	21	580	179	9	61	15	2	13	64	0	18	0	0	962
Percent	2.2%	60.3%	18.6%	0.9%	6.3%	1.6%	0.2%	1.4%	6.7%	0.0%	1.9%	0.0%	0.0%	
AM Peak	09:00	07:00	11:00	06:00	09:00	11:00	11:00	08:00	10:00		07:00			11:00
Vol.	7	19	12	1	4	3	2	2	8		2			44
PM Peak	15:00	17:00	16:00	13:00	16:00	12:00		12:00	12:00		12:00			17:00
Vol.	3	71	20	2	8	2		2	7		4			93
Grand Total	21	580	179	9	61	15	2	13	64	0	18	0	0	962
Percent	2.2%	60.3%	18.6%	0.9%	6.3%	1.6%	0.2%	1.4%	6.7%	0.0%	1.9%	0.0%	0.0%	

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

County of Riverside
Bridge Street
W/ Gilman Springs Road
24 Hour Directional Classification Count

CRV002
Site Code: 051-18094

Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/07/18	1	10	1	0	0	1	0	0	2	0	0	0	0	15
01:00	0	5	2	0	0	0	0	0	3	0	0	0	0	10
02:00	0	3	0	0	0	0	0	0	3	0	0	0	0	6
03:00	1	7	4	0	0	1	0	1	4	0	0	0	0	18
04:00	3	18	6	0	4	1	0	0	5	0	0	0	0	37
05:00	1	39	16	0	4	1	0	1	6	0	1	0	0	69
06:00	3	73	**21**	**1**	**9**	2	0	1	4	0	2	0	0	116
07:00	3	**91**	21	1	8	**4**	0	**2**	9	0	3	0	0	**142**
08:00	0	62	20	1	6	0	0	2	**15**	0	**5**	0	0	111
09:00	**8**	54	10	1	9	3	0	1	12	0	4	0	0	102
10:00	3	40	19	1	4	1	0	0	15	0	3	0	0	86
11:00	2	43	18	0	3	4	**2**	2	5	0	3	0	0	82
12 PM	1	58	16	2	6	**4**	0	**2**	**11**	0	**9**	0	0	109
13:00	**4**	53	15	**3**	8	4	0	2	8	0	6	0	0	103
14:00	2	50	16	0	7	2	0	1	7	0	3	0	0	88
15:00	4	80	**31**	0	7	0	0	2	6	0	1	0	0	131
16:00	1	91	29	0	**11**	1	0	2	2	0	0	0	0	137
17:00	1	**108**	26	1	5	1	0	0	1	0	0	0	0	**143**
18:00	1	66	14	1	5	1	0	0	1	0	0	0	0	89
19:00	0	44	9	0	7	0	0	1	1	0	1	0	0	63
20:00	0	40	7	0	2	0	0	1	2	0	0	0	0	52
21:00	0	33	10	1	1	0	0	0	2	0	0	0	0	47
22:00	1	49	7	2	0	1	0	0	4	0	0	0	0	64
23:00	0	39	3	1	0	0	0	0	2	0	0	0	0	45
Total	40	1156	321	16	106	32	2	21	130	0	41	0	0	1865
Percent	2.1%	62.0%	17.2%	0.9%	5.7%	1.7%	0.1%	1.1%	7.0%	0.0%	2.2%	0.0%	0.0%	
AM Peak	09:00	07:00	06:00	06:00	06:00	07:00	11:00	07:00	08:00		08:00			07:00
Vol.	8	91	21	1	9	4	2	2	15		5			142
PM Peak	13:00	17:00	15:00	13:00	16:00	12:00		12:00	12:00		12:00			17:00
Vol.	4	108	31	3	11	4		2	11		9			143
Grand Total	40	1156	321	16	106	32	2	21	130	0	41	0	0	1865
Percent	2.1%	62.0%	17.2%	0.9%	5.7%	1.7%	0.1%	1.1%	7.0%	0.0%	2.2%	0.0%	0.0%	

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County of Riverside
Gilman Springs Road
N/ Alessandro Boulevard
24 Hour Directional Classification Count

CRV001
Site Code: 051-18094

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/07/18	0	53	21	2	3	0	0	0	1	0	0	0	0	80
01:00	1	42	20	1	1	2	0	1	3	0	0	0	0	71
02:00	0	74	25	1	10	0	0	0	5	0	0	0	0	115
03:00	**2**	180	67	3	47	2	0	1	7	0	0	0	0	309
04:00	0	342	123	0	89	**3**	0	4	5	0	0	0	0	566
05:00	1	449	169	5	**118**	2	0	1	2	0	0	0	0	747
06:00	1	**590**	200	0	99	1	0	**5**	8	0	0	0	0	**904**
07:00	1	563	149	3	63	2	0	2	7	0	0	0	0	790
08:00	0	390	134	**8**	50	0	0	3	9	0	0	**1**	0	595
09:00	0	346	124	3	48	1	0	2	**15**	**2**	**1**	0	0	542
10:00	2	258	101	8	40	1	0	1	9	0	0	0	0	420
11:00	1	175	**203**	8	53	2	0	0	8	0	0	0	0	450
12 PM	4	**148**	277	10	66	5	0	2	3	0	0	0	0	515
13:00	6	134	235	**13**	52	4	0	2	**6**	0	0	0	0	452
14:00	**7**	92	254	12	59	**8**	0	4	3	0	0	0	0	439
15:00	4	137	297	9	**92**	2	0	**5**	1	0	0	0	0	**547**
16:00	2	100	**311**	5	53	1	0	1	2	0	**1**	**1**	0	477
17:00	0	146	248	2	62	1	0	4	3	0	0	0	0	466
18:00	2	141	187	4	49	2	0	4	2	0	0	0	0	391
19:00	0	130	132	2	33	1	0	0	1	0	0	0	0	299
20:00	0	110	113	1	18	1	0	0	0	0	0	0	0	243
21:00	0	86	87	4	19	1	0	0	1	0	0	0	0	198
22:00	3	56	60	1	13	4	0	0	3	0	0	0	0	140
23:00	0	35	67	2	3	0	0	0	0	0	0	0	0	107
Total	37	4777	3604	107	1140	46	0	42	104	2	2	2	0	9863
Percent	0.4%	48.4%	36.5%	1.1%	11.6%	0.5%	0.0%	0.4%	1.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	03:00	06:00	11:00	08:00	05:00	04:00		06:00	09:00	09:00	09:00	08:00		06:00
Vol.	2	590	203	8	118	3		5	15	2	1	1		904
PM Peak	14:00	12:00	16:00	13:00	15:00	14:00		15:00	13:00		16:00	16:00		15:00
Vol.	7	148	311	13	92	8		5	6		1	1		547
Grand Total	37	4777	3604	107	1140	46	0	42	104	2	2	2	0	9863
Percent	0.4%	48.4%	36.5%	1.1%	11.6%	0.5%	0.0%	0.4%	1.1%	0.0%	0.0%	0.0%	0.0%	

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County of Riverside
Gilman Springs Road
N/ Alessandro Boulevard
24 Hour Directional Classification Count

CRV001
Site Code: 051-18094

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/07/18	0	137	13	1	3	0	0	0	3	0	0	0	0	157
01:00	0	69	10	0	1	0	0	0	0	0	0	0	0	80
02:00	0	57	2	0	2	0	0	0	5	0	0	0	0	66
03:00	0	57	3	0	2	0	0	2	6	0	0	0	0	70
04:00	0	33	13	2	4	0	0	2	6	0	0	0	0	60
05:00	2	129	34	2	8	0	0	3	9	0	**3**	0	0	190
06:00	0	216	58	4	23	1	0	3	**18**	0	0	0	0	323
07:00	2	298	74	5	18	0	0	2	13	0	0	0	0	412
08:00	0	237	67	5	**27**	**2**	0	**5**	8	0	1	0	0	352
09:00	**6**	243	78	4	21	0	**1**	5	14	0	0	0	0	372
10:00	2	272	68	**6**	21	2	0	4	9	0	0	**1**	0	385
11:00	1	**307**	**79**	6	23	2	1	1	8	0	1	0	0	**429**
12 PM	0	419	79	3	16	**3**	0	3	**13**	0	0	0	0	536
13:00	4	424	90	1	24	0	**1**	1	13	0	0	0	0	558
14:00	2	472	128	3	35	2	0	2	11	0	**1**	0	0	656
15:00	4	548	186	1	67	0	0	**7**	3	0	0	**1**	0	817
16:00	**7**	596	**223**	1	**99**	0	0	1	2	0	0	0	0	929
17:00	4	**684**	170	1	75	0	0	2	2	0	0	0	0	**938**
18:00	4	606	152	0	67	0	0	1	3	0	0	0	0	833
19:00	2	441	137	2	51	0	0	2	2	0	0	0	0	637
20:00	0	349	90	**5**	38	1	0	0	6	**1**	0	0	0	490
21:00	2	328	86	3	24	0	0	0	2	0	0	0	0	445
22:00	0	256	81	1	23	0	0	0	0	0	0	0	0	361
23:00	1	157	39	1	12	0	0	1	2	0	0	0	0	213
Total	43	7335	1960	57	684	13	3	47	158	1	6	2	0	10309
Percent	0.4%	71.2%	19.0%	0.6%	6.6%	0.1%	0.0%	0.5%	1.5%	0.0%	0.1%	0.0%	0.0%	
AM Peak	09:00	11:00	11:00	10:00	08:00	08:00	09:00	08:00	06:00		05:00	10:00		11:00
Vol.	6	307	79	6	27	2	1	5	18		3	1		429
PM Peak	16:00	17:00	16:00	20:00	16:00	12:00	13:00	15:00	12:00	20:00	14:00	15:00		17:00
Vol.	7	684	223	5	99	3	1	7	13	1	1	1		938
Grand Total	43	7335	1960	57	684	13	3	47	158	1	6	2	0	10309
Percent	0.4%	71.2%	19.0%	0.6%	6.6%	0.1%	0.0%	0.5%	1.5%	0.0%	0.1%	0.0%	0.0%	

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County of Riverside
Gilman Springs Road
N/ Alessandro Boulevard
24 Hour Directional Classification Count

CRV001
Site Code: 051-18094

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/07/18	0	190	34	3	6	0	0	0	4	0	0	0	0	237
01:00	1	111	30	1	2	2	0	1	3	0	0	0	0	151
02:00	0	131	27	1	12	0	0	0	10	0	0	0	0	181
03:00	2	237	70	3	49	2	0	3	13	0	0	0	0	379
04:00	0	375	136	2	93	3	0	6	11	0	0	0	0	626
05:00	3	578	203	7	**126**	2	0	4	11	0	**3**	0	0	937
06:00	1	806	258	4	122	2	0	**8**	26	0	0	0	0	**1227**
07:00	3	**861**	223	8	81	2	0	4	20	0	0	0	0	1202
08:00	0	627	201	13	77	2	0	8	17	0	1	**1**	0	947
09:00	**6**	589	202	7	69	1	**1**	7	**29**	**2**	1	0	0	914
10:00	4	530	169	**14**	61	3	0	5	18	0	0	1	0	805
11:00	2	482	**282**	14	76	**4**	1	1	16	0	1	0	0	879
12 PM	4	567	356	13	82	8	0	5	16	0	0	0	0	1051
13:00	**10**	558	325	14	76	4	**1**	3	**19**	0	0	0	0	1010
14:00	9	564	382	**15**	94	**10**	0	6	14	0	**1**	0	0	1095
15:00	8	685	483	10	**159**	2	0	**12**	4	0	0	**1**	0	1364
16:00	9	696	**534**	6	152	1	0	2	4	0	1	1	0	**1406**
17:00	4	**830**	418	3	137	1	0	6	5	0	0	0	0	1404
18:00	6	747	339	4	116	2	0	5	5	0	0	0	0	1224
19:00	2	571	269	4	84	1	0	2	3	0	0	0	0	936
20:00	0	459	203	6	56	2	0	0	6	**1**	0	0	0	733
21:00	2	414	173	7	43	1	0	0	3	0	0	0	0	643
22:00	3	312	141	2	36	4	0	0	3	0	0	0	0	501
23:00	1	192	106	3	15	0	0	1	2	0	0	0	0	320
Total	80	12112	5564	164	1824	59	3	89	262	3	8	4	0	20172
Percent	0.4%	60.0%	27.6%	0.8%	9.0%	0.3%	0.0%	0.4%	1.3%	0.0%	0.0%	0.0%	0.0%	
AM Peak	09:00	07:00	11:00	10:00	05:00	11:00	09:00	06:00	09:00	09:00	05:00	08:00		06:00
Vol.	6	861	282	14	126	4	1	8	29	2	3	1		1227
PM Peak	13:00	17:00	16:00	14:00	15:00	14:00	13:00	15:00	13:00	20:00	14:00	15:00		16:00
Vol.	10	830	534	15	159	10	1	12	19	1	1	1		1406
Grand Total	80	12112	5564	164	1824	59	3	89	262	3	8	4	0	20172
Percent	0.4%	60.0%	27.6%	0.8%	9.0%	0.3%	0.0%	0.4%	1.3%	0.0%	0.0%	0.0%	0.0%	

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County of Riverside
Gilman Springs Road
S/ Bridge Street
24 Hour Directional Classification Count

CRV003
Site Code: 051-18094

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/07/18	1	63	22	2	5	0	0	0	0	0	0	0	0	93
01:00	0	56	15	1	1	1	0	2	3	0	0	0	0	79
02:00	3	90	19	2	7	1	0	0	2	0	0	0	0	124
03:00	2	197	65	3	49	1	0	1	5	0	0	0	0	323
04:00	1	373	121	0	79	2	0	4	4	0	0	0	0	584
05:00	**7**	454	166	5	**105**	1	0	3	1	0	0	0	0	742
06:00	5	**652**	**193**	1	82	1	0	**9**	8	0	**2**	0	0	**953**
07:00	1	642	151	3	50	1	0	3	5	0	1	0	0	857
08:00	3	449	129	**6**	49	1	0	6	8	0	2	**1**	0	654
09:00	3	371	112	1	45	**3**	0	5	**14**	**2**	2	0	0	558
10:00	1	281	95	3	43	2	0	5	6	0	2	0	0	438
11:00	2	326	95	4	33	1	0	2	12	0	1	0	0	476
12 PM	3	382	**115**	4	42	**3**	0	3	9	0	**3**	0	0	564
13:00	3	324	99	**9**	33	1	0	3	7	0	2	0	0	481
14:00	1	317	90	6	33	2	0	5	**11**	0	3	0	0	468
15:00	**4**	**423**	114	4	**57**	1	0	**8**	9	0	0	0	0	**620**
16:00	1	388	101	4	40	0	0	4	3	0	1	0	0	542
17:00	3	370	112	2	36	2	0	2	1	0	0	0	0	528
18:00	1	304	77	4	38	1	0	6	1	0	0	0	0	432
19:00	0	238	63	0	28	2	0	0	0	0	0	0	0	331
20:00	1	213	50	1	16	1	0	1	0	0	0	0	0	283
21:00	0	171	32	1	17	0	0	1	2	0	0	0	0	224
22:00	0	111	19	1	8	1	0	0	3	0	0	0	0	143
23:00	0	62	19	2	3	0	0	0	0	0	0	0	0	86
Total	46	7257	2074	69	899	29	0	73	114	2	19	1	0	10583
Percent	0.4%	68.6%	19.6%	0.7%	8.5%	0.3%	0.0%	0.7%	1.1%	0.0%	0.2%	0.0%	0.0%	
AM Peak	05:00	06:00	06:00	08:00	05:00	09:00		06:00	09:00	09:00	06:00	08:00		06:00
Vol.	7	652	193	6	105	3		9	14	2	2	1		953
PM Peak	15:00	15:00	12:00	13:00	15:00	12:00		15:00	14:00		12:00			15:00
Vol.	4	423	115	9	57	3		8	11		3			620
Grand Total	46	7257	2074	69	899	29	0	73	114	2	19	1	0	10583
Percent	0.4%	68.6%	19.6%	0.7%	8.5%	0.3%	0.0%	0.7%	1.1%	0.0%	0.2%	0.0%	0.0%	

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County of Riverside
Gilman Springs Road
S/ Bridge Street
24 Hour Directional Classification Count

CRV003
Site Code: 051-18094

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/07/18	0	148	20	1	5	0	0	1	1	0	0	0	0	176
01:00	0	70	15	0	2	1	0	0	0	0	0	0	0	88
02:00	0	56	5	0	3	0	0	0	3	0	0	0	0	67
03:00	0	64	8	0	4	0	0	1	3	0	0	0	0	80
04:00	0	41	11	1	4	0	0	1	3	0	0	0	0	61
05:00	2	121	33	5	11	1	0	2	8	0	**4**	0	0	187
06:00	1	223	70	5	26	1	0	4	11	0	1	0	0	342
07:00	2	**327**	91	6	32	1	0	3	11	0	2	0	0	475
08:00	1	291	74	**7**	30	**3**	0	5	6	0	2	0	0	419
09:00	**4**	252	94	7	33	2	0	**6**	**13**	0	2	0	0	413
10:00	2	293	86	6	25	2	0	1	4	0	1	**1**	0	421
11:00	1	324	**106**	6	**37**	1	0	4	9	0	2	0	0	**490**
12 PM	2	405	98	**3**	32	**4**	0	2	6	0	3	0	0	555
13:00	5	448	109	3	40	1	**1**	1	**10**	0	**4**	0	0	622
14:00	4	518	155	3	34	2	0	1	9	0	3	0	0	729
15:00	4	641	161	2	53	0	0	**5**	3	0	0	**1**	0	870
16:00	5	690	**226**	1	**65**	0	0	4	2	0	0	0	0	993
17:00	3	**788**	183	2	50	0	0	0	3	0	0	0	**1**	**1030**
18:00	**6**	719	149	0	36	0	0	0	2	0	0	0	0	912
19:00	2	540	121	1	31	1	0	2	1	0	0	0	0	699
20:00	0	379	80	3	25	1	0	1	5	**1**	0	0	0	495
21:00	2	383	70	2	14	0	0	0	2	0	0	0	0	473
22:00	0	287	50	0	10	0	0	0	0	0	0	0	0	347
23:00	1	187	36	1	3	0	0	0	1	0	0	0	0	229
Total	47	8195	2051	65	605	21	1	44	116	1	24	2	1	11173
Percent	0.4%	73.3%	18.4%	0.6%	5.4%	0.2%	0.0%	0.4%	1.0%	0.0%	0.2%	0.0%	0.0%	
AM Peak	09:00	07:00	11:00	08:00	11:00	08:00		09:00	09:00		05:00	10:00		11:00
Vol.	4	327	106	7	37	3		6	13		4	1		490
PM Peak	18:00	17:00	16:00	12:00	16:00	12:00	13:00	15:00	13:00	20:00	13:00	15:00	17:00	17:00
Vol.	6	788	226	3	65	4	1	5	10	1	4	1	1	1030
Grand Total	47	8195	2051	65	605	21	1	44	116	1	24	2	1	11173
Percent	0.4%	73.3%	18.4%	0.6%	5.4%	0.2%	0.0%	0.4%	1.0%	0.0%	0.2%	0.0%	0.0%	

Counts Unlimited, Inc.

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

County of Riverside
Gilman Springs Road
S/ Bridge Street
24 Hour Directional Classification Count

CRV003
Site Code: 051-18094

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/07/18	1	211	42	3	10	0	0	1	1	0	0	0	0	269
01:00	0	126	30	1	3	2	0	2	3	0	0	0	0	167
02:00	3	146	24	2	10	1	0	0	5	0	0	0	0	191
03:00	2	261	73	3	53	1	0	2	8	0	0	0	0	403
04:00	1	414	132	1	83	2	0	5	7	0	0	0	0	645
05:00	**9**	575	199	10	**116**	2	0	5	9	0	**4**	0	0	929
06:00	6	875	**263**	6	108	2	0	**13**	19	0	3	0	0	1295
07:00	3	**969**	242	9	82	2	0	6	16	0	3	0	0	**1332**
08:00	4	740	203	**13**	79	4	0	11	14	0	4	**1**	0	1073
09:00	7	623	206	8	78	**5**	0	11	**27**	**2**	4	0	0	971
10:00	3	574	181	9	68	4	0	6	10	0	3	1	0	859
11:00	3	650	201	10	70	2	0	6	21	0	3	0	0	966
12 PM	5	787	213	7	74	**7**	0	5	15	0	**6**	0	0	1119
13:00	**8**	772	208	**12**	73	2	**1**	4	17	0	6	0	0	1103
14:00	5	835	245	9	67	4	0	6	**20**	0	6	0	0	1197
15:00	8	1064	275	6	**110**	1	0	**13**	12	0	0	**1**	0	1490
16:00	6	1078	**327**	5	105	0	0	8	5	0	1	0	0	1535
17:00	6	**1158**	295	4	86	2	0	2	4	0	0	0	**1**	**1558**
18:00	7	1023	226	4	74	1	0	6	3	0	0	0	0	1344
19:00	2	778	184	1	59	3	0	2	1	0	0	0	0	1030
20:00	1	592	130	4	41	2	0	2	5	**1**	0	0	0	778
21:00	2	554	102	3	31	0	0	1	4	0	0	0	0	697
22:00	0	398	69	1	18	1	0	0	3	0	0	0	0	490
23:00	1	249	55	3	6	0	0	0	1	0	0	0	0	315
Total	93	15452	4125	134	1504	50	1	117	230	3	43	3	1	21756
Percent	0.4%	71.0%	19.0%	0.6%	6.9%	0.2%	0.0%	0.5%	1.1%	0.0%	0.2%	0.0%	0.0%	
AM Peak	05:00	07:00	06:00	08:00	05:00	09:00		06:00	09:00	09:00	05:00	08:00		07:00
Vol.	9	969	263	13	116	5		13	27	2	4	1		1332
PM Peak	13:00	17:00	16:00	13:00	15:00	12:00	13:00	15:00	14:00	20:00	12:00	15:00	17:00	17:00
Vol.	8	1158	327	12	110	7	1	13	20	1	6	1	1	1558
Grand Total	93	15452	4125	134	1504	50	1	117	230	3	43	3	1	21756
Percent	0.4%	71.0%	19.0%	0.6%	6.9%	0.2%	0.0%	0.5%	1.1%	0.0%	0.2%	0.0%	0.0%	

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APPENDIX 3.2:

EXISTING (2018) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	80	166	841	457	1
Future Vol, veh/h	0	80	166	841	457	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	82	171	867	471	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1681	472	472	0	-	0
Stage 1	472	-	-	-	-	-
Stage 2	1209	-	-	-	-	-
Critical Hdwy	6.4	6	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	105	612	1100	-	-	-
Stage 1	632	-	-	-	-	-
Stage 2	285	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	89	612	1100	-	-	-
Mov Cap-2 Maneuver	108	-	-	-	-	-
Stage 1	534	-	-	-	-	-
Stage 2	285	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.8	1.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1100	-	612	-	-
HCM Lane V/C Ratio	0.156	-	0.135	-	-
HCM Control Delay (s)	8.9	-	11.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.6	-	0.5	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	536	1005	2	0	2
Future Vol, veh/h	1	536	1005	2	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	576	1081	2	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1083	0	-	0	1660	1082
Stage 1	-	-	-	-	1082	-
Stage 2	-	-	-	-	578	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	652	-	-	-	108	267
Stage 1	-	-	-	-	328	-
Stage 2	-	-	-	-	565	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	652	-	-	-	108	267
Mov Cap-2 Maneuver	-	-	-	-	108	-
Stage 1	-	-	-	-	327	-
Stage 2	-	-	-	-	565	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	18.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	652	-	-	-	267
HCM Lane V/C Ratio	0.002	-	-	-	0.008
HCM Control Delay (s)	10.5	-	-	-	18.6
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	9.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	499	37	7	911	96	32
Future Vol, veh/h	499	37	7	911	96	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	175	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	548	41	8	1001	105	35

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	548	0	1565	548
Stage 1	-	-	-	-	548	-
Stage 2	-	-	-	-	1017	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1032	-	124	540
Stage 1	-	-	-	-	583	-
Stage 2	-	-	-	-	352	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1032	-	123	540
Mov Cap-2 Maneuver	-	-	-	-	123	-
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	352	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	112.6
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	152	-	-	1032	-
HCM Lane V/C Ratio	0.925	-	-	0.007	-
HCM Control Delay (s)	112.6	-	-	8.5	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	6.6	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	518	0	0	915	9	0	0	0	5	0	3
Future Vol, veh/h	12	518	0	0	915	9	0	0	0	5	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	155	-	315	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	557	0	0	984	10	0	0	0	5	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	994	0	0	557	0	0	1574	1577	557	1567	1567	984
Stage 1	-	-	-	-	-	-	583	583	-	984	984	-
Stage 2	-	-	-	-	-	-	991	994	-	583	583	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	704	-	-	1024	-	-	90	111	534	91	112	304
Stage 1	-	-	-	-	-	-	502	502	-	302	329	-
Stage 2	-	-	-	-	-	-	299	326	-	502	502	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	704	-	-	1024	-	-	88	109	534	90	110	304
Mov Cap-2 Maneuver	-	-	-	-	-	-	88	109	-	90	110	-
Stage 1	-	-	-	-	-	-	493	493	-	297	329	-
Stage 2	-	-	-	-	-	-	296	326	-	493	493	-

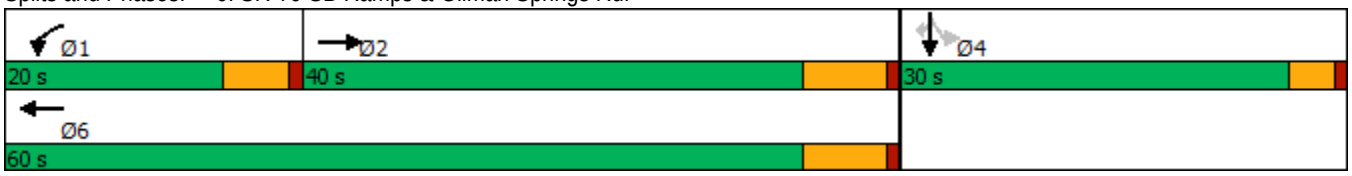
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	0	36.7
HCM LOS			A	E

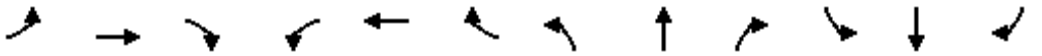
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	704	-	-	1024	-	-	122
HCM Lane V/C Ratio	-	0.018	-	-	-	-	-	0.071
HCM Control Delay (s)	0	10.2	-	-	0	-	-	36.7
HCM Lane LOS	A	B	-	-	A	-	-	E
HCM 95th %tile Q(veh)	-	0.1	-	-	0	-	-	0.2

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	220	5	911	2	13
Future Volume (vph)	220	5	911	2	13
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.5	10.4	34.5	9.0	9.0
Total Split (s)	40.0	20.0	60.0	30.0	30.0
Total Split (%)	44.4%	22.2%	66.7%	33.3%	33.3%
Yellow Time (s)	5.5	4.4	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	5.4	6.5	4.0	4.0
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 43.9
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 6: SR-79 SB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	220	303	5	911	0	0	0	0	146	2	13
Future Volume (veh/h)	0	220	303	5	911	0	0	0	0	146	2	13
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	232	250	5	959	0				154	2	8
Peak Hour Factor	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
Cap, veh/h	0	796	710	12	2121	0				252	3	227
Arrive On Green	0.00	0.44	0.44	0.01	0.59	0.00				0.14	0.14	0.14
Sat Flow, veh/h	0	1900	1610	1810	3705	0				1787	23	1610
Grp Volume(v), veh/h	0	232	250	5	959	0				156	0	8
Grp Sat Flow(s),veh/h/ln	0	1805	1610	1810	1805	0				1811	0	1610
Q Serve(g_s), s	0.0	3.2	4.0	0.1	5.8	0.0				3.1	0.0	0.2
Cycle Q Clear(g_c), s	0.0	3.2	4.0	0.1	5.8	0.0				3.1	0.0	0.2
Prop In Lane	0.00		1.00	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	796	710	12	2121	0				255	0	227
V/C Ratio(X)	0.00	0.29	0.35	0.41	0.45	0.00				0.61	0.00	0.04
Avail Cap(c_a), veh/h	0	1565	1396	684	4998	0				1218	0	1083
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	6.9	7.1	19.1	4.5	0.0				15.6	0.0	14.3
Incr Delay (d2), s/veh	0.0	0.4	0.6	40.8	0.3	0.0				5.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.7	0.2	0.4	0.0				1.4	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.4	7.8	59.9	4.8	0.0				20.6	0.0	14.5
LnGrp LOS	A	A	A	E	A	A				C	A	B
Approach Vol, veh/h		482			964						164	
Approach Delay, s/veh		7.6			5.1						20.3	
Approach LOS		A			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	5.7	23.5		9.4		29.2
Change Period (Y+Rc), s	5.4	6.5		4.0		6.5
Max Green Setting (Gmax), s	14.6	33.5		26.0		53.5
Max Q Clear Time (g_c+I1), s	2.1	6.0		5.1		7.8
Green Ext Time (p_c), s	0.0	5.3		1.4		14.9

Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	32.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	349	0	0	500	261	417	2	8	0	0	0
Future Vol, veh/h	17	349	0	0	500	261	417	2	8	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	18	367	0	0	526	275	439	2	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	801	0	-	-	-	0	666	1204	184
Stage 1	-	-	-	-	-	-	403	403	-
Stage 2	-	-	-	-	-	-	263	801	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	831	-	0	0	-	-	~ 397	186	833
Stage 1	-	-	0	0	-	-	649	603	-
Stage 2	-	-	0	0	-	-	763	400	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	831	-	-	-	-	-	~ 388	0	833
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 388	0	-
Stage 1	-	-	-	-	-	-	635	0	-
Stage 2	-	-	-	-	-	-	763	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	118.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	388	833	831	-	-	-
HCM Lane V/C Ratio	1.137	0.01	0.022	-	-	-
HCM Control Delay (s)	120.5	9.4	9.4	-	-	-
HCM Lane LOS	F	A	A	-	-	-
HCM 95th %tile Q(veh)	16.6	0	0.1	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	160	103	515	959	5
Future Vol, veh/h	1	160	103	515	959	5
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	-	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	167	107	536	999	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1752	1002	1004	0	-	0
Stage 1	1002	-	-	-	-	-
Stage 2	750	-	-	-	-	-
Critical Hdwy	6.4	6	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	95	314	698	-	-	-
Stage 1	358	-	-	-	-	-
Stage 2	470	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	80	314	698	-	-	-
Mov Cap-2 Maneuver	233	-	-	-	-	-
Stage 1	303	-	-	-	-	-
Stage 2	470	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	29	1.8	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	698	-	313	-	-
HCM Lane V/C Ratio	0.154	-	0.536	-	-
HCM Control Delay (s)	11.1	-	29	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.5	-	3	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1116	616	2	2	2
Future Vol, veh/h	3	1116	616	2	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	1163	642	2	2	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	644	0	-	0	1812	643
Stage 1	-	-	-	-	643	-
Stage 2	-	-	-	-	1169	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	951	-	-	-	87	477
Stage 1	-	-	-	-	527	-
Stage 2	-	-	-	-	298	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	951	-	-	-	87	477
Mov Cap-2 Maneuver	-	-	-	-	87	-
Stage 1	-	-	-	-	525	-
Stage 2	-	-	-	-	298	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	30.2
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	951	-	-	-	147
HCM Lane V/C Ratio	0.003	-	-	-	0.028
HCM Control Delay (s)	8.8	-	-	-	30.2
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1048	70	11	574	44	12
Future Vol, veh/h	1048	70	11	574	44	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	175	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1092	73	11	598	46	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1092	0	1712	1092
Stage 1	-	-	-	-	1092	-
Stage 2	-	-	-	-	620	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	647	-	101	263
Stage 1	-	-	-	-	324	-
Stage 2	-	-	-	-	540	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	647	-	99	263
Mov Cap-2 Maneuver	-	-	-	-	99	-
Stage 1	-	-	-	-	318	-
Stage 2	-	-	-	-	540	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	65.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	114	-	-	647	-
HCM Lane V/C Ratio	0.512	-	-	0.018	-
HCM Control Delay (s)	65.8	-	-	10.7	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	2.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1059	1	0	585	1	0	0	0	2	0	0
Future Vol, veh/h	0	1059	1	0	585	1	0	0	0	2	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	155	-	315	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1139	1	0	629	1	0	0	0	2	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	630	0	0	1140	0	0	1770	1770	1140	1769	1769	629
Stage 1	-	-	-	-	-	-	1140	1140	-	629	629	-
Stage 2	-	-	-	-	-	-	630	630	-	1140	1140	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	962	-	-	620	-	-	66	84	247	66	84	486
Stage 1	-	-	-	-	-	-	247	278	-	474	478	-
Stage 2	-	-	-	-	-	-	473	478	-	247	278	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	962	-	-	620	-	-	66	84	247	66	84	486
Mov Cap-2 Maneuver	-	-	-	-	-	-	66	84	-	66	84	-
Stage 1	-	-	-	-	-	-	247	278	-	474	478	-
Stage 2	-	-	-	-	-	-	473	478	-	247	278	-

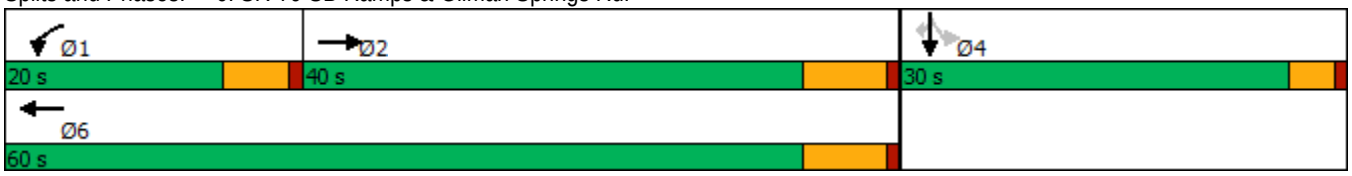
Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	0	61.4
HCM LOS			A	F

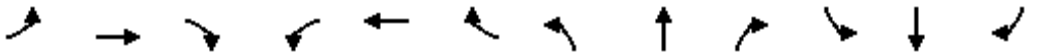
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	962	-	-	620	-	-	66
HCM Lane V/C Ratio	-	-	-	-	-	-	-	0.033
HCM Control Delay (s)	0	0	-	-	0	-	-	61.4
HCM Lane LOS	A	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0.1

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	511	2	563	3	23
Future Volume (vph)	511	2	563	3	23
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.5	10.4	34.5	9.0	9.0
Total Split (s)	40.0	20.0	60.0	30.0	30.0
Total Split (%)	44.4%	22.2%	66.7%	33.3%	33.3%
Yellow Time (s)	5.5	4.4	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	5.4	6.5	4.0	4.0
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 58
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 6: SR-79 SB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	511	549	2	563	0	0	0	0	276	3	23
Future Volume (veh/h)	0	511	549	2	563	0	0	0	0	276	3	23
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	544	438	2	599	0				294	3	12
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	0	863	695	5	2024	0				426	4	383
Arrive On Green	0.00	0.45	0.45	0.00	0.56	0.00				0.24	0.24	0.24
Sat Flow, veh/h	0	1995	1530	1810	3705	0				1792	18	1610
Grp Volume(v), veh/h	0	517	465	2	599	0				297	0	12
Grp Sat Flow(s),veh/h/ln	0	1805	1625	1810	1805	0				1810	0	1610
Q Serve(g_s), s	0.0	11.4	11.4	0.1	4.6	0.0				7.8	0.0	0.3
Cycle Q Clear(g_c), s	0.0	11.4	11.4	0.1	4.6	0.0				7.8	0.0	0.3
Prop In Lane	0.00		0.94	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	820	738	5	2024	0				431	0	383
V/C Ratio(X)	0.00	0.63	0.63	0.40	0.30	0.00				0.69	0.00	0.03
Avail Cap(c_a), veh/h	0	1160	1044	507	3706	0				903	0	803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	10.9	10.9	25.9	6.0	0.0				18.1	0.0	15.2
Incr Delay (d2), s/veh	0.0	1.7	1.9	86.1	0.2	0.0				4.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.2	2.9	0.1	0.9	0.0				3.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	12.6	12.8	112.1	6.2	0.0				22.3	0.0	15.3
LnGrp LOS	A	B	B	F	A	A				C	A	B
Approach Vol, veh/h		982			601						309	
Approach Delay, s/veh		12.7			6.6						22.0	
Approach LOS		B			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	5.5	30.2		16.4		35.7
Change Period (Y+Rc), s	5.4	6.5		4.0		6.5
Max Green Setting (Gmax), s	14.6	33.5		26.0		53.5
Max Q Clear Time (g_c+I1), s	2.1	13.4		9.8		6.6
Green Ext Time (p_c), s	0.0	10.3		2.7		8.0

Intersection Summary		
HCM 6th Ctrl Delay		12.3
HCM 6th LOS		B

Intersection	
Int Delay, s/veh	23.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	774	0	0	323	219	242	1	7	0	0	0
Future Vol, veh/h	14	774	0	0	323	219	242	1	7	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	15	832	0	0	347	235	260	1	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	582	0	-	-	-	0	1036	1444	416
Stage 1	-	-	-	-	-	-	862	862	-
Stage 2	-	-	-	-	-	-	174	582	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1002	-	0	0	-	-	~ 231	133	591
Stage 1	-	-	0	0	-	-	379	375	-
Stage 2	-	-	0	0	-	-	845	502	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1002	-	-	-	-	-	~ 228	0	591
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 228	0	-
Stage 1	-	-	-	-	-	-	373	0	-
Stage 2	-	-	-	-	-	-	845	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	145.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	228	591	1002	-	-	-
HCM Lane V/C Ratio	1.146	0.013	0.015	-	-	-
HCM Control Delay (s)	149.7	11.2	8.6	-	-	-
HCM Lane LOS	F	B	A	-	-	-
HCM 95th %tile Q(veh)	12.2	0	0	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX 3.3:

EXISTING (2018) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

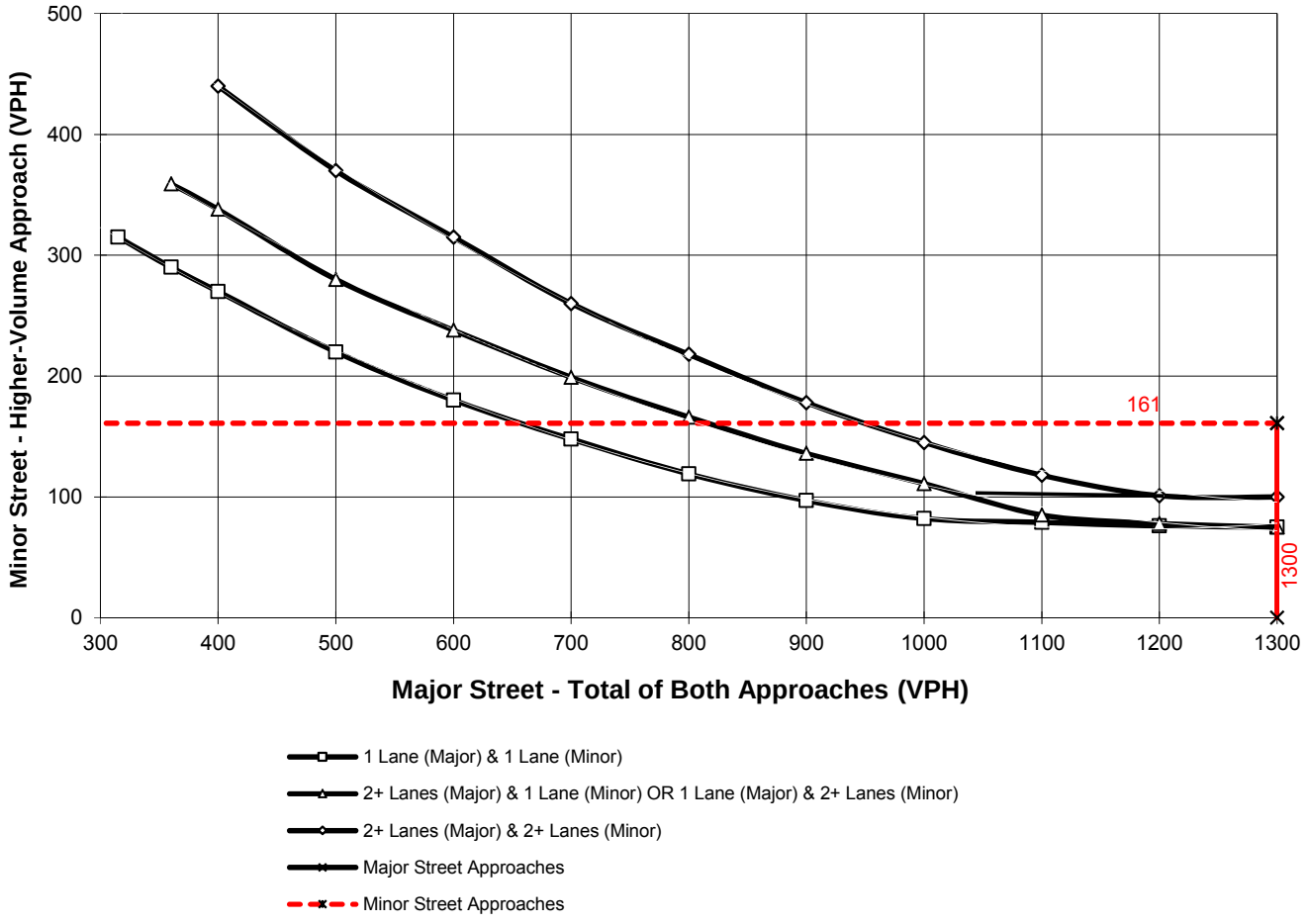
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2018) Conditions - Weekday PM Peak Hour**

Major Street Name = **Gilman Springs Rd.** Total of Both Approaches (VPH) = **1582**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Alessandro Bl.** High Volume Approach (VPH) = **161**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

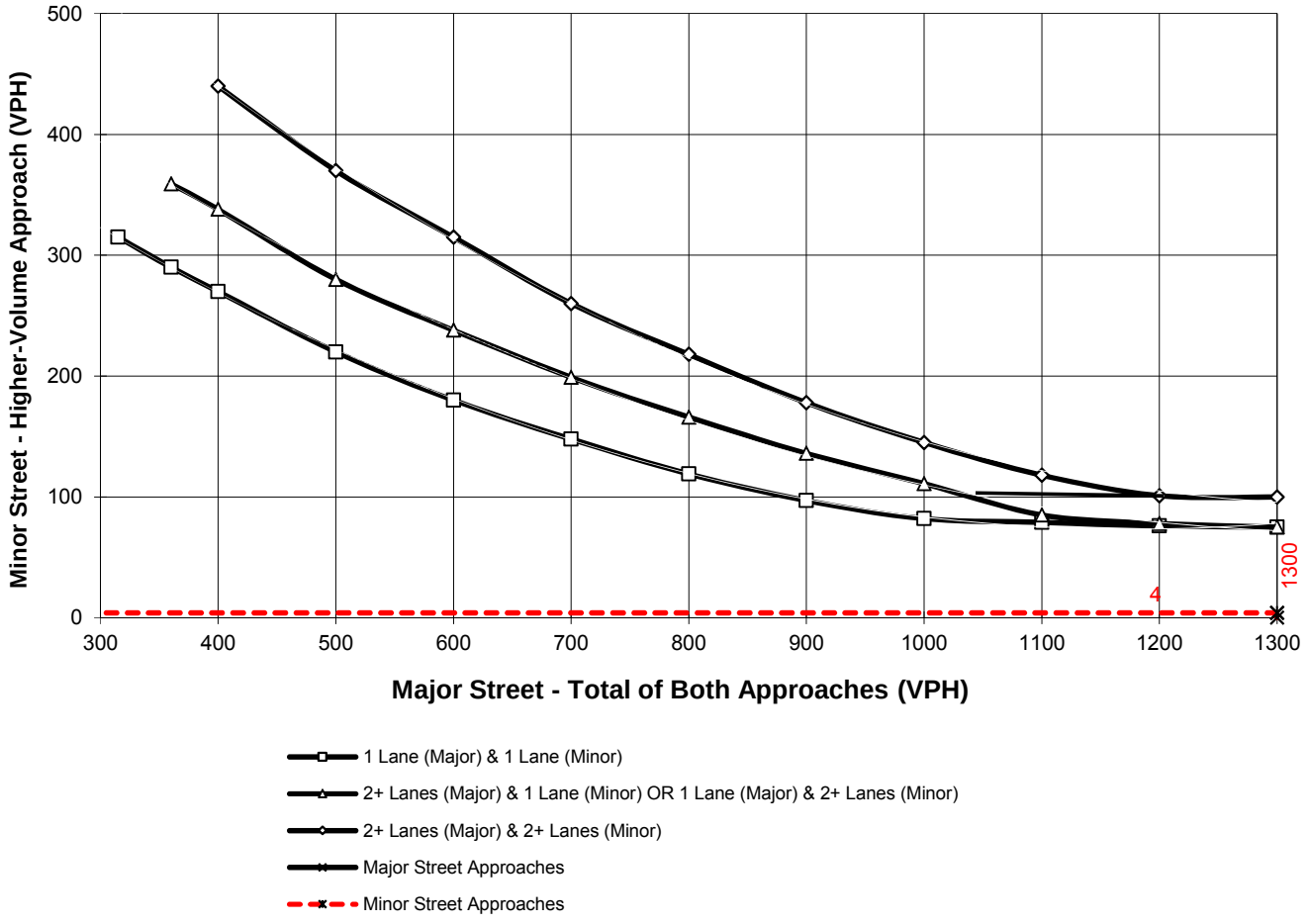
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2018) Conditions - Weekday PM Peak Hour**

Major Street Name = **Gilman Springs Rd.** Total of Both Approaches (VPH) = **1737**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Jack Rabbit Trail** High Volume Approach (VPH) = **4**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

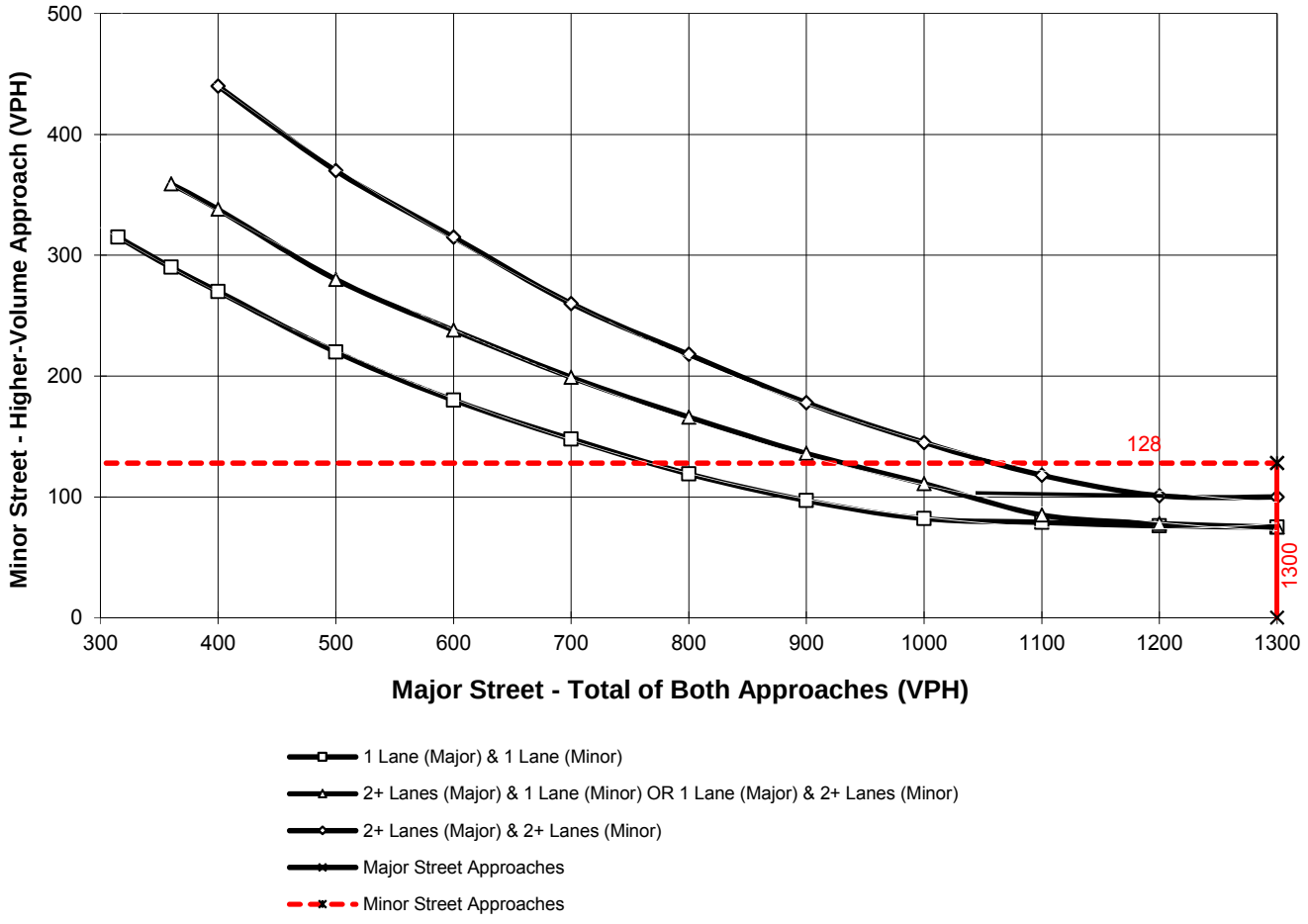
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2018) Conditions - Weekday AM Peak Hour**

Major Street Name = **Gilman Springs Rd.** Total of Both Approaches (VPH) = **1454**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Bridge St.** High Volume Approach (VPH) = **128**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

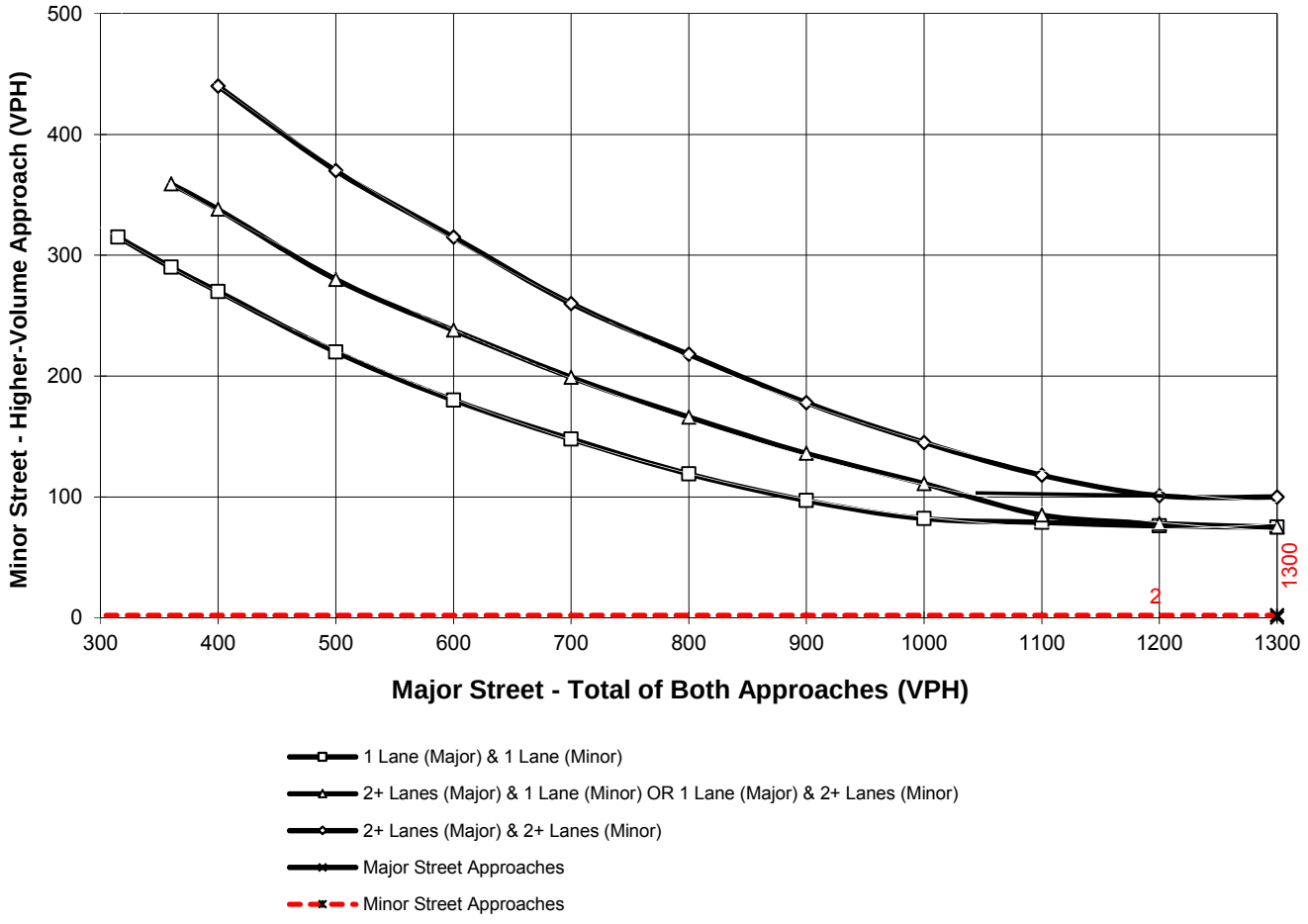
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2018) Conditions - Weekday PM Peak Hour**

Major Street Name = **Gilman Springs Rd.** Total of Both Approaches (VPH) = **1646**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Bridge St.** High Volume Approach (VPH) = **2**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

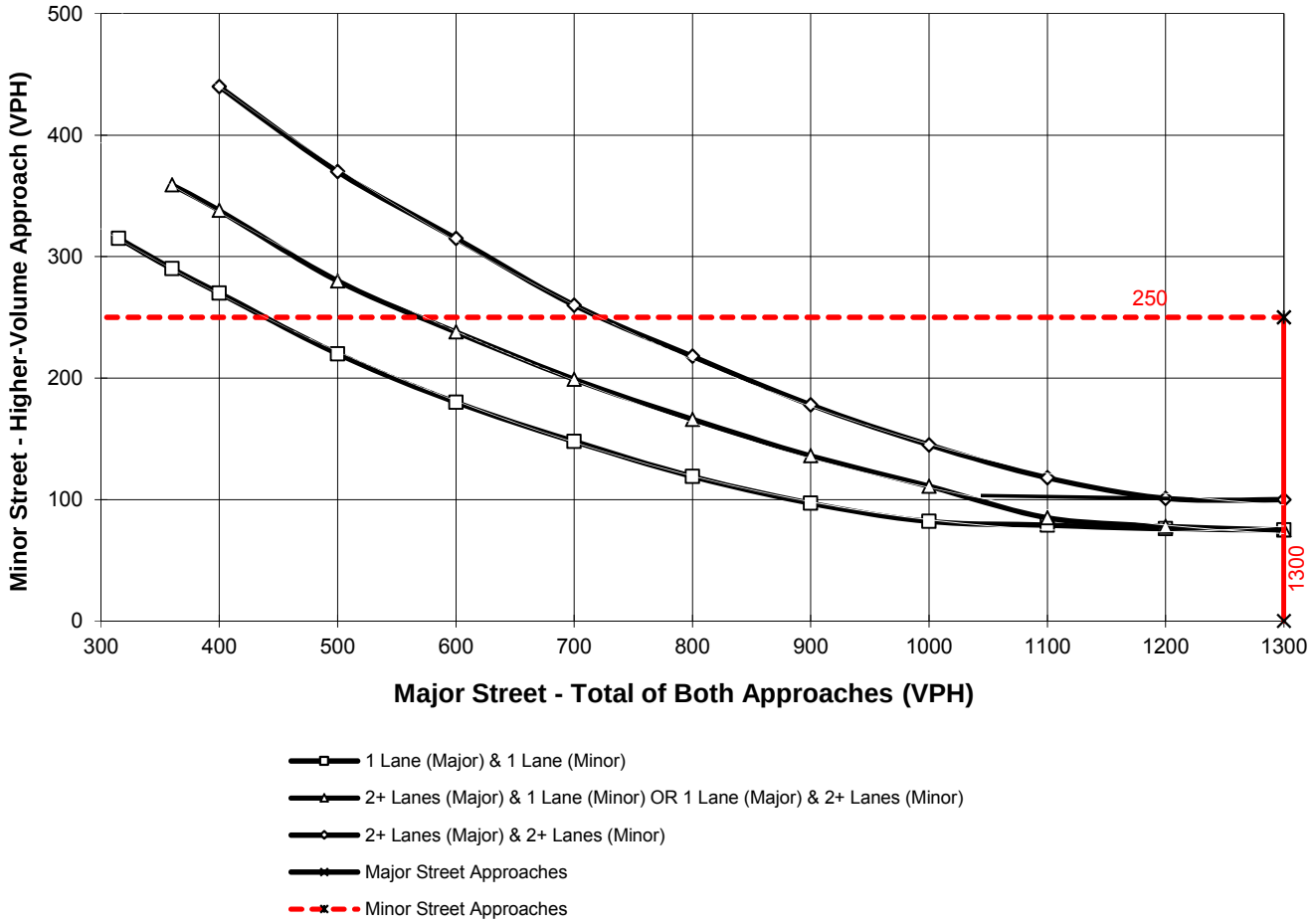
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2018) Conditions - Weekday PM Peak Hour**

Major Street Name = **Gilman Springs Rd.**
Total of Both Approaches (VPH) = **1330**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **SR-79 NB Ramps**
High Volume Approach (VPH) = **250**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 3.4:

EXISTING (2018) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	551	5	959	156	14
v/c Ratio	0.27	0.01	0.43	0.31	0.03
Control Delay	4.5	20.8	7.4	17.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.5	20.8	7.4	17.9	0.1
Queue Length 50th (ft)	14	1	75	33	0
Queue Length 95th (ft)	63	10	137	90	0
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2570	672	3524	1143	1059
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.21	0.01	0.27	0.14	0.01

Intersection Summary

Intersection	
Int Delay, s/veh	32.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	349	0	0	500	261	417	2	8	0	0	0
Future Vol, veh/h	17	349	0	0	500	261	417	2	8	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	18	367	0	0	526	275	439	2	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	801	0	-	-	-	0	666	1204	184
Stage 1	-	-	-	-	-	-	403	403	-
Stage 2	-	-	-	-	-	-	263	801	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	831	-	0	0	-	-	~ 397	186	833
Stage 1	-	-	0	0	-	-	649	603	-
Stage 2	-	-	0	0	-	-	763	400	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	831	-	-	-	-	-	~ 388	0	833
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 388	0	-
Stage 1	-	-	-	-	-	-	635	0	-
Stage 2	-	-	-	-	-	-	763	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	118.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	388	833	831	-	-	-
HCM Lane V/C Ratio	1.137	0.01	0.022	-	-	-
HCM Control Delay (s)	120.5	9.4	9.4	-	-	-
HCM Lane LOS	F	A	A	-	-	-
HCM 95th %tile Q(veh)	16.6	0	0.1	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1128	2	599	297	24
v/c Ratio	0.64	0.01	0.33	0.55	0.04
Control Delay	10.7	30.0	9.0	23.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	10.7	30.0	9.0	23.3	0.1
Queue Length 50th (ft)	80	1	55	81	0
Queue Length 95th (ft)	255	7	110	204	0
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2179	483	3209	864	827
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.52	0.00	0.19	0.34	0.03

Intersection Summary

Intersection	
Int Delay, s/veh	23.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	774	0	0	323	219	242	1	7	0	0	0
Future Vol, veh/h	14	774	0	0	323	219	242	1	7	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	15	832	0	0	347	235	260	1	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	582	0	-	-	-	0	1036	1444	416
Stage 1	-	-	-	-	-	-	862	862	-
Stage 2	-	-	-	-	-	-	174	582	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1002	-	0	0	-	-	~ 231	133	591
Stage 1	-	-	0	0	-	-	379	375	-
Stage 2	-	-	0	0	-	-	845	502	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1002	-	-	-	-	-	~ 228	0	591
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 228	0	-
Stage 1	-	-	-	-	-	-	373	0	-
Stage 2	-	-	-	-	-	-	845	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.2	0	145.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	228	591	1002	-	-	-
HCM Lane V/C Ratio	1.146	0.013	0.015	-	-	-
HCM Control Delay (s)	149.7	11.2	8.6	-	-	-
HCM Lane LOS	F	B	A	-	-	-
HCM 95th %tile Q(veh)	12.2	0	0	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX 3.5:

EXISTING (2018) CONDITIONS BASIC FREEWAY SEGMENT ANALYSIS WORKSHEETS

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3930	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2158
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	59.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	36.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3131	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1719
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	66.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	25.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3540	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1963
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	31.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3131	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1719
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	66.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	25.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1348	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	740
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.31
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	10.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1479	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	820
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.34
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	11.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1096	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	608
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.25
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	8.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1239	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	680
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.28
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	4052	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2224
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.93
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	57.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	38.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3569	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1960
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	31.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	4514	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2478
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.03
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3569	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1960
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	31.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1730	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	950
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.40
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	13.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1986	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1090
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.45
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	15.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1209	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	664
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.28
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1221	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	670
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.28
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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APPENDIX 3.6:

EXISTING (2018) CONDITIONS FREEWAY MERGE/DIVERGE ANALYSIS WORKSHEETS

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3125	805
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.962
Flow Rate (v_i), pc/h	3431	910
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.90	0.43

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	37.1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.593
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	53.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3431	Ramp Junction Speed (S), mi/h	53.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4341	Average Density (D), pc/mi/ln	40.6
Level of Service (LOS)	E		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	190
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3131	6
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	1.000
Flow Rate (v_i), pc/h	3438	7
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.72	0.00

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	32.1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.299
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3438	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	27.9
Level of Service (LOS)	D		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3540	410
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.917
Flow Rate (v_i), pc/h	3926	486
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.82	0.23

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	36.2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.342
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3926	Ramp Junction Speed (S), mi/h	60.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	32.5
Level of Service (LOS)	E		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3130	1
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	1.000
Flow Rate (v_i), pc/h	3437	1
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.72	0.00

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	30.5
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.415
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	58.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3437	Ramp Junction Speed (S), mi/h	58.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3438	Average Density (D), pc/mi/ln	29.4
Level of Service (LOS)	D		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	110
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1348	152
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.943
Flow Rate (v_i), pc/h	1480	175
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.31	0.08

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	16.0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.314
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1480	Ramp Junction Speed (S), mi/h	61.2
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	12.1
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1196	283
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.917
Flow Rate (v_i), pc/h	1313	335
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.34	0.16

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	15.7
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.305
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1313	Ramp Junction Speed (S), mi/h	61.5
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1648	Average Density (D), pc/mi/ln	13.4
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	823	273
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.962
Flow Rate (v_i), pc/h	904	308
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.25	0.15

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	12.4
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.298
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	904	Ramp Junction Speed (S), mi/h	61.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1212	Average Density (D), pc/mi/ln	9.8
Level of Service (LOS)	B		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	155
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1239	416
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.980
Flow Rate (v_i), pc/h	1360	461
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.28	0.22

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	14.6
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.339
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1360	Ramp Junction Speed (S), mi/h	60.5
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	11.2
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

	Freeway	Ramp
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

	Freeway	Ramp
Demand Volume (V_i), veh/h	3567	485
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.952
Flow Rate (v_i), pc/h	3916	554
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.93	0.26

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	38.3
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.635
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	52.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3916	Ramp Junction Speed (S), mi/h	52.2
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4470	Average Density (D), pc/mi/ln	42.8
Level of Service (LOS)	E		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	190
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3569	2
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	1.000
Flow Rate (v_i), pc/h	3919	2
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.82	0.00

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	36.2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.298
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3919	Ramp Junction Speed (S), mi/h	61.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	31.8
Level of Service (LOS)	E		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	4514	948
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.980
Flow Rate (v_i), pc/h	4956	1051
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	1.03	0.50

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	45.1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	59.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4956	Ramp Junction Speed (S), mi/h	-
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

	Freeway	Ramp
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

	Freeway	Ramp
Demand Volume (V_i), veh/h	3566	3
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	0.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	1.000
Flow Rate (v_i), pc/h	3915	3
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.82	0.00

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	34.2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.490
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	56.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3915	Ramp Junction Speed (S), mi/h	56.3
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3918	Average Density (D), pc/mi/ln	34.8
Level of Service (LOS)	D		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	110
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1730	290
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.962
Flow Rate (v_i), pc/h	1899	328
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.40	0.16

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	19.6
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.328
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.8
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1899	Ramp Junction Speed (S), mi/h	60.8
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	15.6
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1440	546
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.980
Flow Rate (v_i), pc/h	1581	606
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.46	0.29

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	19.8
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.320
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1581	Ramp Junction Speed (S), mi/h	61.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2187	Average Density (D), pc/mi/ln	17.9
Level of Service (LOS)	B		

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Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

	Freeway	Ramp
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

	Freeway	Ramp
Demand Volume (V_i), veh/h	979	230
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	1.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.990
Flow Rate (v_i), pc/h	1075	253
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.28	0.12

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	13.3
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.300
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1075	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1328	Average Density (D), pc/mi/ln	10.8
Level of Service (LOS)	B		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	Existing (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	155
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1221	242
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.962
Flow Rate (v_i), pc/h	1341	273
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.28	0.13

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	14.4
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.323
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1341	Ramp Junction Speed (S), mi/h	61.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	11.0
Level of Service (LOS)	B		

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APPENDIX 3.7:

EXISTING (2018) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	499	37	7	911	96
Future Volume (vph)	499	37	7	911	96
Turn Type	NA	Perm	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		4			
Detector Phase	4	4	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	35.5	35.5	9.6	24.5	24.5
Total Split (s)	84.0	84.0	10.0	94.0	26.0
Total Split (%)	70.0%	70.0%	8.3%	78.3%	21.7%
Yellow Time (s)	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 72
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Bridge St. & Gilman Springs Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	499	37	7	911	96	32
Future Volume (veh/h)	499	37	7	911	96	32
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	548	0	8	1001	105	35
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1078		19	1231	200	67
Arrive On Green	0.57	0.00	0.01	0.65	0.15	0.15
Sat Flow, veh/h	1900	1610	1810	1900	1308	436
Grp Volume(v), veh/h	548	0	8	1001	141	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1756	0
Q Serve(g_s), s	11.5	0.0	0.3	25.6	4.8	0.0
Cycle Q Clear(g_c), s	11.5	0.0	0.3	25.6	4.8	0.0
Prop In Lane		1.00	1.00		0.74	0.25
Lane Grp Cap(c), veh/h	1078		19	1231	269	0
V/C Ratio(X)	0.51		0.43	0.81	0.52	0.00
Avail Cap(c_a), veh/h	2253		150	2544	524	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.6	0.0	32.1	8.6	25.5	0.0
Incr Delay (d2), s/veh	0.5	0.0	5.6	1.9	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.1	5.7	1.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.1	0.0	37.8	10.5	27.1	0.0
LnGrp LOS	A		D	B	C	A
Approach Vol, veh/h	548	A		1009	141	
Approach Delay, s/veh	9.1			10.7	27.1	
Approach LOS	A			B	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		16.5	5.3	43.6		48.8
Change Period (Y+Rc), s		6.5	4.6	6.5		6.5
Max Green Setting (Gmax), s		19.5	5.4	77.5		87.5
Max Q Clear Time (g_c+I1), s		6.8	2.3	13.5		27.6
Green Ext Time (p_c), s		0.3	0.0	5.2		14.7

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

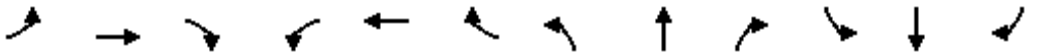
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBT	Ø2	Ø3
Lane Configurations								
Traffic Volume (vph)	12	518	915	9	5	0		
Future Volume (vph)	12	518	915	9	5	0		
Turn Type	Prot	NA	NA	Perm	Perm	NA		
Protected Phases	7	4	8			6	2	3
Permitted Phases				8	6			
Detector Phase	7	4	8	8	6	6		
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	30.5	30.5	30.5	14.6	14.6	14.6	9.6
Total Split (s)	10.0	94.4	94.0	94.0	16.0	16.0	16.0	9.6
Total Split (%)	8.3%	78.7%	78.3%	78.3%	13.3%	13.3%	13%	8%
Yellow Time (s)	3.6	5.5	5.5	5.5	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		
Total Lost Time (s)	4.6	6.5	6.5	6.5		4.6		
Lead/Lag	Lead	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	None	Min	Min	Min	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 66.5
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Driveway & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	518	0	0	915	9	0	0	0	5	0	3
Future Volume (veh/h)	12	518	0	0	915	9	0	0	0	5	0	3
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	13	557	0	0	984	10	0	0	0	5	0	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
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	29	1342	0	3	1190	1008	0	265	0	196	18	80
Arrive On Green	0.02	0.71	0.00	0.00	0.63	0.63	0.00	0.00	0.00	0.14	0.00	0.14
Sat Flow, veh/h	1810	1900	0	1810	1900	1610	0	1900	0	826	133	575
Grp Volume(v), veh/h	13	557	0	0	984	10	0	0	0	8	0	0
Grp Sat Flow(s),veh/h/ln	1810	1900	0	1810	1900	1610	0	1900	0	1533	0	0
Q Serve(g_s), s	0.5	8.8	0.0	0.0	28.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.5	8.8	0.0	0.0	28.8	0.2	0.0	0.0	0.0	0.3	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	0.62		0.37
Lane Grp Cap(c), veh/h	29	1342	0	3	1190	1008	0	265	0	295	0	0
V/C Ratio(X)	0.45	0.42	0.00	0.00	0.83	0.01	0.00	0.00	0.00	0.03	0.00	0.00
Avail Cap(c_a), veh/h	136	2325	0	126	2315	1962	0	302	0	324	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.0	4.4	0.0	0.0	10.4	5.0	0.0	0.0	0.0	26.7	0.0	0.0
Incr Delay (d2), s/veh	4.1	0.3	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.5	0.0	0.0	7.8	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.1	4.7	0.0	0.0	12.6	5.1	0.0	0.0	0.0	26.8	0.0	0.0
LnGrp LOS	D	A	A	A	B	A	A	A	A	C	A	A
Approach Vol, veh/h		570			994			0			8	
Approach Delay, s/veh		5.5			12.5			0.0			26.8	
Approach LOS		A			B						C	

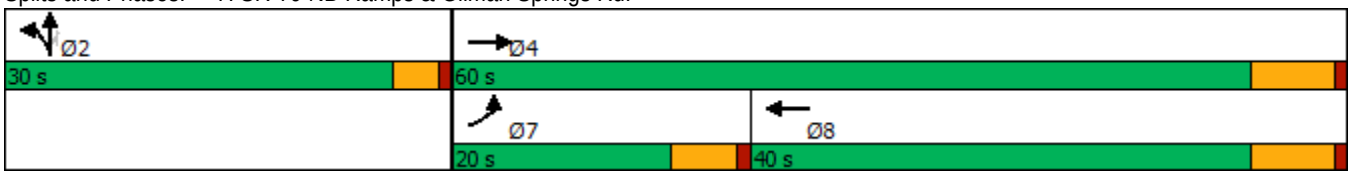
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.6	0.0	57.2		14.6	5.7	51.5				
Change Period (Y+Rc), s		4.6	4.6	6.5		4.6	4.6	6.5				
Max Green Setting (Gmax), s		11.4	5.0	87.9		11.4	5.4	87.5				
Max Q Clear Time (g_c+I1), s		0.0	0.0	10.8		2.3	2.5	30.8				
Green Ext Time (p_c), s		0.0	0.0	5.3		0.0	0.0	14.1				

Intersection Summary												
HCM 6th Ctrl Delay			10.0									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Configurations					
Traffic Volume (vph)	17	349	500	2	8
Future Volume (vph)	17	349	500	2	8
Turn Type	Prot	NA	NA	NA	Perm
Protected Phases	7	4	8	2	
Permitted Phases					2
Detector Phase	7	4	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.4	34.5	32.5	9.0	9.0
Total Split (s)	20.0	60.0	40.0	30.0	30.0
Total Split (%)	22.2%	66.7%	44.4%	33.3%	33.3%
Yellow Time (s)	4.4	5.5	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.5	6.5	4.0	4.0
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 58.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 7: SR-79 NB Ramps & Gilman Springs Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	349	0	0	500	261	417	2	8	0	0	0
Future Volume (veh/h)	17	349	0	0	500	261	417	2	8	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	18	367	0	0	526	275	439	2	8			
Peak Hour Factor	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			
Cap, veh/h	39	1786	0	0	864	451	573	3	512			
Arrive On Green	0.02	0.49	0.00	0.00	0.38	0.38	0.32	0.32	0.32			
Sat Flow, veh/h	1810	3705	0	0	2389	1196	1802	8	1610			
Grp Volume(v), veh/h	18	367	0	0	414	387	441	0	8			
Grp Sat Flow(s),veh/h/ln	1810	1805	0	0	1805	1685	1810	0	1610			
Q Serve(g_s), s	0.6	3.2	0.0	0.0	10.4	10.4	12.3	0.0	0.2			
Cycle Q Clear(g_c), s	0.6	3.2	0.0	0.0	10.4	10.4	12.3	0.0	0.2			
Prop In Lane	1.00		0.00	0.00		0.71	1.00		1.00			
Lane Grp Cap(c), veh/h	39	1786	0	0	680	635	576	0	512			
V/C Ratio(X)	0.46	0.21	0.00	0.00	0.61	0.61	0.77	0.00	0.02			
Avail Cap(c_a), veh/h	471	3441	0	0	1077	1005	838	0	746			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	27.1	8.0	0.0	0.0	14.1	14.2	17.2	0.0	13.1			
Incr Delay (d2), s/veh	16.6	0.1	0.0	0.0	1.9	2.0	4.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.4	0.8	0.0	0.0	3.6	3.4	5.0	0.0	0.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.7	8.1	0.0	0.0	16.0	16.2	22.0	0.0	13.1			
LnGrp LOS	D	A	A	A	B	B	C	A	B			
Approach Vol, veh/h		385			801			449				
Approach Delay, s/veh		9.8			16.1			21.9				
Approach LOS		A			B			C				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		21.9		34.3			6.6	27.6				
Change Period (Y+Rc), s		4.0		6.5			5.4	6.5				
Max Green Setting (Gmax), s		26.0		53.5			14.6	33.5				
Max Q Clear Time (g_c+I1), s		14.3		5.2			2.6	12.4				
Green Ext Time (p_c), s		3.5		4.5			0.0	8.7				
Intersection Summary												
HCM 6th Ctrl Delay			16.2									
HCM 6th LOS			B									

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	1048	70	11	574	44
Future Volume (vph)	1048	70	11	574	44
Turn Type	NA	Perm	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		4			
Detector Phase	4	4	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	35.5	35.5	9.6	24.5	24.5
Total Split (s)	85.0	85.0	9.6	94.6	25.4
Total Split (%)	70.8%	70.8%	8.0%	78.8%	21.2%
Yellow Time (s)	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 78.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Bridge St. & Gilman Springs Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1048	70	11	574	44	12
Future Volume (veh/h)	1048	70	11	574	44	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1092	0	11	598	46	12
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1259		24	1387	162	42
Arrive On Green	0.66	0.00	0.01	0.73	0.12	0.12
Sat Flow, veh/h	1900	1610	1810	1900	1377	359
Grp Volume(v), veh/h	1092	0	11	598	59	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1766	0
Q Serve(g_s), s	38.8	0.0	0.5	10.6	2.6	0.0
Cycle Q Clear(g_c), s	38.8	0.0	0.5	10.6	2.6	0.0
Prop In Lane		1.00	1.00		0.78	0.20
Lane Grp Cap(c), veh/h	1259		24	1387	207	0
V/C Ratio(X)	0.87		0.45	0.43	0.28	0.00
Avail Cap(c_a), veh/h	1751		106	1966	392	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.4	0.0	41.7	4.5	34.3	0.0
Incr Delay (d2), s/veh	4.2	0.0	4.8	0.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	0.0	0.2	2.2	1.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.6	0.0	46.5	4.8	35.1	0.0
LnGrp LOS	B		D	A	D	A
Approach Vol, veh/h	1092	A		609	59	
Approach Delay, s/veh	15.6			5.6	35.1	
Approach LOS	B			A	D	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		16.5	5.7	62.9		68.7
Change Period (Y+Rc), s		6.5	4.6	6.5		6.5
Max Green Setting (Gmax), s		18.9	5.0	78.5		88.1
Max Q Clear Time (g_c+I1), s		4.6	2.5	40.8		12.6
Green Ext Time (p_c), s		0.1	0.0	15.6		5.9

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

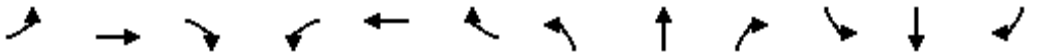
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	WBT	WBR	SBL	SBT	Ø2	Ø3	Ø7
Lane Configurations								
Traffic Volume (vph)	1059	585	1	2	0			
Future Volume (vph)	1059	585	1	2	0			
Turn Type	NA	NA	Perm	Perm	NA			
Protected Phases	4	8			6	2	3	7
Permitted Phases			8	6				
Detector Phase	4	8	8	6	6			
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	5.0
Minimum Split (s)	30.5	30.5	30.5	14.6	14.6	14.6	9.6	9.6
Total Split (s)	95.0	95.0	95.0	15.4	15.4	15.4	9.6	9.6
Total Split (%)	79.2%	79.2%	79.2%	12.8%	12.8%	13%	8%	8%
Yellow Time (s)	5.5	5.5	5.5	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0			
Total Lost Time (s)	6.5	6.5	6.5		4.6			
Lead/Lag	Lag	Lag	Lag				Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes				Yes	Yes
Recall Mode	None	None	None	Min	Min	Min	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 71.9
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Driveway & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1059	1	0	585	1	0	0	0	2	0	0
Future Volume (veh/h)	0	1059	1	0	585	1	0	0	0	2	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	1139	1	0	629	1	0	0	0	2	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	2	1360	1	2	1361	1153	0	255	0	290	0	0
Arrive On Green	0.00	0.72	0.72	0.00	0.72	0.72	0.00	0.00	0.00	0.13	0.00	0.00
Sat Flow, veh/h	1810	1898	2	1810	1900	1610	0	1900	0	1440	0	0
Grp Volume(v), veh/h	0	0	1140	0	629	1	0	0	0	2	0	0
Grp Sat Flow(s),veh/h/ln	1810	0	1900	1810	1900	1610	0	1900	0	1440	0	0
Q Serve(g_s), s	0.0	0.0	31.7	0.0	10.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	31.7	0.0	10.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	2	0	1361	2	1361	1153	0	255	0	290	0	0
V/C Ratio(X)	0.00	0.00	0.84	0.00	0.46	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Avail Cap(c_a), veh/h	122	0	2260	122	2261	1916	0	276	0	306	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	7.5	0.0	4.5	3.0	0.0	0.0	0.0	27.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	6.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	9.6	0.0	4.8	3.0	0.0	0.0	0.0	27.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	A	A	A	C	A	A
Approach Vol, veh/h		1140			630			0			2	
Approach Delay, s/veh		9.6			4.8			0.0			27.9	
Approach LOS		A			A						C	

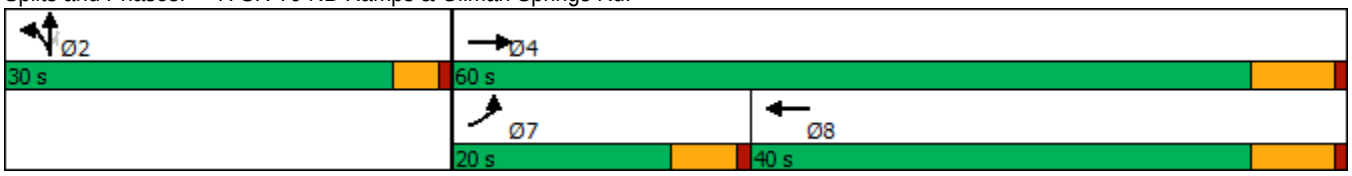
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.6	0.0	59.8		14.6	0.0	59.8				
Change Period (Y+Rc), s		4.6	4.6	6.5		4.6	4.6	6.5				
Max Green Setting (Gmax), s		10.8	5.0	88.5		10.8	5.0	88.5				
Max Q Clear Time (g_c+I1), s		0.0	0.0	33.7		2.1	0.0	12.4				
Green Ext Time (p_c), s		0.0	0.0	19.6		0.0	0.0	6.4				

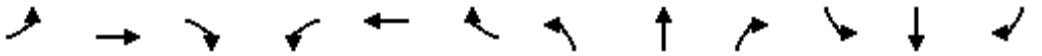
Intersection Summary	
HCM 6th Ctrl Delay	7.9
HCM 6th LOS	A

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Configurations					
Traffic Volume (vph)	14	774	323	1	7
Future Volume (vph)	14	774	323	1	7
Turn Type	Prot	NA	NA	NA	Perm
Protected Phases	7	4	8	2	
Permitted Phases					2
Detector Phase	7	4	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	4.5	4.5
Minimum Split (s)	10.4	34.5	32.5	9.0	9.0
Total Split (s)	20.0	60.0	40.0	30.0	30.0
Total Split (%)	22.2%	66.7%	44.4%	33.3%	33.3%
Yellow Time (s)	4.4	5.5	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.5	6.5	4.0	4.0
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	Min	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 48.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 7: SR-79 NB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	774	0	0	323	219	242	1	7	0	0	0
Future Volume (veh/h)	14	774	0	0	323	219	242	1	7	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	15	832	0	0	347	235	260	1	8			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	35	1809	0	0	724	481	432	2	386			
Arrive On Green	0.02	0.50	0.00	0.00	0.35	0.35	0.24	0.24	0.24			
Sat Flow, veh/h	1810	3705	0	0	2171	1380	1803	7	1610			
Grp Volume(v), veh/h	15	832	0	0	301	281	261	0	8			
Grp Sat Flow(s),veh/h/ln	1810	1805	0	0	1805	1652	1810	0	1610			
Q Serve(g_s), s	0.3	6.1	0.0	0.0	5.3	5.4	5.2	0.0	0.2			
Cycle Q Clear(g_c), s	0.3	6.1	0.0	0.0	5.3	5.4	5.2	0.0	0.2			
Prop In Lane	1.00		0.00	0.00		0.84	1.00		1.00			
Lane Grp Cap(c), veh/h	35	1809	0	0	630	576	434	0	386			
V/C Ratio(X)	0.43	0.46	0.00	0.00	0.48	0.49	0.60	0.00	0.02			
Avail Cap(c_a), veh/h	652	4765	0	0	1492	1365	1161	0	1033			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.7	6.6	0.0	0.0	10.3	10.4	13.7	0.0	11.8			
Incr Delay (d2), s/veh	17.1	0.4	0.0	0.0	1.2	1.4	2.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.3	1.0	0.0	0.0	1.6	1.5	1.9	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.8	6.9	0.0	0.0	11.5	11.7	16.5	0.0	11.8			
LnGrp LOS	D	A	A	A	B	B	B	A	B			
Approach Vol, veh/h		847			582			269				
Approach Delay, s/veh		7.5			11.6			16.4				
Approach LOS		A			B			B				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		13.7		26.8			6.2	20.6				
Change Period (Y+Rc), s		4.0		6.5			5.4	6.5				
Max Green Setting (Gmax), s		26.0		53.5			14.6	33.5				
Max Q Clear Time (g_c+I1), s		7.2		8.1			2.3	7.4				
Green Ext Time (p_c), s		2.5		12.3			0.0	6.7				

Intersection Summary												
HCM 6th Ctrl Delay			10.3									
HCM 6th LOS			B									

APPENDIX 3.8:

EXISTING (2018) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	551	5	959	156	14
v/c Ratio	0.27	0.01	0.43	0.31	0.03
Control Delay	4.5	20.8	7.4	17.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.5	20.8	7.4	17.9	0.1
Queue Length 50th (ft)	14	1	75	33	0
Queue Length 95th (ft)	63	10	137	90	0
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2570	672	3524	1143	1059
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.21	0.01	0.27	0.14	0.01

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	18	367	801	441	8
v/c Ratio	0.07	0.24	0.57	0.64	0.01
Control Delay	28.8	10.8	14.3	22.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	28.8	10.8	14.3	22.9	0.0
Queue Length 50th (ft)	5	41	85	106	0
Queue Length 95th (ft)	28	66	202	#364	0
Internal Link Dist (ft)		777	1139	1422	
Turn Bay Length (ft)	215				240
Base Capacity (vph)	483	3223	2150	863	826
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.04	0.11	0.37	0.51	0.01

Intersection Summary

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



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1128	2	599	297	24
v/c Ratio	0.64	0.01	0.33	0.55	0.04
Control Delay	10.7	30.0	9.0	23.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	10.7	30.0	9.0	23.3	0.1
Queue Length 50th (ft)	80	1	55	81	0
Queue Length 95th (ft)	255	7	110	204	0
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2179	483	3209	864	827
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.52	0.00	0.19	0.34	0.03

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	15	832	582	261	8
v/c Ratio	0.05	0.49	0.37	0.48	0.01
Control Delay	23.1	10.0	7.9	18.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	23.1	10.0	7.9	18.8	0.0
Queue Length 50th (ft)	3	71	27	54	0
Queue Length 95th (ft)	22	148	106	153	0
Internal Link Dist (ft)		777	1139	1422	
Turn Bay Length (ft)	215				240
Base Capacity (vph)	575	3430	2537	1028	963
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.03	0.24	0.23	0.25	0.01

Intersection Summary

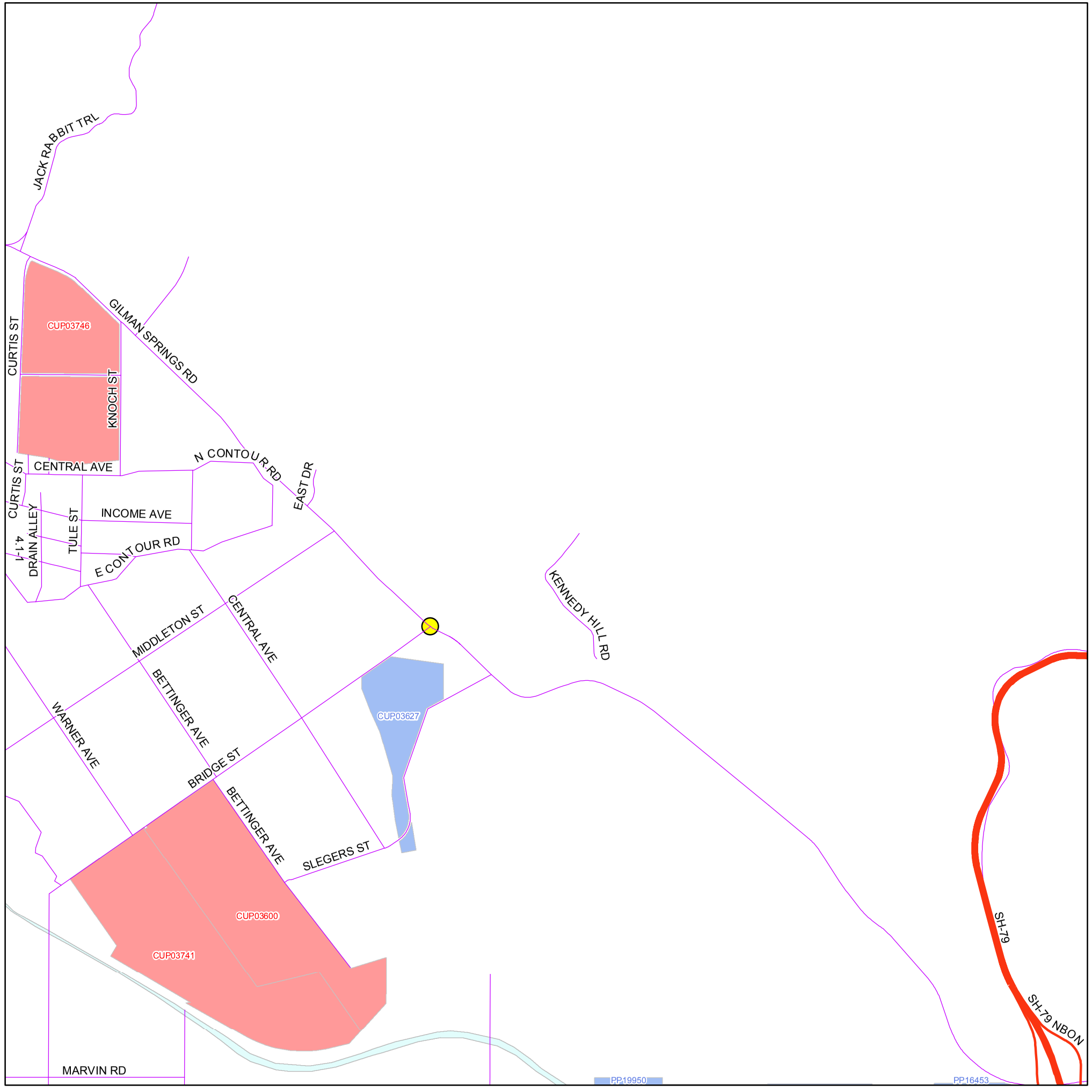
APPENDIX 4.1:

CUMULATIVE DEVELOPMENT PROJECT RESERACH

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N



- Cities (Outline)
- Active Major Cases (CUP, PM, PP, PUP, SP, TR)
- Approved Major Cases (CUP, PM, PP, PUP, SP, TR)

0 1,050 2,100 4,200 Feet

Printed by ktsang on 6/16/10

Active Cases as of 2/23/2018

CASE NAME	STATUS	APPLIED DATE	APPROVAL DATE	EXPIRED DATE
CASE DESCRIPTION				
CUP03600	LDC REVIEW	7/8/2008		
100 AC TO BE USED FOR COMPOSTING GREEN WASTE MAJORITY OF PROPERTY TO REMAIN AS AGRICULTURE				
CUP03741	PC	2/22/2016		
TO DEVELOP REGIONAL COMPOST FACILITY				
CUP03746	LDC REVIEW	5/17/2016		
COMPOSTING FACILITY				

CASE NAME	STATUS	APPLIED DATE	APPROVAL DATE	EXPIRED DATE
CASE DESCRIPTION				
CUP03627	APPROVED	7/30/2009		1/11/2014
WASTE COMPOSTING FACILITY PROCESSING ORGANIC GREEN WASTE AND MANURE (HORSE & STEER) INTO FERTILIZER AND SOIL AMENDMENTS				
PP16453	APPROVED	3/17/2000		9/28/2002
UNMANNED WIRELESS TELECOMM SITE WITH 105' MONOPOLE				
PP19950	APPROVED	11/5/2004		10/23/2008
70' MONOPOLE W/ SLIMLINE ANTENNAS & A 4' DISH ANT				

11379

City of Beaumont

550 E. 6th Street
Beaumont, CA 92223
(951) 769-8520
www.ci.beaumont.ca.us

MAJOR PROJECT STATUS AS OF JANUARY 31, 2018

(Number Next to Project Title Correlates with Current Development Project Map)

PROJECTS UNDER DEVELOPMENT:

PROJECT NAME	LOCATION	TOTAL AC.	RES. AC.	COM./IND. AC.	NO. D.U.*	PROJECT STATUS
Sundance (#17)	N/8th St.; W/Highland Springs Ave.	1195.00	886.85	13.50	4450	Specific Plan, Project Under Development.
Fairway Canyon SCPGA Tract No. 31462, Tract No. 36558, and Tract No. 36783 (#29)	N/ San Timoteo Canyon Rd.; SW/I-10	1555.70	678.00	46.40	3300	Specific Plan, Project Under Development
Four Seasons (#23) Tract No. 32260 & 33096	S/I-10; W/Highland Springs Avenue	565.50	365.30		1890	Specific Plan, Homes Under Construction
Heartland (#6)	N/SR 60; W/Potrero Blvd.	417.20	207.60	61.80	981	Specific Plan, Preliminary graded.
Seasons at Beaumont 38 Units Rental Complex Veterans Housing	Illinois Avenue between 6th Street & 8th Street	1.30	1.30	-	38	Building Under Construction
Hidden Canyon Industrial (#36)	Southeast corner of SR 60 and Jack Rabbit Trail	196.50	-	158.83	-	Specific Plan / Plot Plan Approved (11-PP-04) PM 36426-Currently Grading
Sundance Corporate Center (#46)	NWC of Highland Springs and 8th	13.60	-	13.60	-	Plot Plan Approved (07-PP-12) Currently Grading
Beaumont Commercial Center	Northwest Corner of Highland Springs and 1st Street (419-260-075)	7.07	-	7.07	-	Plot Plan Approved (15-PP-03) Currently Grading

Subtotal for Projects Under Development:		**3951.87**	**2139.05**	**301.20**	**10,659**	

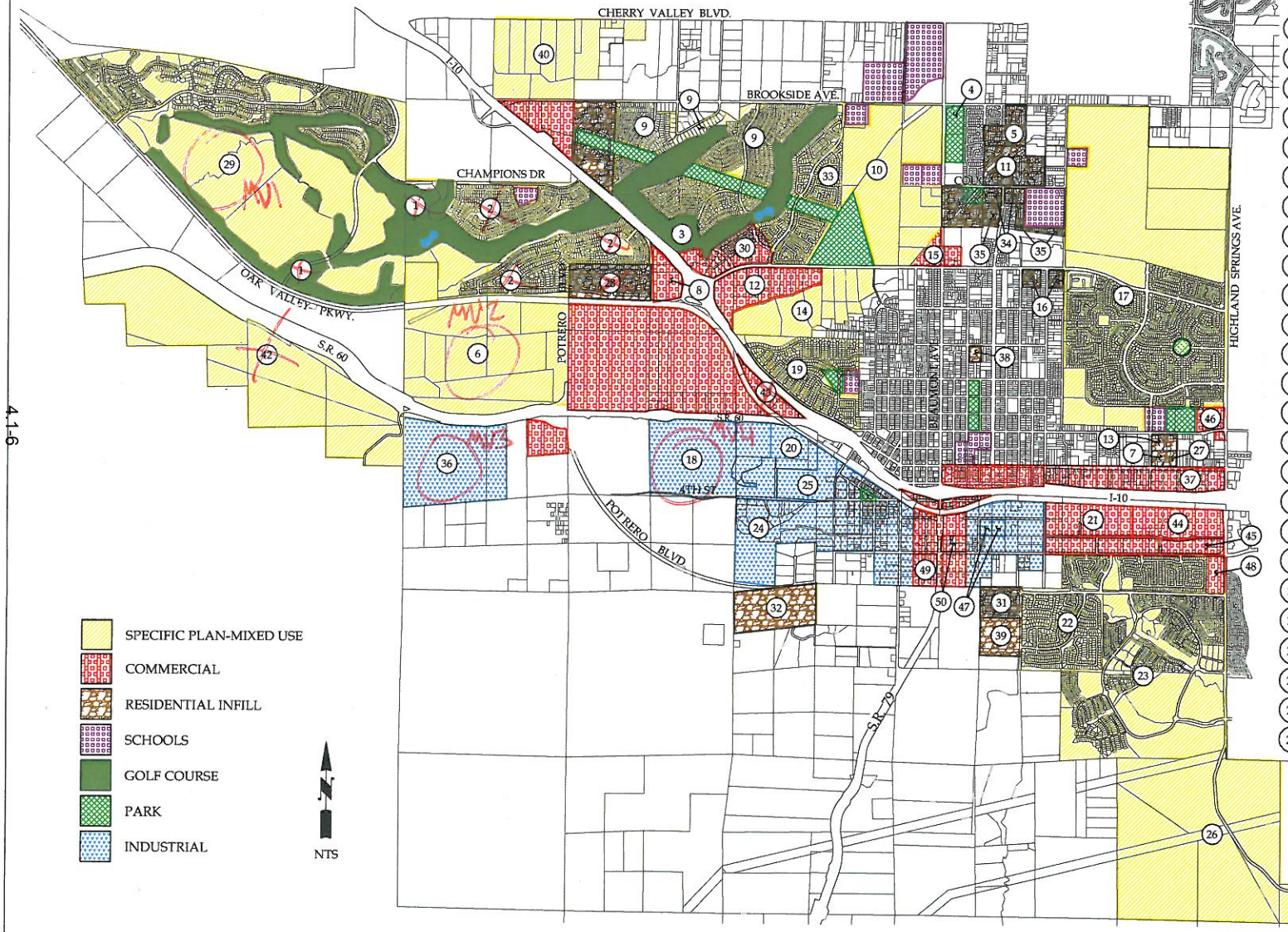
* Total Number of Dwelling Units within the Specific Plan/Tract Map - Includes completed units

PROJECTS NOT UNDER DEVELOPMENT:

PROJECT NAME	LOCATION	TOTAL AC.	RES. AC.	COM./IND. AC.	NO. D.U.	PROJECT STATUS
not in area Kirkwood Ranch (#14)	N/I-10; S/Oak Valley Parkway	128.00	128.00	-	403	Specific Plan (1991) Tentative Tract Map 27357 Approved
not in area Potrero Creek Estates (#26)	S/I-10; W/Highland Springs Ave.	737.10	307.80	-	700	Specific Plan (1989)
not in area Tract No. 32850 (#39)	E/Manzanita Park Rd.; N/First Street	29.09	29.09	-	95	Tract 32850 Approved
not in area Noble Creek Vistas (#10)	N/14th St.; W/Beaumont Ave.	332.28	222.50	-	648	Specific Plan (2006)
not in area Sunny-Cal Specific Plan (#40)	North of Brookside and west of I-10	324.00	216.05	10.08	571	Annexation Approved. Specific Plan & Tract Map Approved TM 36583
built Tournament Hills 3, TM 36307	North of Oak Valley Parkway, 1 mile west of Desert Lawn Dr.	63.56	63.56	-	279	Tract 36307, Amendment to Oak Valley Specific Plan Approved
not in area San Gorgonio Village, Phase 2 (#45)	Between 1st and 2nd Street & Penn. And Commerce Way	22.50		22.50		Phase 1 (Kohl's) Completed, Phase 2 not under Construction
add as '84 Rolling Hills Ranch Industrial Phase 2 (#18)	S/SR 60; W/Viele Ave.	155.00	-	155.00	-	Phase 1 (Wolverine) Completed, Phase 2 not under Construction
Subtotals for Projects Not Under Development:		**1791.53**	**967.00**	**187.58**	**2,696**	
Estimated Totals - All Projects		**5743.40**	**3106.05**	**488.78**	**13,355**	

4.1-5

CITY OF BEAUMONT
CURRENT AND RECENTLY BUILT DEVELOPMENT PROJECTS



1. SCPGA GOLF COURSE
2. TOURNAMENT HILLS
3. OAK VALLEY GOLF COURSE
4. SPORTS PARK
5. VICTORIA HOMES
6. HEARTLAND
7. TUSCANY TOWNHOMES
8. OAK VALLEY CHAMPIONS COMMERCIAL
9. SOLERA BY DEL WEBB
10. NOBLE CREEK VISTAS
11. COUGAR RANCH
12. OAK VALLEY VILLAGE
13. BEAUMONT COMMONS
14. KIRKWOOD RANCH
15. OAK VALLEY TOWN CENTER COMMERCIAL
16. PRECISION LLC
17. SUNDANCE
18. PROLOGIS
19. THREE RINGS RANCH
20. DOWLING ORCHARD INDUSTRIAL PARK
21. WALMART/HOME DEPOT COMMERCIAL
22. SENECA SPRINGS/EMPIRE HOMES
23. K. HOVNANIAN'S FOUR SEASONS
24. BEAUMONT INDUSTRIAL PARK
25. LOWES RELOAD
26. POTRERO CREEK ESTATES
27. TUSCANY VILLAS
28. CURTIS DEV / RYLAND HOMES
29. SUN CAL / VARIOUS BUILDERS
30. OAK VALLEY GREENS COMMERCIAL
31. PACIFIC SCENE
32. JEROME TAUREK
33. THE ESTATES AT OAK VALLEY/PULTE HOMES
34. CANYON RIDGE
35. PACIFIC TRAILS
36. HIDDEN CANYON
37. SIXTH ST. CORRIDOR COMMERCIAL
38. MOUNTAIN VIEW ESTATES
39. PACIFIC SCENE
40. SUNNY-CAL
41. FUTURE DEVELOPMENT (TO BE ASSIGNED)
42. JACK RABBIT TRAIL
43. AIM ALL STORAGE
44. MARKETPLACE AT BEAUMONT
45. SAN GORGONIO VILLAGE
46. SUNDANCE CORPORATE CENTER
47. EUCALYPTUS AT BEAUMONT
48. LOMA LINDA MEDICAL FACILITY
49. BEAUMONT GATEWAY PLAZA
50. BEAUMONT ARCO

HOUSING/BUILDING ACTIVITY LOG

Updated 11/29/2017

11379

TRACT	DEVELOPER	BUSINESS TYPE/DEVELOPER ADDRESS (Developer and Addresses Not Confirmed)		LOCATION	No. of Acres/Lots	Under Construction	Completed	Status
Building Activity								
COMMERICAL DEVELOPMENT								
Project	Developer	Business Type		Location	Acres			Status
~~SPDR 8-13~~	~~O'Reilly Automotive~~	~~Retail Auto Parts Store~~		~~1350 South San Jacinto Avenue~~	~~1.2~~			Open for Business
~~CUP 2-03 A3~~	~~Circle K~~	~~Service Station and C Store~~		~~NWC Sanderson and Esplanande~~	~~1.25~~			Open for Business
~~SPDR 6-14~~	~~Shell/Nakash Enterprises LLC~~	~~Service Station and C Store~~		~~SWC Sanderson and Cottonwood~~	~~1.04~~			Open for Business
~~SR 4-12~~	~~Family Dollar~~	~~General Retail Store~~		~~East Side of San Jacinto Ave, North of Esplanade~~	~~1.05~~			Open for Business
CUP 2-08	Southland Development	Shopping Center	134,000 SF Retail Opportunity	NWC Sanderson and Esplanande	13			Approved Entitlements - Circle K Open for Business
CUP 6-07	99 Cent Only	Shopping Center	120,000 SF Retail Opportunity	SEC Ramona Expressway and State Street	15			Pending Entitlement Review
CUP 1-08	KZ Capital	Shopping Center	139,000 SF Retail Opportunity	SWC Sanderson and Cottonwood	17			Pending Entitlement Review
SR- 1-80	Mountain View Plaza	Shopping Center	69,000 SF Retail Pads Available	NWC Ramona Expressway and State Street	8			CVS, Dennys, 7-11 Open for Business
CUP 8-07	Commercial Center	Shopping Center	98,335 SF Retail Opportunity	SEC Sanderson And Cottonwood	9.51			Pending Entitlement Review
SR 1-08	Bridge Commercial Center	Shopping Center	69,000 SF Retail Opportunity	SEC Ramona Expressway and Bridge Street	8			Pending Entitlement Review
CUP 15-01	OAAI	Services Station	TBD	East side of San Jacinto Ave, N of Menlo (Farmers Com	1			Processing Entitlements
SPDR 16-7	Latham Management Consulting	Hotel/Shopping Center	Retail Opportunity	NWC Ramona Expressway and Main Street	11.48			Processing Entitlements
SPDR 16-10	Cottonwood Commons, LLP	Shopping	Retail Opportunity	NWC Sanderson and Cottonwood	35.66			Processing Entitlements
SPDR 17-2	Mark Development	Retail Center	24,956 Retail Opportunity	NEC San Jacinto and Commonwealth	3.07			Approved Entitlements
SPDR 17-__	Starbucks (Staters Center)	Fast Food	Starbucks	East Side of San Jacinto Ave, South of Esplanade				Approved Entitlements
SPDR 17-4	Salim Development	Fast Food	Wienerschnitzel 1245 SF	SWC San Jacinto and Esplanade	12,000sf			Approved Entitlements
SPDR 17-11	MW Vantage 1, LLC	Commercial Center	49,000 SF/Gas, Car Wash, Retail	W Side of San Jacinto Ave at Commonwealth terminus	9.51			Processing Entitlements
SPDR 17-15	Panorama Properties, Inc	Services Station	2,960 SF Service Station	NEC Sanderson Ave and Seventh Street				Processing Entitlements
SPDR 17-__	Soboba Band of Luiseño Indians	Commercial Center	TBD	NWC Main Street and Ramona Expressway				Processing Entitlements

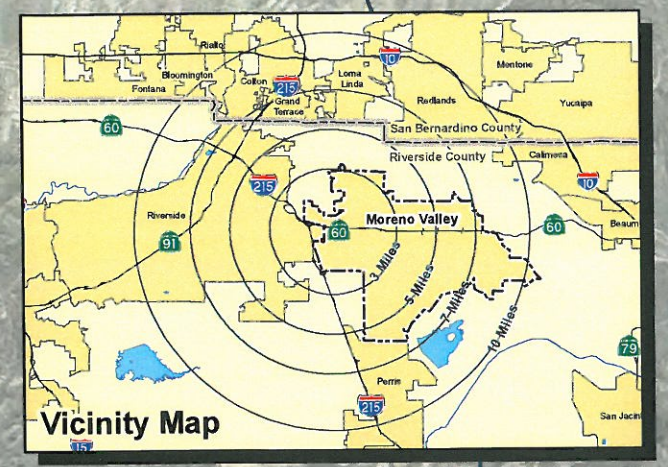
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TRACT	DEVELOPER	BUSINESS TYPE/DEVELOPER ADDRESS (Developer and Addresses Not Confirmed)		LOCATION	No. of Acres/Lots	Under Construction	Completed	Status
RESIDENTIAL DEVELOPMENT								
TR 31886	Frontier Homes	8300 Utica Ave Suite 300	Rancho Cucamonga, CA 91739	S of Ramona Expwy; W of Potter Rd	151	2	146	Under Construction
TR 31886	Wanhoo/Signature Homes	17588 Rowland Str. Unit 2016	City of Industry, CA 91748	S of Ramona Expwy; W of Potter Rd	120	6	5	Under Construction
TR 31037	DR Horton	2280 Wardlow Circle, Ste 100	Corona, CA 92880	S of Ramona Blvd., West of Lyon	88	0	46	Under Construction
TR 34586	Brosh SoCal Properties Inc	1662 Plum Ln	Redlands, CA 92374-4597	W side of Kirby St; 656' north of Esplanade Ave	34	4	18	Under Construction
TR 30639	Gallery Artisan Trails LLC	3938 Temecula Pkway Unit A369	Temecula, CA 92592	NEC of Washington and Meridian St	92	0	92	Completed
TR 30084 (SP 1-01)	KB Homes	36310 Inland Valley Dr	Wildomar Dr, CA 92595	NWC Warren Rd & Cottonwood Ave	108	3	87	Under Construction
TR 28224	DCI/San Jacinto Z LLC	35951 Inland Empire Blvd. Bldg 1	Ontario, CA 91764	Senior Housing - S of 7th St, W of Ramona Expwy	70	4	40	Under Construction
TR 31979	JD Pierce / S&S Homes	1231 N Cactus Ave Ste D	Rialto, CA 92376	S of Angela Way, at end of Camelia Dr	11	0	0	Plan Check
TR 30035	KB Homes	36310 Inland Valley Dr	Wildomar Dr, CA 92595	NWC Warren Rd & Cottonwood Ave	74	0	0	Plan Check
TR 32352	RSI			W side of Sanderson, north of Seventh Street	47	0	14	Under Construction
TR 30481	Sandlewood			North side of Cottonwood, west of Lyon	11	0	7	Under Construction
Partial Buildout - Recorded Tract Maps								
TR22665	Lennar Communities			SEC of 7th St & Pine Ave	147	0	68	Submitting for Plan Check
TR30035 (SP 1-01)	KB Homes	36310 Inland Valley Dr	Wildomar Dr, CA 92595	NWC Warren Rd & Cottonwood Ave	74	0	0	
TR30036 (SP 1-01)	KB Homes	36310 Inland Valley Dr	Wildomar Dr, CA 92595	NWC Warren Rd & Cottonwood Ave	104	0	0	
TR30481	Mulberry Inv	31548 Bluff Dr	Laguna Beach, CA 92651	N of Cottonwood, E of Kirby	126	0	92	
TR30597	Covenant Park	11911 Artesia Blv #200	Artesia, CA 90701	NEC 7th and Cawston Ext.	116	0	33	
TR30603	Lennar Communities	980 Montecito Dr Ste 302	Corona, CA 92879	N of Esplanade, Bet Pine and Lyon	203	0	193	
TR30659	Covenant Park	11911 Artesia Blv #200	Artesia, CA 90701	NWC of Washington, Arroyo Viejo	64	0	33	
TR30878	JSUB Inc	1562 Brentwood Drive	Boudler City, NV 89005	NWC 7th Street and Lyon Avenue	170	0	155	
TR30944	Gateway Inland	P.O. Box 1310	Oceanside, CA 92051	NWC Cottonwood & Lyon	103	0	89	
TR31037	CADO San Jacinto	1545 Faraday Ave	Carlsbad, CA 92008	Bet DeAnza & Ramona NW of Potter	129	0	0	
TR31037	DR Horton			Bet DeAnza & Ramona NW of Potter	88	0	14	Under Construction
TR31154	46 Almaden San Jacinto	3470 Wilshire Blvd No 1020	Los Angeles, CA 90010	SW of DeAnza and E of Lyon	88	0	42	
TR31294	JSUB Inc	1562 Brentwood Drive	Boudler City, NV 89005	660' E of Kirby and N of 7th St	37	0	15	
TR32053	Latham Management Consulting	1600 E Florida Ste 110	Hemet, CA 92544	NWC Ramona Expwy and Main	178	0	24	
TR32352	Gray 1 Mayfield 37	550 W C St. No 1470	San Diego, CA 92101	E of Sanderson, bet 7th & Cottonwood	153	0	106	
VTR31384	Desert Candle	1000 Dove St Ste 100	Newport Beach, CA 92660	2642' N of Cottonwood; E side of Lyon	91	0	44	
TR 31886	Signature Homes Wanhoo			S of Ramona Expwy; W of Potter Rd	44	0	0	SPDR for Plotting Homes
				TOTALS:	2721	19	1363	

TRACT	DEVELOPER	BUSINESS TYPE/DEVELOPER ADDRESS (Developer and Addresses Not Confirmed)		LOCATION	No. of Acres/Lots	Under Construction	Completed	Status
Approved Tentative Tract Maps -		**Note: Review of Tenative Maps is underway to determine validity.**						
TR30379	Curci San Jacinto Inv	P.O. Box 1549	Newport Beach, CA 92659	N of Artesian, E of Vernon	126			
TR30814	GBMF Inv	19853 Red Roan Ln	Yorba Linda, CA 92886	N of Cottonwood E side of Sanderson	155			
SP1-02	The McRae Group of Companies	8800 N Gainey Cir Dr 255	Scottsdale, AZ 85258	NEC Esplanade & Warren Rd	0			
PM30090 (SP 1-01)	KB Homes	36310 Inland Valley Dr	Wildomar Dr, CA 92595	NWC Warren Rd & Cottonwood Ave	5			
TR30598 (SP 1-03)	SanJac1	20371 Irvine Ave Ste 210	Santa Ana Heights, CA 92707	N of Blodgett, W of Hwy79, E of Potter	560			
TR31293	JA Bray	3161 Michelson Dr Ste 42	Irvine, CA 92612	E of Lyon and N of Cottonwood	100			
TR31282	John Boruchin	9618 Blanchard Ave	Fontana, CA 92335	S of DeAnza, E of Lyon	274			
TR31900	Parkridge 38	2760 Lake Sahara Dr Ste 106	Las Vegas, NV 89117	W of Lyon & S of DeAnza	112			
TR31929	JCLIN Inv	1000 Dove St No 300	Newport Beach, CA 92660	E of Kirby bet 7th and Esplanade	78			
TR32153	Robert Newsom	28910 Rancho Calif Rd 206	Temecula, CA 92590	S of Ramona Blvd, end of Virginia Wy	44			
TR32376	Regal Development	12671 High Bluff Dr #150	San Diego, CA 92130	N of Ramona Expwy, W City Limits	337			
TR32247	Sunwood San Jacinto	9740 Appaloosa Rd Ste 130	San Diego, CA 92131	S of 7th St and W of Lyon	150			
SP1-04	Eugene M Gabrych	2006 Old Highway 395	Fallbrook, CA 92028	W of Sanderson to O'Dell Ave	0			
TR32809	David Rosenberg	400 N Stephanie St No 160	Henderson, NV 89014	N of 7th W of E of Palm- **272 Condos**	68			no du
TR32549	Tim Smith	PO Box 121	Corona Del Mar, CA 92625	SS of 7th, 1290' E of Sanderson Ave	19			
TR32955 (SP1-02)	The McRae Group of Companies	8800 N Gainey Cir Dr 255	Scottsdale, AZ 85258	NEC Esplanade & Warren Rd	613			
TR32843	American Spectrum Dunham	19100 Von Karman Ave Unit 900	Irvine, CA 92612-6597	E of Sanderson, bet DeAnza & Ramona	143			
TR33509	EMWD	2270 Trumble Rd	Perris, CA 92570	E of Mountain, S of Esplanade	37			
TR33420A1	JMP Bixby Cottonwood LLC	3890 11th St Unit 118	Riverside, CA 92501-3572	SWC Cottonwood & Sanderson	161			
TR33072	Baumkirchner Family Trust	25 Via Zamora	San Clemente, CA 92673	W of Lyon Ave, 1000'N of Cottonwood	140			
TR32574	San Jacinto USD	2045 S San Jacinto Ave	San Jacinto, CA 92583	E side of Lyon, 1400' N of Cottonwood	131			
TR33716	Mary Swaim	400 Lexington Cir	Oceanside, CA 92057	E of Lyon bet Cottonwood and 7th St	49			
TR33249	Anthony Souza	16051 Avenida San Miguel	La Mirada, CA 90638	Bet Ramona Blvd and DeAnza Dr, W of Chase	25			
TR33644	Sean Repko	P.O. Box 8006	Rancho Santa Fe, CA 92067	E of Minor, W of Hewitt - **62 Condos**	1			
TR33662A1	Curci San Jacinto Inv	P.O. Box 1549	Newport Beach, CA 92659	S of Ramona Expwy, E of Vernon	98			
TR34212	Valley Community Church	1430 S. Kirby St	San Jacinto, CA 92582	N of Esplanade 221' W of Kirby	12			
TR34455	Mananne Millard	2661 W Esplanade Ave	San Jacinto, CA 92582	S of Cottonwood Ave, 640' E of Lyon Ave	15			
TR34364	Mike Ali	8181 Deauville Dr	Huntington Beach, CA 92646	S of Ramona Blvd , 400' W of Chase St	8			
TR34656	La Palma 120	P.O. Box 22218	Mesa AZ, 85277	NEC Chase and DeAnza	18			
TR34866	Juan Gonzalez	2813 Burgundy Lace Ln	San Jacinto, CA 92583	SWC Seventh St. and Kirby Street	18			
TR34684	Mario Zamorano	3590 Dartmouth Ln	Rowland Heights, CA 91748	W side of Kirby St, north of Esplanade Ave	35			
TR34665	EMWD	2270 Trumble Rd	Perris, CA 92570	E side of Idywild , N of Tahquitz St	20			
TR35447	Lucia Gonzalez	15700 Lakewood Blvd	Bellflower, CA 90706	N side of Shaver St, E of Miramar	10			
TR36188 (SP1-04)	Eugene M Gabrych	2006 Old Highway 395	Fallbrook, CA 92028	W of Sanderson, S of Ramona Blvd, E of O'dell	1323			
TR36243	Auxano LLC	333 W Paseo de Cristobal	San Clemente, CA 92672-5430	N of 7th St. 66' W of Sanderson	43			
				TOTALS:	4948			
In-Process Tentative Tract Maps								
TT 37229	WMR Residential Investments	27127 Calle Arroyo Ste 1910	San Juan Capistrano, CA 92675	SEC Esplanade and Hewitt	73			Possible Development by 2020
TT 37230	WMR Residential Investments	27127 Calle Arroyo Ste 1910	San Juan Capistrano, CA 92675	NEC Esplanade & Hewitt	84			Possible Development by 2020

☆ See tract map for those locations

City of Moreno Valley California Development Projects



	Population	Average Household Income
City of Moreno Valley	209,826	$69,610
3 Mile Market Reach	108,057	$66,400
5 Mile Market Reach	255,253	$76,830
10 Mile Market Reach	658,471	$77,200
20 Mile Market Reach	2,325,591	$77,052

*Data from Claritas May 2017

University of California Riverside

Lakeshore Village Marketplace

Canyon Spring Center

TownGate Highlands

Pigeon Pass Plaza

Moreno Valley Mall

Festival Center

TownGate Crossing

TownGate Promenade

The Quarter

Moreno Valley Plaza

TownGate Center/ Plaza

TownGate Square

Sycamore Canyon Business Park

Stoneridge Towne Centre

Moreno Valley Auto Mall

Moreno Beach Plaza

SR 60 Business Park Area

Connects to I-10

Approved World Logistics Center Specific Plan 40.6 Million Sq Ft MV3

MV1 MV2

Plaza del Sol

Alessandro Plaza

Elsworth Plaza

Civic Center

Public Library

Centerpointe Business Park

Sunnymead Towne Center

Riverside University Health Systems

Cactus Commerce Center

March LifeCare Campus

Moreno Marketplace

Aqua Bella

Proposed Health/ Wellness Center

Kaiser Permanente Moreno Valley

Meridian Business Park

South Moreno Valley Walmart

Lakeside Plaza & Terrace

March Air Reserve Base March Global Airport

Iris Plaza

Moreno Valley College

Moreno Valley Industrial Area

Lake Perris State Park

- Metrolink Station
- March Inland Port
- Hospitality
- Single Family Housing
- Multi-Family Housing
- Office/Medical
- Market Range
- Commercial Shopping Centers
- Industrial/Business Park
- Medical Projects
- Moreno Valley Boundary

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The information shown on this map was compiled from the Riverside County GIS and the City of Moreno Valley GIS. The land base and facility information on this map is for display purposes only and should not be relied upon without independent verification as to its accuracy. Riverside County and City of Moreno Valley will not be held responsible for any claims, losses or damages resulting from the use of this map.

Contact City of Moreno Valley Economic Development Department at 951-413-3460 or EDTeam@moval.org

MORENOVALLEY ACCELERATING OPPORTUNITIES

Revision Date: July 2017

4.1-10

COMMERCIAL
development

The City of Moreno Valley is a growing city with a bright future. Strategically located in the Inland Empire of Southern California, with a market area of over two million people and abundant developable land, savvy developers and retailers continue to choose Moreno Valley for growth and success. The City of Moreno Valley is dedicated to fostering new businesses and well-managed growth to create a superb quality of life. *Take a look at what's happening!*



Commercial Centers

Center Name	Size (sq. ft.)	Traffic Counts (ADT) East/West	North/South
TownGate Highlands	251,900	270,000	24,200
Moreno Valley Mall	1,200,000	270,000	38,000
Stoneridge Towne Centre	579,295	163,000	20,100
TownGate Center/Plaza	465,000	257,000	33,700
Moreno Beach Plaza	350,000	139,000	14,900
Moreno Valley Plaza	341,000	15,300	24,900
TownGate Square	136,000	16,200	38,000
TownGate Crossing	237,000	270,000	38,000
TownGate Promenade	200,000	270,000	36,000
Moreno Beach Marketplace	175,000	8,400	17,300
Lakeside Plaza & Terrace	143,000	18,800	13,300
Lakeshore Village	140,000	9,400	--
*Alessandro & Lasselle	140,000	17,500	13,300
Moreno Marketplace	93,788	6,400	15,900
Iris Plaza	87,120	18,800	20,300
Elsworth Plaza	30,000	27,700	--
Cactus Commerce Center	16,000	36,100	--
*Rancho Belago Plaza	14,000	3,800	14,300
Festival Center	1,327,645	103,000	33,500

** Approved Projects*

Office/Medical

Map #	Name	Size (sq. ft.)
1	TownGate Square	170,000
2	Olivewood Plaza	22,758
3	Centerpointe Office Area	258,000
4	Moreno Valley Medical Plaza	217,000
5	Moreno Valley Medical Overlay Area	122,250
6	Renaissance Village	98,400
7	Riverside County Office Building	52,000
8	Fresenius Medical Care	12,000
9	Integrated Care Communities	44,000
10	Riverside University Health System Expansion	34,749
11	Kaiser Permanente Moreno Valley Emergency Room Expansion	8,500



Industrial/Job Centers

Areas	Occupied/ Leased (sq. ft.)	Available/ Approved (sq. ft.)	Proposed (sq. ft.)
Centerpointe Business Park	4,241,407	968,508	--
Moreno Valley Industrial Area	9,781,639	5,019,868	3,586,469
SR-60 Business Park Area	2,620,887	2,279,498	--
Approved World Logistics Center	—	—	40,600,000
Meridian Business Park	*Adjacent to the City of Moreno Valley, two business parks provide additional daytime population utilizing services within Moreno Valley.*		



Hospitality Development

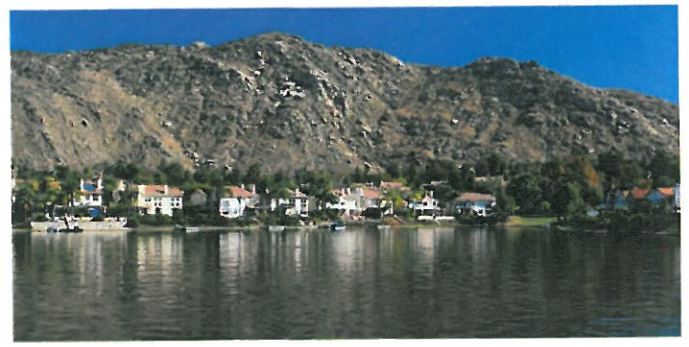
Map #	Hotel Name	# Guest Rooms
	Centerpointe Hotel:	
1	Hawthorn Inn (approved)	79
	TownGate Hotels:	
2	The Quarter	216
3	Ayres Hotel & Spa	127
4	Hampton Inn & Suites	115
	Sunnymead Area Hotels:	
5	La Quinta Inn & Suites	58
6	Travelers Inn	55
7	Comfort Inn	92
8	Sleep Inn & Suites	66
9	Econo Lodge	51
10	Holiday Inn Express	153
11	Best Western Hotel & Suites	59



RESIDENTIAL
development

New Single-Family Development: 3,622 Units

Map #	Tract	Builder/Applicant	# of Units	Status
1	33626	Kincaid Development	25	Approved
2	31394	Pigeon Pass Ltd.	78	Approved
3	29343	Professor's Fund IV	58	Approved
4	24203	Blue Ribbon Enterprise	99	In Process
5	32515	Lennar Homes - Meadow Creek	148	Under Construction
6	32005	Red Hill Village, LLC	214	Approved
7	33388	SCH Development LLC	15	Approved
8	31592	CV Communities	36	Approved
9	32710	Issac Genah	6	In Process
10	32126	Salvador Torres	35	Approved
11	36761	Right Solutions, LLC	7	In Process
12	35606	Metric Homes	16	In Process
13	31621	Victoria Homes- "Skyline"	12	Approved
14	35956	Mr. Salcedo	2	In Process
15	31297	Randy McFarland	7	Approved
16	35262	FDC & Associates	3	In Process
17	36983	Construction Specialist Group LLC	53	In Process
18	31517	Winchester Associates	83	Approved
19	33436	Winchester Associates	105	Approved
20	PA15-0039	Global Investment & DEV LLC	272	In Process
21	34603	Wolverine Properties	26	In Process
22	31206	Curtis Development	23	In Process
23	32460	Sussex Capital Group	58	Approved
24	33962	Pacific Scene Homes	31	Approved
25	32459	Sussex Capital Group	11	Approved
26	30411	Pacific Communities	24	Approved
27	30998	Pacific Communities	47	Approved
28	34043	RM3 Building and Development	12	Approved
29	33256	Pacific Communities	100	Recorded
30	31305	RSI	87	Approved
31	36933	Beazer Homes	275	In Plan Check
32	37060	Macjones Holdings	16	In Process
33	34397	Winchester Associates	52	In Process
34	32408	Dev West Engineering	80	Approved
35	31618	Frontier Homes	56	Under Construction
36	36372	Motlagh Family Trust	25	In Process
37	32645	Winchester Associates	54	Approved
38	32548	Gabel, Cook and Associates	107	Approved
39	32218	Winchester Associates	63	Approved
40	32284	Joe Anderson	32	Approved
41	31590	Mike McKnight Planning Const	96	In Process
42	36882	Frontier Homes	40	Approved
43	36436	KB Homes	159	In Plan Check
44	36719	Kuo Ming Lee	34	In Process
45	35377	Michael Dillard	9	In Process
46	32556	Invermex, Inc.	32	In Process
47	34748	Rados	135	Approved
48	22180	RSI	140	Under Construction
49	36760	Mission Pacific Land Co	221	Approved
50	33024	Adam Wisler	8	Approved
51	32716	Bob Rogers	57	Approved
52	31442	SKG Pacific Enterprises Inc	63	Approved
53	36401	Continental East Fund III, LLC	92	Approved
54	30268	Pacific Communities "High Pointe" and "Pacific Iris"	83	Under Construction



New Multi-Family Development: 2,352 Units

Map #	Tract	Builder/Applicant	# of Units	Status
1	PA15-0042	Latco SC Inc.	112	Under Construction
2	35414	Oak Park Partners	266	In Plan Check
3	32215	Winchester Associates "Scottish Village"	194	Approved
4	PA14-0027	Design Concepts	39	Approved
5	36401	Continental East	125	In Plan Check
6	32142	GHA	62	Approved
7	31814	Jesse Huizar	60	Approved
8	34216	Creative Design Assoc.	39	Approved
9	33771	Jian Qiang Liu	12	Approved
10	PEN16-0066	Cal Choice Inv. Inc.	12	In Process
11	35663	Jimmy Lee	12	Approved
12	35369	Tason Myers Property	12	Approved
13	35769	Michael Chen	16	Approved
14	PA09-0006	Jim Nydam	15	Approved
15	35304	Jimmy Lee	12	Approved
16	36708	Nova Homes	122	Approved
17	35429	Creative Design Assoc.	58	Approved
18	35304	Jimmy Lee	24	Approved
19	34681	Perris Pacific Company	49	Approved
20	33607	Mo Ghiassi TL Group	52	Approved
21	PA15-0046	LA Jolla Development/ Rochas Grandes	426	Approved
22	PA13-0006	Rancho Belago Developers, Inc.	141	In Process
23	PEN16-0123	MV Bella Vista GP, LLC	220	Approved
24	PEN16-0039	Latco SC Inc.	272	Approved

MORENOVALLEY
ACCELERATING OPPORTUNITIES

Contact us at
951.413.3460 | edteam@moval.org
www.morenovalleybusiness.com

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APPENDIX 5.1:

E+P CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	81	166	882	501	1
Future Vol, veh/h	0	81	166	882	501	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	84	171	909	516	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1768	517	517	0	-	0
Stage 1	517	-	-	-	-	-
Stage 2	1251	-	-	-	-	-
Critical Hdwy	6.4	6	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	93	579	1059	-	-	-
Stage 1	603	-	-	-	-	-
Stage 2	272	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	78	579	1059	-	-	-
Mov Cap-2 Maneuver	96	-	-	-	-	-
Stage 1	506	-	-	-	-	-
Stage 2	272	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.3	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1059	-	579	-	-
HCM Lane V/C Ratio	0.162	-	0.144	-	-
HCM Control Delay (s)	9.1	-	12.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.6	-	0.5	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	581	1047	2	0	2
Future Vol, veh/h	1	581	1047	2	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	625	1126	2	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1128	0	-	0	1754	1127
Stage 1	-	-	-	-	1127	-
Stage 2	-	-	-	-	627	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	627	-	-	-	95	251
Stage 1	-	-	-	-	312	-
Stage 2	-	-	-	-	536	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	627	-	-	-	95	251
Mov Cap-2 Maneuver	-	-	-	-	95	-
Stage 1	-	-	-	-	311	-
Stage 2	-	-	-	-	536	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	19.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	627	-	-	-	251
HCM Lane V/C Ratio	0.002	-	-	-	0.009
HCM Control Delay (s)	10.8	-	-	-	19.5
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	13.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	544	37	14	953	96	39
Future Vol, veh/h	544	37	14	953	96	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	175	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	598	41	15	1047	105	43

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	598	0	1675	598
Stage 1	-	-	-	-	598	-
Stage 2	-	-	-	-	1077	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	989	-	106	506
Stage 1	-	-	-	-	553	-
Stage 2	-	-	-	-	330	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	989	-	~ 104	506
Mov Cap-2 Maneuver	-	-	-	-	~ 104	-
Stage 1	-	-	-	-	545	-
Stage 2	-	-	-	-	330	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	170.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	135	-	-	989	-
HCM Lane V/C Ratio	1.099	-	-	0.016	-
HCM Control Delay (s)	170.9	-	-	8.7	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	8.3	-	-	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	518	0	0	915	32	0	0	0	26	0	52
Future Vol, veh/h	64	518	0	0	915	32	0	0	0	26	0	52
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	155	-	315	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	69	557	0	0	984	34	0	0	0	28	0	56

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1018	0	0	557	0	0	1724	1713	557	1679	1679	984
Stage 1	-	-	-	-	-	-	695	695	-	984	984	-
Stage 2	-	-	-	-	-	-	1029	1018	-	695	695	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	689	-	-	1024	-	-	71	91	534	76	96	304
Stage 1	-	-	-	-	-	-	436	447	-	302	329	-
Stage 2	-	-	-	-	-	-	285	317	-	436	447	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	689	-	-	1024	-	-	54	82	534	70	86	304
Mov Cap-2 Maneuver	-	-	-	-	-	-	54	82	-	70	86	-
Stage 1	-	-	-	-	-	-	392	402	-	272	329	-
Stage 2	-	-	-	-	-	-	233	317	-	392	402	-

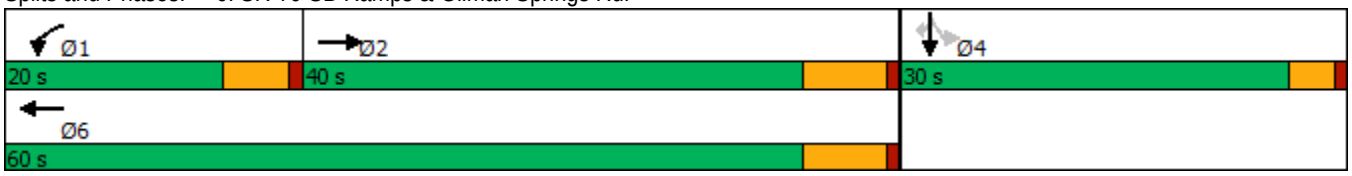
Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0	0	60.1
HCM LOS			A	F

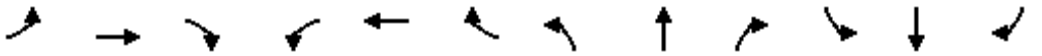
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	689	-	-	1024	-	-	144
HCM Lane V/C Ratio	-	0.1	-	-	-	-	-	0.582
HCM Control Delay (s)	0	10.8	-	-	0	-	-	60.1
HCM Lane LOS	A	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	0.3	-	-	0	-	-	3

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	241	5	913	2	35
Future Volume (vph)	241	5	913	2	35
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.5	10.4	34.5	9.0	9.0
Total Split (s)	40.0	20.0	60.0	30.0	30.0
Total Split (%)	44.4%	22.2%	66.7%	33.3%	33.3%
Yellow Time (s)	5.5	4.4	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	5.4	6.5	4.0	4.0
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 43.9
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 6: SR-79 SB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	241	304	5	913	0	0	0	0	146	2	35
Future Volume (veh/h)	0	241	304	5	913	0	0	0	0	146	2	35
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	254	251	5	961	0				154	2	31
Peak Hour Factor	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
Cap, veh/h	0	792	707	12	2104	0				268	3	241
Arrive On Green	0.00	0.44	0.44	0.01	0.58	0.00				0.15	0.15	0.15
Sat Flow, veh/h	0	1900	1610	1810	3705	0				1787	23	1610
Grp Volume(v), veh/h	0	254	251	5	961	0				156	0	31
Grp Sat Flow(s),veh/h/ln	0	1805	1610	1810	1805	0				1811	0	1610
Q Serve(g_s), s	0.0	3.6	4.1	0.1	5.9	0.0				3.1	0.0	0.7
Cycle Q Clear(g_c), s	0.0	3.6	4.1	0.1	5.9	0.0				3.1	0.0	0.7
Prop In Lane	0.00		1.00	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	792	707	12	2104	0				271	0	241
V/C Ratio(X)	0.00	0.32	0.36	0.41	0.46	0.00				0.57	0.00	0.13
Avail Cap(c_a), veh/h	0	1539	1373	672	4915	0				1198	0	1065
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.2	7.3	19.4	4.7	0.0				15.5	0.0	14.5
Incr Delay (d2), s/veh	0.0	0.5	0.6	40.8	0.3	0.0				4.1	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.7	0.8	0.2	0.5	0.0				1.3	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.7	8.0	60.3	5.0	0.0				19.6	0.0	15.0
LnGrp LOS	A	A	A	E	A	A				B	A	B
Approach Vol, veh/h		505			966						187	
Approach Delay, s/veh		7.8			5.3						18.8	
Approach LOS		A			A						B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	5.7	23.7		9.9		29.4
Change Period (Y+Rc), s	5.4	6.5		4.0		6.5
Max Green Setting (Gmax), s	14.6	33.5		26.0		53.5
Max Q Clear Time (g_c+I1), s	2.1	6.1		5.1		7.9
Green Ext Time (p_c), s	0.0	5.6		1.6		15.0

Intersection Summary		
HCM 6th Ctrl Delay		7.6
HCM 6th LOS		A

Intersection	
Int Delay, s/veh	43.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	349	0	0	500	261	418	2	8	0	0	0
Future Vol, veh/h	37	349	0	0	500	261	418	2	8	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	39	367	0	0	526	275	440	2	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	801	0	-	-	-	0	708	1246	184
Stage 1	-	-	-	-	-	-	445	445	-
Stage 2	-	-	-	-	-	-	263	801	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	831	-	0	0	-	-	~ 374	175	833
Stage 1	-	-	0	0	-	-	619	578	-
Stage 2	-	-	0	0	-	-	763	400	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	831	-	-	-	-	-	~ 356	0	833
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 356	0	-
Stage 1	-	-	-	-	-	-	590	0	-
Stage 2	-	-	-	-	-	-	763	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.9	0	159.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	356	833	831	-	-	-
HCM Lane V/C Ratio	1.242	0.01	0.047	-	-	-
HCM Control Delay (s)	162.3	9.4	9.5	-	-	-
HCM Lane LOS	F	A	A	-	-	-
HCM 95th %tile Q(veh)	19.3	0	0.1	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	160	104	556	997	5
Future Vol, veh/h	1	160	104	556	997	5
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	-	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	167	108	579	1039	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1837	1042	1044	0	-	0
Stage 1	1042	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Critical Hdwy	6.4	6	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	84	298	674	-	-	-
Stage 1	343	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	71	298	674	-	-	-
Mov Cap-2 Maneuver	219	-	-	-	-	-
Stage 1	288	-	-	-	-	-
Stage 2	448	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	31.8	1.8	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	674	-	297	-	-
HCM Lane V/C Ratio	0.161	-	0.565	-	-
HCM Control Delay (s)	11.4	-	31.8	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.6	-	3.2	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1154	657	2	2	2
Future Vol, veh/h	3	1154	657	2	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	1202	684	2	2	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	686	0	-	0	1893	685
Stage 1	-	-	-	-	685	-
Stage 2	-	-	-	-	1208	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	917	-	-	-	78	452
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	286	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	917	-	-	-	78	452
Mov Cap-2 Maneuver	-	-	-	-	78	-
Stage 1	-	-	-	-	502	-
Stage 2	-	-	-	-	286	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	32.9
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	917	-	-	-	133
HCM Lane V/C Ratio	0.003	-	-	-	0.031
HCM Control Delay (s)	8.9	-	-	-	32.9
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1086	70	17	615	44	18
Future Vol, veh/h	1086	70	17	615	44	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	175	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1131	73	18	641	46	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1131	0	1808	1131
Stage 1	-	-	-	-	1131	-
Stage 2	-	-	-	-	677	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	625	-	88	250
Stage 1	-	-	-	-	311	-
Stage 2	-	-	-	-	509	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	625	-	85	250
Mov Cap-2 Maneuver	-	-	-	-	85	-
Stage 1	-	-	-	-	302	-
Stage 2	-	-	-	-	509	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	83
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	105	-	-	625	-
HCM Lane V/C Ratio	0.615	-	-	0.028	-
HCM Control Delay (s)	83	-	-	10.9	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	3	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	1059	1	0	585	21	0	0	0	23	0	48
Future Vol, veh/h	44	1059	1	0	585	21	0	0	0	23	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	155	-	315	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	47	1139	1	0	629	23	0	0	0	25	0	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	652	0	0	1140	0	0	1901	1886	1140	1863	1863	629
Stage 1	-	-	-	-	-	-	1234	1234	-	629	629	-
Stage 2	-	-	-	-	-	-	667	652	-	1234	1234	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	944	-	-	620	-	-	53	71	247	56	74	486
Stage 1	-	-	-	-	-	-	218	251	-	474	478	-
Stage 2	-	-	-	-	-	-	451	467	-	218	251	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	944	-	-	620	-	-	46	67	247	54	70	486
Mov Cap-2 Maneuver	-	-	-	-	-	-	46	67	-	54	70	-
Stage 1	-	-	-	-	-	-	207	238	-	450	478	-
Stage 2	-	-	-	-	-	-	403	467	-	207	238	-

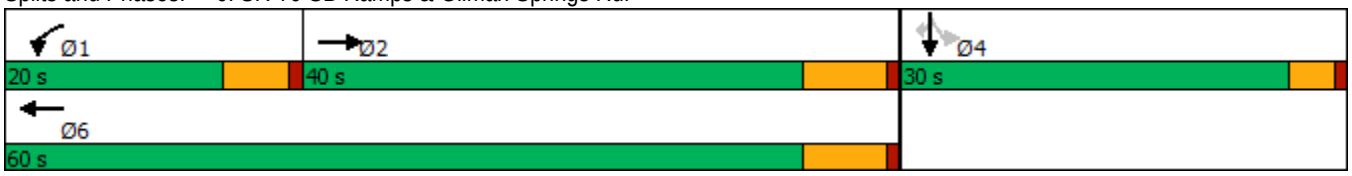
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0	0	61.7
HCM LOS			A	F

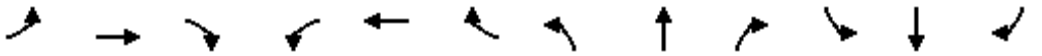
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	944	-	-	620	-	-	135
HCM Lane V/C Ratio	-	0.05	-	-	-	-	-	0.566
HCM Control Delay (s)	0	9	-	-	0	-	-	61.7
HCM Lane LOS	A	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	0.2	-	-	0	-	-	2.8

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	531	2	564	3	42
Future Volume (vph)	531	2	564	3	42
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.5	10.4	34.5	9.0	9.0
Total Split (s)	40.0	20.0	60.0	30.0	30.0
Total Split (%)	44.4%	22.2%	66.7%	33.3%	33.3%
Yellow Time (s)	5.5	4.4	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	5.4	6.5	4.0	4.0
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 58.4
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 6: SR-79 SB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	531	550	2	564	0	0	0	0	276	3	42
Future Volume (veh/h)	0	531	550	2	564	0	0	0	0	276	3	42
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	565	439	2	600	0				294	3	33
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	0	884	687	5	2029	0				429	4	386
Arrive On Green	0.00	0.46	0.46	0.00	0.56	0.00				0.24	0.24	0.24
Sat Flow, veh/h	0	2028	1502	1810	3705	0				1792	18	1610
Grp Volume(v), veh/h	0	528	476	2	600	0				297	0	33
Grp Sat Flow(s),veh/h/ln	0	1805	1630	1810	1805	0				1810	0	1610
Q Serve(g_s), s	0.0	11.9	11.9	0.1	4.6	0.0				7.9	0.0	0.8
Cycle Q Clear(g_c), s	0.0	11.9	11.9	0.1	4.6	0.0				7.9	0.0	0.8
Prop In Lane	0.00		0.92	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	826	745	5	2029	0				434	0	386
V/C Ratio(X)	0.00	0.64	0.64	0.40	0.30	0.00				0.68	0.00	0.09
Avail Cap(c_a), veh/h	0	1142	1031	499	3647	0				889	0	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.0	11.0	26.4	6.1	0.0				18.3	0.0	15.6
Incr Delay (d2), s/veh	0.0	1.8	2.0	86.2	0.2	0.0				4.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.4	3.1	0.1	0.9	0.0				3.3	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	12.8	13.0	112.5	6.3	0.0				22.4	0.0	15.8
LnGrp LOS	A	B	B	F	A	A				C	A	B
Approach Vol, veh/h		1004			602						330	
Approach Delay, s/veh		12.9			6.6						21.7	
Approach LOS		B			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	5.5	30.7		16.7		36.3
Change Period (Y+Rc), s	5.4	6.5		4.0		6.5
Max Green Setting (Gmax), s	14.6	33.5		26.0		53.5
Max Q Clear Time (g_c+I1), s	2.1	13.9		9.9		6.6
Green Ext Time (p_c), s	0.0	10.4		2.9		8.1

Intersection Summary		
HCM 6th Ctrl Delay		12.4
HCM 6th LOS		B

Intersection	
Int Delay, s/veh	30.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	774	0	0	323	219	243	1	7	0	0	0
Future Vol, veh/h	34	774	0	0	323	219	243	1	7	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	37	832	0	0	347	235	261	1	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	582	0	-	-	-	0	1080	1488	416
Stage 1	-	-	-	-	-	-	906	906	-
Stage 2	-	-	-	-	-	-	174	582	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1002	-	0	0	-	-	~ 216	125	591
Stage 1	-	-	0	0	-	-	359	358	-
Stage 2	-	-	0	0	-	-	845	502	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1002	-	-	-	-	-	~ 208	0	591
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 208	0	-
Stage 1	-	-	-	-	-	-	346	0	-
Stage 2	-	-	-	-	-	-	845	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	191.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	208	591	1002	-	-	-
HCM Lane V/C Ratio	1.261	0.013	0.036	-	-	-
HCM Control Delay (s)	196.4	11.2	8.7	-	-	-
HCM Lane LOS	F	B	A	-	-	-
HCM 95th %tile Q(veh)	13.9	0	0.1	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX 5.2:

E+P CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

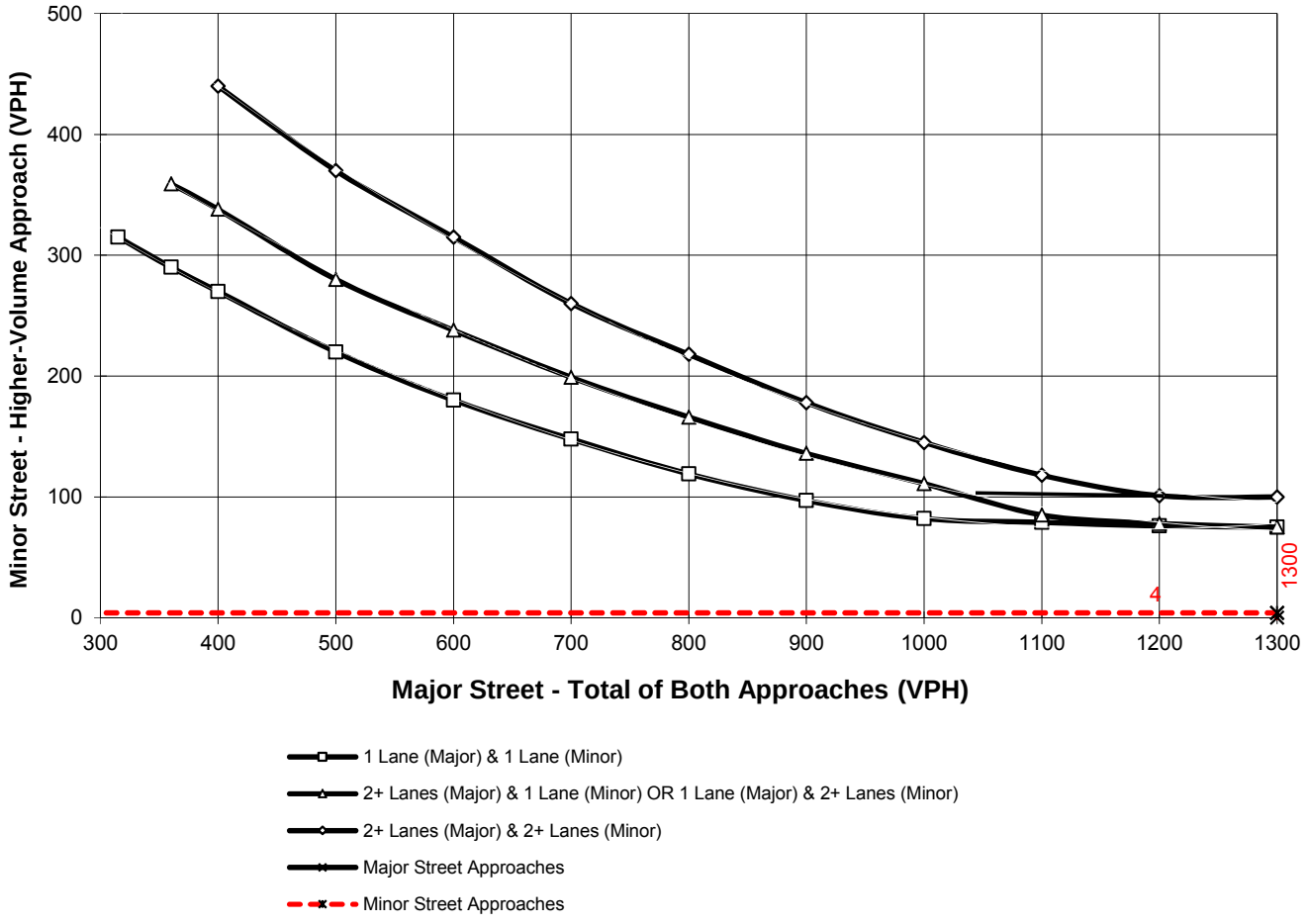
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Gilman Springs Rd.** Total of Both Approaches (VPH) = **1816**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Jack Rabbit Trail** High Volume Approach (VPH) = **4**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

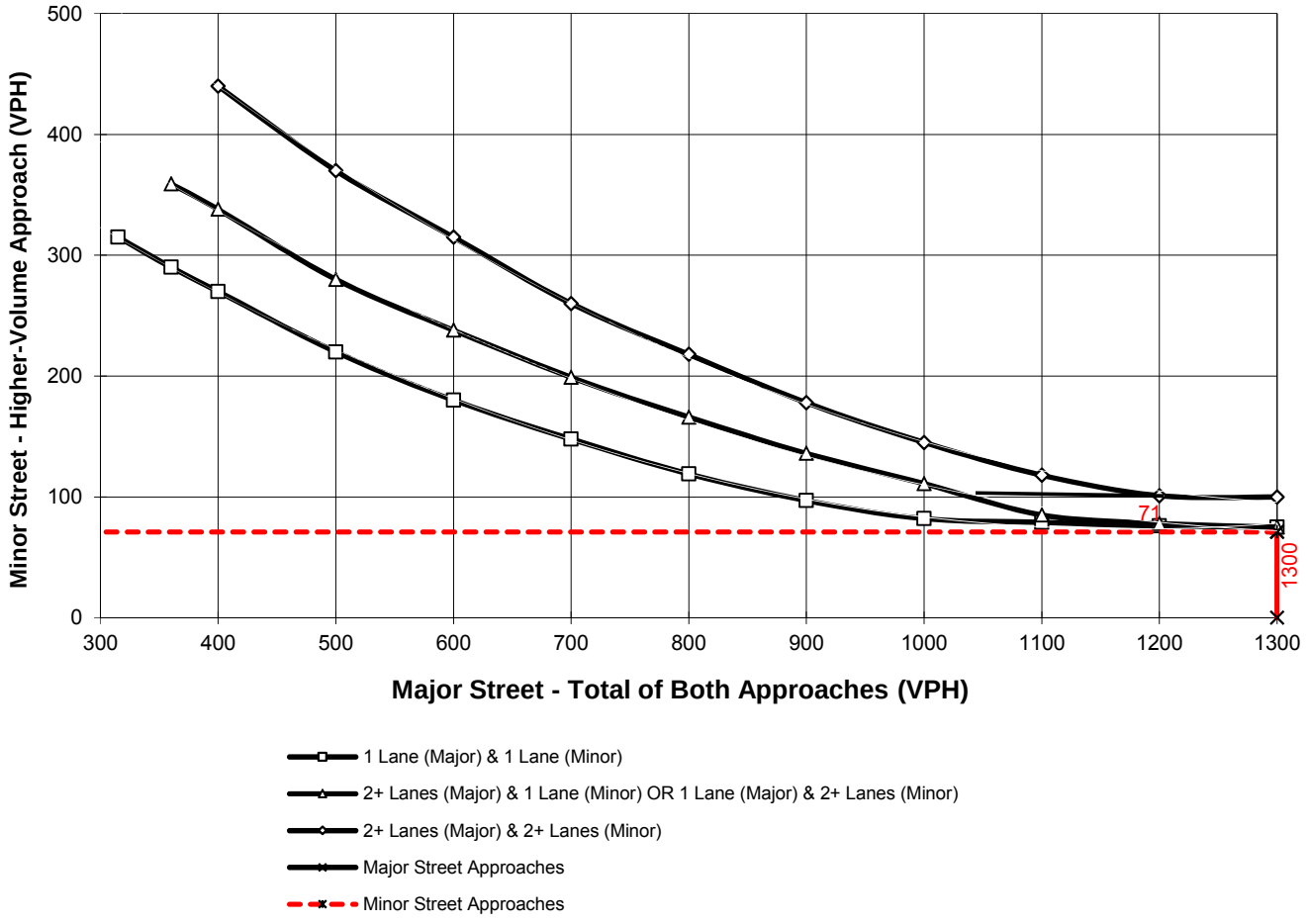
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Gilman Springs Rd.** Total of Both Approaches (VPH) = **1710**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Driveway** High Volume Approach (VPH) = **71**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 5.3:

E+P CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	574	5	961	156	37
v/c Ratio	0.28	0.01	0.43	0.31	0.07
Control Delay	4.7	20.8	7.4	17.9	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.7	20.8	7.4	17.9	0.3
Queue Length 50th (ft)	15	1	75	33	0
Queue Length 95th (ft)	67	10	137	90	0
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2578	671	3524	1143	1059
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.22	0.01	0.27	0.14	0.03

Intersection Summary

Intersection	
Int Delay, s/veh	43.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	349	0	0	500	261	418	2	8	0	0	0
Future Vol, veh/h	37	349	0	0	500	261	418	2	8	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	39	367	0	0	526	275	440	2	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	801	0	-	-	-	0	708	1246	184
Stage 1	-	-	-	-	-	-	445	445	-
Stage 2	-	-	-	-	-	-	263	801	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	831	-	0	0	-	-	~ 374	175	833
Stage 1	-	-	0	0	-	-	619	578	-
Stage 2	-	-	0	0	-	-	763	400	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	831	-	-	-	-	-	~ 356	0	833
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 356	0	-
Stage 1	-	-	-	-	-	-	590	0	-
Stage 2	-	-	-	-	-	-	763	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.9	0	159.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	356	833	831	-	-	-
HCM Lane V/C Ratio	1.242	0.01	0.047	-	-	-
HCM Control Delay (s)	162.3	9.4	9.5	-	-	-
HCM Lane LOS	F	A	A	-	-	-
HCM 95th %tile Q(veh)	19.3	0	0.1	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1150	2	600	297	45
v/c Ratio	0.65	0.01	0.33	0.55	0.08
Control Delay	11.1	30.0	9.0	23.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	11.1	30.0	9.0	23.4	0.3
Queue Length 50th (ft)	85	1	55	83	0
Queue Length 95th (ft)	269	7	111	204	0
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2260	479	3202	857	821
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.51	0.00	0.19	0.35	0.05

Intersection Summary

Intersection	
Int Delay, s/veh	30.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	774	0	0	323	219	243	1	7	0	0	0
Future Vol, veh/h	34	774	0	0	323	219	243	1	7	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	37	832	0	0	347	235	261	1	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	582	0	-	-	-	0	1080	1488	416
Stage 1	-	-	-	-	-	-	906	906	-
Stage 2	-	-	-	-	-	-	174	582	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	1002	-	0	0	-	-	~ 216	125	591
Stage 1	-	-	0	0	-	-	359	358	-
Stage 2	-	-	0	0	-	-	845	502	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1002	-	-	-	-	-	~ 208	0	591
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 208	0	-
Stage 1	-	-	-	-	-	-	346	0	-
Stage 2	-	-	-	-	-	-	845	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	191.2
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	208	591	1002	-	-	-
HCM Lane V/C Ratio	1.261	0.013	0.036	-	-	-
HCM Control Delay (s)	196.4	11.2	8.7	-	-	-
HCM Lane LOS	F	B	A	-	-	-
HCM 95th %tile Q(veh)	13.9	0	0.1	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX 5.4:

E+P CONDITIONS BASIC FREEWAY SEGMENT ANALYSIS WORKSHEETS

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3941	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2186
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.91
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	37.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3135	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1721
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	66.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	25.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3552	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1970
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	31.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3135	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1721
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	66.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	25.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1356	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	752
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.31
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	10.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1480	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	821
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.34
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	11.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Information

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Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1103	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	612
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.25
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	8.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1240	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	680
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.28
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	4063	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2230
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.93
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	57.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	38.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3573	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1962
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	31.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	4524	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2484
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.03
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3573	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1962
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	31.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1737	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	964
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.40
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	13.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1987	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1091
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.45
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	15.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1216	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	668
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.28
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1222	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	671
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.28
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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APPENDIX 5.5:

E+P CONDITIONS MERGE/DIVERGE ANALYSIS WORKSHEETS

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3125	816
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.952
Flow Rate (v_i), pc/h	3431	932
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.91	0.44

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	37.3
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.600
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	53.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3431	Ramp Junction Speed (S), mi/h	53.2
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4363	Average Density (D), pc/mi/ln	41.0
Level of Service (LOS)	E		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	190
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3135	10
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	30.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.769
Flow Rate (v_i), pc/h	3442	14
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.72	0.01

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	32.1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.299
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3442	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	27.9
Level of Service (LOS)	D		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3552	422
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	11.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.901
Flow Rate (v_i), pc/h	3940	509
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.82	0.24

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	36.3
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.344
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3940	Ramp Junction Speed (S), mi/h	60.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	32.6
Level of Service (LOS)	E		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3130	5
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	60.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.625
Flow Rate (v_i), pc/h	3437	9
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.72	0.00

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	30.5
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.416
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	58.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3437	Ramp Junction Speed (S), mi/h	58.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3446	Average Density (D), pc/mi/ln	29.5
Level of Service (LOS)	D		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	110
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1356	160
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	10.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.909
Flow Rate (v_i), pc/h	1504	191
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.31	0.09

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	16.2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.315
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1504	Ramp Junction Speed (S), mi/h	61.2
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	12.3
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1196	284
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.917
Flow Rate (v_i), pc/h	1313	337
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.34	0.16

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	15.8
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.305
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1313	Ramp Junction Speed (S), mi/h	61.5
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1650	Average Density (D), pc/mi/ln	13.4
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	823	280
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.943
Flow Rate (v_i), pc/h	904	323
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.26	0.15

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	12.5
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.298
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	904	Ramp Junction Speed (S), mi/h	61.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1227	Average Density (D), pc/mi/ln	9.9
Level of Service (LOS)	B		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	155
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1240	417
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.980
Flow Rate (v_i), pc/h	1361	463
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.28	0.22

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	14.6
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.340
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1361	Ramp Junction Speed (S), mi/h	60.5
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	11.2
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3567	496
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.935
Flow Rate (v_i), pc/h	3916	577
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.94	0.27

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	38.4
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.643
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	52.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3916	Ramp Junction Speed (S), mi/h	52.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4493	Average Density (D), pc/mi/ln	43.2
Level of Service (LOS)	E		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	190
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3573	6
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	50.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.667
Flow Rate (v_i), pc/h	3923	10
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.82	0.00

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	36.3
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.299
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3923	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	31.8
Level of Service (LOS)	E		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	4524	958
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	3.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.971
Flow Rate (v_i), pc/h	4967	1072
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	1.03	0.51

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	45.2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	59.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4967	Ramp Junction Speed (S), mi/h	-
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3566	7
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	43.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.699
Flow Rate (v_i), pc/h	3915	11
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.82	0.01

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	34.3
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.492
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	56.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3915	Ramp Junction Speed (S), mi/h	56.2
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3926	Average Density (D), pc/mi/ln	34.9
Level of Service (LOS)	D		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	110
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1737	297
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.943
Flow Rate (v_i), pc/h	1927	342
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.40	0.16

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	19.8
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.329
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.8
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1927	Ramp Junction Speed (S), mi/h	60.8
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	15.8
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

	Freeway	Ramp
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

	Freeway	Ramp
Demand Volume (V_i), veh/h	1440	547
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.980
Flow Rate (v_i), pc/h	1581	607
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.46	0.29

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	19.8
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.320
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1581	Ramp Junction Speed (S), mi/h	61.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2188	Average Density (D), pc/mi/ln	17.9
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	979	237
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.962
Flow Rate (v_i), pc/h	1075	268
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.28	0.13

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	13.4
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.300
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1075	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1343	Average Density (D), pc/mi/ln	10.9
Level of Service (LOS)	B		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	E+P
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	155
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1222	243
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.962
Flow Rate (v_i), pc/h	1342	275
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.28	0.13

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	14.4
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.323
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1342	Ramp Junction Speed (S), mi/h	61.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	11.0
Level of Service (LOS)	B		

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APPENDIX 5.6:

E+P CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	544	37	14	953	96
Future Volume (vph)	544	37	14	953	96
Turn Type	NA	Perm	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		4			
Detector Phase	4	4	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	35.5	35.5	9.6	24.5	24.5
Total Split (s)	84.0	84.0	10.0	94.0	26.0
Total Split (%)	70.0%	70.0%	8.3%	78.3%	21.7%
Yellow Time (s)	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 78
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Bridge St. & Gilman Springs Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	544	37	14	953	96	39
Future Volume (veh/h)	544	37	14	953	96	39
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	598	0	15	1047	105	43
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1110		33	1271	177	73
Arrive On Green	0.58	0.00	0.02	0.67	0.14	0.14
Sat Flow, veh/h	1900	1610	1810	1900	1232	504
Grp Volume(v), veh/h	598	0	15	1047	149	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1748	0
Q Serve(g_s), s	13.3	0.0	0.6	28.2	5.5	0.0
Cycle Q Clear(g_c), s	13.3	0.0	0.6	28.2	5.5	0.0
Prop In Lane		1.00	1.00		0.70	0.29
Lane Grp Cap(c), veh/h	1110		33	1271	252	0
V/C Ratio(X)	0.54		0.46	0.82	0.59	0.00
Avail Cap(c_a), veh/h	2121		141	2395	491	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.8	0.0	33.7	8.5	27.8	0.0
Incr Delay (d2), s/veh	0.6	0.0	3.7	2.0	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	0.3	6.2	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.3	0.0	37.4	10.5	30.0	0.0
LnGrp LOS	A		D	B	C	A
Approach Vol, veh/h	598	A		1062	149	
Approach Delay, s/veh	9.3			10.9	30.0	
Approach LOS	A			B	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		16.5	5.9	47.1		52.9
Change Period (Y+Rc), s		6.5	4.6	6.5		6.5
Max Green Setting (Gmax), s		19.5	5.4	77.5		87.5
Max Q Clear Time (g_c+I1), s		7.5	2.6	15.3		30.2
Green Ext Time (p_c), s		0.3	0.0	5.9		16.2

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

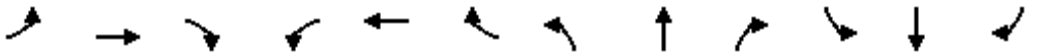
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBT	Ø2	Ø3
Lane Configurations								
Traffic Volume (vph)	64	518	915	32	26	0		
Future Volume (vph)	64	518	915	32	26	0		
Turn Type	Prot	NA	NA	Perm	Perm	NA		
Protected Phases	7	4	8			6	2	3
Permitted Phases				8	6			
Detector Phase	7	4	8	8	6	6		
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	30.5	30.5	30.5	14.6	14.6	14.6	9.6
Total Split (s)	10.0	94.4	94.0	94.0	16.0	16.0	16.0	9.6
Total Split (%)	8.3%	78.7%	78.3%	78.3%	13.3%	13.3%	13%	8%
Yellow Time (s)	3.6	5.5	5.5	5.5	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		
Total Lost Time (s)	4.6	6.5	6.5	6.5		4.6		
Lead/Lag	Lead	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	None	Min	Min	Min	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 80.8
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Driveway & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	518	0	0	915	32	0	0	0	26	0	52
Future Volume (veh/h)	64	518	0	0	915	32	0	0	0	26	0	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	69	557	0	0	984	34	0	0	0	28	0	56
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	90	1383	0	2	1176	996	0	245	0	106	24	137
Arrive On Green	0.05	0.73	0.00	0.00	0.62	0.62	0.00	0.00	0.00	0.13	0.00	0.13
Sat Flow, veh/h	1810	1900	0	1810	1900	1610	0	1900	0	343	189	1066
Grp Volume(v), veh/h	69	557	0	0	984	34	0	0	0	84	0	0
Grp Sat Flow(s),veh/h/ln	1810	1900	0	1810	1900	1610	0	1900	0	1598	0	0
Q Serve(g_s), s	2.9	8.8	0.0	0.0	31.8	0.6	0.0	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	2.9	8.8	0.0	0.0	31.8	0.6	0.0	0.0	0.0	3.5	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	0.33		0.67
Lane Grp Cap(c), veh/h	90	1383	0	2	1176	996	0	245	0	268	0	0
V/C Ratio(X)	0.76	0.40	0.00	0.00	0.84	0.03	0.00	0.00	0.00	0.31	0.00	0.00
Avail Cap(c_a), veh/h	126	2153	0	117	2144	1817	0	279	0	296	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.4	4.1	0.0	0.0	11.7	5.8	0.0	0.0	0.0	31.0	0.0	0.0
Incr Delay (d2), s/veh	9.9	0.3	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.6	0.0	0.0	9.3	0.2	0.0	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.3	4.3	0.0	0.0	14.0	5.8	0.0	0.0	0.0	31.6	0.0	0.0
LnGrp LOS	D	A	A	A	B	A	A	A	A	C	A	A
Approach Vol, veh/h		626			1018			0			84	
Approach Delay, s/veh		9.0			13.8			0.0			31.6	
Approach LOS		A			B						C	

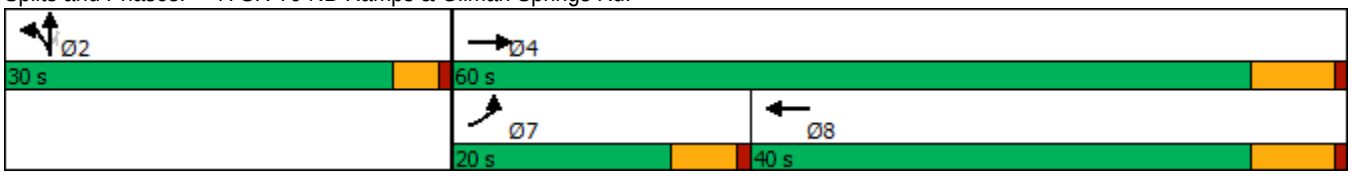
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.6	0.0	63.0		14.6	8.5	54.5				
Change Period (Y+Rc), s		4.6	4.6	6.5		4.6	4.6	6.5				
Max Green Setting (Gmax), s		11.4	5.0	87.9		11.4	5.4	87.5				
Max Q Clear Time (g_c+I1), s		0.0	0.0	10.8		5.5	4.9	33.8				
Green Ext Time (p_c), s		0.0	0.0	5.3		0.2	0.0	14.2				

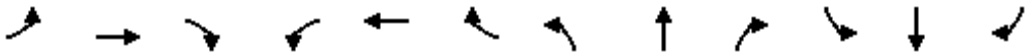
Intersection Summary												
HCM 6th Ctrl Delay			12.9									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Configurations					
Traffic Volume (vph)	37	349	500	2	8
Future Volume (vph)	37	349	500	2	8
Turn Type	Prot	NA	NA	NA	Perm
Protected Phases	7	4	8	2	
Permitted Phases					2
Detector Phase	7	4	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.4	34.5	32.5	9.0	9.0
Total Split (s)	20.0	60.0	40.0	30.0	30.0
Total Split (%)	22.2%	66.7%	44.4%	33.3%	33.3%
Yellow Time (s)	4.4	5.5	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.5	6.5	4.0	4.0
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 66.8
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 7: SR-79 NB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	349	0	0	500	261	418	2	8	0	0	0
Future Volume (veh/h)	37	349	0	0	500	261	418	2	8	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	39	367	0	0	526	275	440	2	8			
Peak Hour Factor	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			
Cap, veh/h	73	1819	0	0	850	443	568	3	507			
Arrive On Green	0.04	0.50	0.00	0.00	0.37	0.37	0.32	0.32	0.32			
Sat Flow, veh/h	1810	3705	0	0	2389	1196	1802	8	1610			
Grp Volume(v), veh/h	39	367	0	0	414	387	442	0	8			
Grp Sat Flow(s),veh/h/ln	1810	1805	0	0	1805	1685	1810	0	1610			
Q Serve(g_s), s	1.2	3.3	0.0	0.0	10.9	10.9	12.8	0.0	0.2			
Cycle Q Clear(g_c), s	1.2	3.3	0.0	0.0	10.9	10.9	12.8	0.0	0.2			
Prop In Lane	1.00		0.00	0.00		0.71	1.00		1.00			
Lane Grp Cap(c), veh/h	73	1819	0	0	669	624	570	0	507			
V/C Ratio(X)	0.54	0.20	0.00	0.00	0.62	0.62	0.77	0.00	0.02			
Avail Cap(c_a), veh/h	455	3329	0	0	1042	973	811	0	722			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	27.3	7.9	0.0	0.0	14.9	14.9	18.0	0.0	13.7			
Incr Delay (d2), s/veh	12.5	0.1	0.0	0.0	2.0	2.2	5.3	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.7	0.8	0.0	0.0	3.9	3.7	5.3	0.0	0.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.8	8.1	0.0	0.0	16.9	17.1	23.3	0.0	13.7			
LnGrp LOS	D	A	A	A	B	B	C	A	B			
Approach Vol, veh/h		406			801			450				
Approach Delay, s/veh		11.1			17.0			23.1				
Approach LOS		B			B			C				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		22.3		35.7			7.7	28.0				
Change Period (Y+Rc), s		4.0		6.5			5.4	6.5				
Max Green Setting (Gmax), s		26.0		53.5			14.6	33.5				
Max Q Clear Time (g_c+I1), s		14.8		5.3			3.2	12.9				
Green Ext Time (p_c), s		3.5		4.5			0.1	8.6				
Intersection Summary												
HCM 6th Ctrl Delay			17.2									
HCM 6th LOS			B									

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	1086	70	17	615	44
Future Volume (vph)	1086	70	17	615	44
Turn Type	NA	Perm	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		4			
Detector Phase	4	4	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	35.5	35.5	9.6	24.5	24.5
Total Split (s)	85.0	85.0	9.6	94.6	25.4
Total Split (%)	70.8%	70.8%	8.0%	78.8%	21.2%
Yellow Time (s)	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 86.7
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Bridge St. & Gilman Springs Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1086	70	17	615	44	18
Future Volume (veh/h)	1086	70	17	615	44	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1131	0	18	641	46	19
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1282		36	1417	135	56
Arrive On Green	0.67	0.00	0.02	0.75	0.11	0.11
Sat Flow, veh/h	1900	1610	1810	1900	1219	503
Grp Volume(v), veh/h	1131	0	18	641	66	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1748	0
Q Serve(g_s), s	43.3	0.0	0.9	11.7	3.2	0.0
Cycle Q Clear(g_c), s	43.3	0.0	0.9	11.7	3.2	0.0
Prop In Lane		1.00	1.00		0.70	0.29
Lane Grp Cap(c), veh/h	1282		36	1417	193	0
V/C Ratio(X)	0.88		0.49	0.45	0.34	0.00
Avail Cap(c_a), veh/h	1649		100	1851	365	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.8	0.0	43.9	4.4	37.2	0.0
Incr Delay (d2), s/veh	5.4	0.0	3.8	0.3	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	0.0	0.4	2.4	1.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.2	0.0	47.7	4.7	38.2	0.0
LnGrp LOS	B		D	A	D	A
Approach Vol, veh/h	1131	A		659	66	
Approach Delay, s/veh	17.2			5.9	38.2	
Approach LOS	B			A	D	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		16.5	6.4	67.5		73.9
Change Period (Y+Rc), s		6.5	4.6	6.5		6.5
Max Green Setting (Gmax), s		18.9	5.0	78.5		88.1
Max Q Clear Time (g_c+I1), s		5.2	2.9	45.3		13.7
Green Ext Time (p_c), s		0.1	0.0	15.7		6.5

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

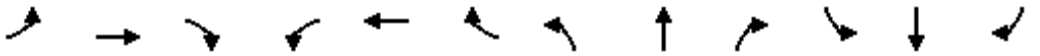
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBT	Ø2	Ø3
Lane Configurations								
Traffic Volume (vph)	44	1059	585	21	23	0		
Future Volume (vph)	44	1059	585	21	23	0		
Turn Type	Prot	NA	NA	Perm	Perm	NA		
Protected Phases	7	4	8			6	2	3
Permitted Phases				8	6			
Detector Phase	7	4	8	8	6	6		
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	30.5	30.5	30.5	14.6	14.6	14.6	9.6
Total Split (s)	9.6	95.0	95.0	95.0	15.4	15.4	15.4	9.6
Total Split (%)	8.0%	79.2%	79.2%	79.2%	12.8%	12.8%	13%	8%
Yellow Time (s)	3.6	5.5	5.5	5.5	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		
Total Lost Time (s)	4.6	6.5	6.5	6.5		4.6		
Lead/Lag	Lead	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	None	Min	Min	Min	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 72.3
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Driveway & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	1059	1	0	585	21	0	0	0	23	0	48
Future Volume (veh/h)	44	1059	1	0	585	21	0	0	0	23	0	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	47	1139	1	0	629	23	0	0	0	25	0	52
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	76	1360	1	2	1164	987	0	255	0	108	26	145
Arrive On Green	0.04	0.72	0.72	0.00	0.61	0.61	0.00	0.00	0.00	0.13	0.00	0.13
Sat Flow, veh/h	1810	1898	2	1810	1900	1610	0	1900	0	323	197	1082
Grp Volume(v), veh/h	47	0	1140	0	629	23	0	0	0	77	0	0
Grp Sat Flow(s),veh/h/ln	1810	0	1900	1810	1900	1610	0	1900	0	1602	0	0
Q Serve(g_s), s	1.9	0.0	31.7	0.0	14.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.9	0.0	31.7	0.0	14.3	0.4	0.0	0.0	0.0	3.1	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	0.32		0.68
Lane Grp Cap(c), veh/h	76	0	1361	2	1164	987	0	255	0	280	0	0
V/C Ratio(X)	0.62	0.00	0.84	0.00	0.54	0.02	0.00	0.00	0.00	0.28	0.00	0.00
Avail Cap(c_a), veh/h	122	0	2260	122	2261	1916	0	276	0	296	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.1	0.0	7.5	0.0	8.3	5.7	0.0	0.0	0.0	29.2	0.0	0.0
Incr Delay (d2), s/veh	3.1	0.0	2.1	0.0	0.6	0.0	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	6.0	0.0	3.9	0.1	0.0	0.0	0.0	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.1	0.0	9.6	0.0	8.9	5.7	0.0	0.0	0.0	29.7	0.0	0.0
LnGrp LOS	D	A	A	A	A	A	A	A	A	C	A	A
Approach Vol, veh/h		1187			652			0			77	
Approach Delay, s/veh		10.7			8.8			0.0			29.7	
Approach LOS		B			A						C	

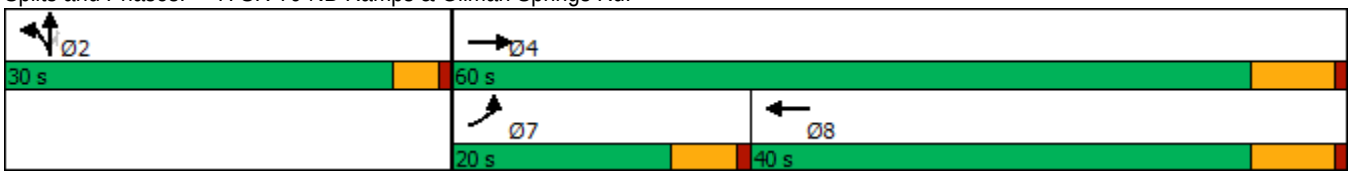
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.6	0.0	59.8		14.6	7.7	52.1				
Change Period (Y+Rc), s		4.6	4.6	6.5		4.6	4.6	6.5				
Max Green Setting (Gmax), s		10.8	5.0	88.5		10.8	5.0	88.5				
Max Q Clear Time (g_c+I1), s		0.0	0.0	33.7		5.1	3.9	16.3				
Green Ext Time (p_c), s		0.0	0.0	19.6		0.1	0.0	6.5				

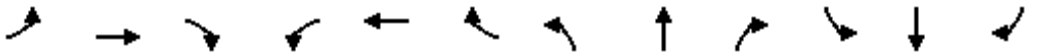
Intersection Summary												
HCM 6th Ctrl Delay			10.8									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Configurations					
Traffic Volume (vph)	34	774	323	1	7
Future Volume (vph)	34	774	323	1	7
Turn Type	Prot	NA	NA	NA	Perm
Protected Phases	7	4	8	2	
Permitted Phases					2
Detector Phase	7	4	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	4.5	4.5
Minimum Split (s)	10.4	34.5	32.5	9.0	9.0
Total Split (s)	20.0	60.0	40.0	30.0	30.0
Total Split (%)	22.2%	66.7%	44.4%	33.3%	33.3%
Yellow Time (s)	4.4	5.5	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.5	6.5	4.0	4.0
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	Min	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 51.4
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 7: SR-79 NB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	774	0	0	323	219	243	1	7	0	0	0
Future Volume (veh/h)	34	774	0	0	323	219	243	1	7	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	37	832	0	0	347	235	261	1	8			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	76	1850	0	0	710	472	427	2	382			
Arrive On Green	0.04	0.51	0.00	0.00	0.34	0.34	0.24	0.24	0.24			
Sat Flow, veh/h	1810	3705	0	0	2171	1380	1803	7	1610			
Grp Volume(v), veh/h	37	832	0	0	301	281	262	0	8			
Grp Sat Flow(s),veh/h/ln	1810	1805	0	0	1805	1652	1810	0	1610			
Q Serve(g_s), s	0.8	6.1	0.0	0.0	5.5	5.7	5.4	0.0	0.2			
Cycle Q Clear(g_c), s	0.8	6.1	0.0	0.0	5.5	5.7	5.4	0.0	0.2			
Prop In Lane	1.00		0.00	0.00		0.84	1.00		1.00			
Lane Grp Cap(c), veh/h	76	1850	0	0	617	565	429	0	382			
V/C Ratio(X)	0.49	0.45	0.00	0.00	0.49	0.50	0.61	0.00	0.02			
Avail Cap(c_a), veh/h	630	4609	0	0	1443	1320	1123	0	999			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.6	6.5	0.0	0.0	10.9	10.9	14.3	0.0	12.3			
Incr Delay (d2), s/veh	10.1	0.4	0.0	0.0	1.3	1.5	3.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.5	1.0	0.0	0.0	1.7	1.6	2.0	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	6.8	0.0	0.0	12.2	12.4	17.3	0.0	12.3			
LnGrp LOS	C	A	A	A	B	B	B	A	B			
Approach Vol, veh/h		869			582			270				
Approach Delay, s/veh		7.8			12.3			17.1				
Approach LOS		A			B			B				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		13.9		28.0			7.1	20.8				
Change Period (Y+Rc), s		4.0		6.5			5.4	6.5				
Max Green Setting (Gmax), s		26.0		53.5			14.6	33.5				
Max Q Clear Time (g_c+I1), s		7.4		8.1			2.8	7.7				
Green Ext Time (p_c), s		2.5		12.3			0.1	6.7				
Intersection Summary												
HCM 6th Ctrl Delay			10.8									
HCM 6th LOS			B									

APPENDIX 5.7:

E+P CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	574	5	961	156	37
v/c Ratio	0.28	0.01	0.43	0.31	0.07
Control Delay	4.7	20.8	7.4	17.9	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.7	20.8	7.4	17.9	0.3
Queue Length 50th (ft)	15	1	75	33	0
Queue Length 95th (ft)	67	10	137	90	0
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2578	671	3524	1143	1059
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.22	0.01	0.27	0.14	0.03

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	39	367	801	442	8
v/c Ratio	0.15	0.21	0.60	0.71	0.01
Control Delay	33.4	9.6	17.8	30.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	33.4	9.6	17.8	30.4	0.0
Queue Length 50th (ft)	17	45	142	180	0
Queue Length 95th (ft)	48	66	208	#378	0
Internal Link Dist (ft)		777	1139	1422	
Turn Bay Length (ft)	215				240
Base Capacity (vph)	434	2864	1943	775	753
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.09	0.13	0.41	0.57	0.01

Intersection Summary

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



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1150	2	600	297	45
v/c Ratio	0.65	0.01	0.33	0.55	0.08
Control Delay	11.1	30.0	9.0	23.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	11.1	30.0	9.0	23.4	0.3
Queue Length 50th (ft)	85	1	55	83	0
Queue Length 95th (ft)	269	7	111	204	0
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2260	479	3202	857	821
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.51	0.00	0.19	0.35	0.05

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	37	832	582	262	8
v/c Ratio	0.11	0.48	0.40	0.48	0.01
Control Delay	24.4	10.0	10.0	20.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	24.4	10.0	10.0	20.0	0.0
Queue Length 50th (ft)	8	77	30	54	0
Queue Length 95th (ft)	40	150	111	159	0
Internal Link Dist (ft)		777	1139	1422	
Turn Bay Length (ft)	215				240
Base Capacity (vph)	553	3316	2446	988	930
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.07	0.25	0.24	0.27	0.01

Intersection Summary

APPENDIX 6.1:

EAP (2018) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	83	169	899	510	1
Future Vol, veh/h	0	83	169	899	510	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	86	174	927	526	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1802	527	527	0	-	0
Stage 1	527	-	-	-	-	-
Stage 2	1275	-	-	-	-	-
Critical Hdwy	6.4	6	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	89	572	1050	-	-	-
Stage 1	596	-	-	-	-	-
Stage 2	265	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	74	572	1050	-	-	-
Mov Cap-2 Maneuver	86	-	-	-	-	-
Stage 1	497	-	-	-	-	-
Stage 2	265	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1050	-	572	-	-
HCM Lane V/C Ratio	0.166	-	0.15	-	-
HCM Control Delay (s)	9.1	-	12.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.6	-	0.5	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	591	1067	2	0	2
Future Vol, veh/h	1	591	1067	2	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	635	1147	2	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1149	0	-	0	1785	1148
Stage 1	-	-	-	-	1148	-
Stage 2	-	-	-	-	637	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	615	-	-	-	91	244
Stage 1	-	-	-	-	305	-
Stage 2	-	-	-	-	531	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	615	-	-	-	91	244
Mov Cap-2 Maneuver	-	-	-	-	91	-
Stage 1	-	-	-	-	304	-
Stage 2	-	-	-	-	531	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	19.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	615	-	-	-	244
HCM Lane V/C Ratio	0.002	-	-	-	0.009
HCM Control Delay (s)	10.9	-	-	-	19.9
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	15.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	553	38	14	971	98	39
Future Vol, veh/h	553	38	14	971	98	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	175	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	608	42	15	1067	108	43

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	608	0	1705	608
Stage 1	-	-	-	-	608	-
Stage 2	-	-	-	-	1097	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	980	-	~ 102	499
Stage 1	-	-	-	-	547	-
Stage 2	-	-	-	-	323	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	980	-	~ 100	499
Mov Cap-2 Maneuver	-	-	-	-	~ 100	-
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	323	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	197.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	129	-	-	980	-
HCM Lane V/C Ratio	1.167	-	-	0.016	-
HCM Control Delay (s)	197.3	-	-	8.7	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	9	-	-	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	528	0	0	933	32	0	0	0	26	0	52
Future Vol, veh/h	64	528	0	0	933	32	0	0	0	26	0	52
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	155	-	315	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	69	568	0	0	1003	34	0	0	0	28	0	56

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1037	0	0	568	0	0	1754	1743	568	1709	1709	1003
Stage 1	-	-	-	-	-	-	706	706	-	1003	1003	-
Stage 2	-	-	-	-	-	-	1048	1037	-	706	706	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	678	-	-	1014	-	-	67	88	526	73	92	297
Stage 1	-	-	-	-	-	-	430	442	-	294	322	-
Stage 2	-	-	-	-	-	-	278	311	-	430	442	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	678	-	-	1014	-	-	50	79	526	67	83	297
Mov Cap-2 Maneuver	-	-	-	-	-	-	50	79	-	67	83	-
Stage 1	-	-	-	-	-	-	386	397	-	264	322	-
Stage 2	-	-	-	-	-	-	226	311	-	386	397	-

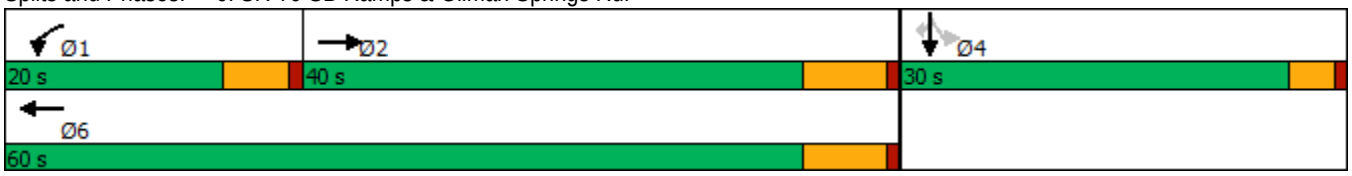
Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0	0	64.1
HCM LOS			A	F

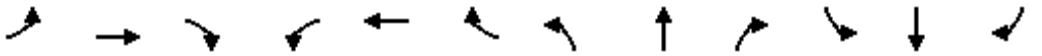
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	678	-	-	1014	-	-	139
HCM Lane V/C Ratio	-	0.102	-	-	-	-	-	0.603
HCM Control Delay (s)	0	10.9	-	-	0	-	-	64.1
HCM Lane LOS	A	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	0.3	-	-	0	-	-	3.1

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	245	5	931	2	35
Future Volume (vph)	245	5	931	2	35
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.5	10.4	34.5	9.0	9.0
Total Split (s)	40.0	20.0	60.0	30.0	30.0
Total Split (%)	44.4%	22.2%	66.7%	33.3%	33.3%
Yellow Time (s)	5.5	4.4	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	5.4	6.5	4.0	4.0
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 44.4
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 6: SR-79 SB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	245	310	5	931	0	0	0	0	148	2	35
Future Volume (veh/h)	0	245	310	5	931	0	0	0	0	148	2	35
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	258	257	5	980	0				156	2	31
Peak Hour Factor	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
Cap, veh/h	0	804	717	12	2119	0				270	3	243
Arrive On Green	0.00	0.45	0.45	0.01	0.59	0.00				0.15	0.15	0.15
Sat Flow, veh/h	0	1900	1610	1810	3705	0				1788	23	1610
Grp Volume(v), veh/h	0	258	257	5	980	0				158	0	31
Grp Sat Flow(s),veh/h/ln	0	1805	1610	1810	1805	0				1811	0	1610
Q Serve(g_s), s	0.0	3.7	4.2	0.1	6.2	0.0				3.3	0.0	0.7
Cycle Q Clear(g_c), s	0.0	3.7	4.2	0.1	6.2	0.0				3.3	0.0	0.7
Prop In Lane	0.00		1.00	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	804	717	12	2119	0				273	0	243
V/C Ratio(X)	0.00	0.32	0.36	0.41	0.46	0.00				0.58	0.00	0.13
Avail Cap(c_a), veh/h	0	1509	1346	659	4820	0				1175	0	1045
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.2	7.3	19.8	4.7	0.0				15.8	0.0	14.7
Incr Delay (d2), s/veh	0.0	0.5	0.6	40.9	0.3	0.0				4.1	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.8	0.8	0.2	0.5	0.0				1.4	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	7.7	8.0	60.7	5.0	0.0				19.9	0.0	15.2
LnGrp LOS	A	A	A	E	A	A				B	A	B
Approach Vol, veh/h		515			985						189	
Approach Delay, s/veh		7.8			5.3						19.1	
Approach LOS		A			A						B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	5.7	24.4		10.0		30.0
Change Period (Y+Rc), s	5.4	6.5		4.0		6.5
Max Green Setting (Gmax), s	14.6	33.5		26.0		53.5
Max Q Clear Time (g_c+I1), s	2.1	6.2		5.3		8.2
Green Ext Time (p_c), s	0.0	5.7		1.6		15.4

Intersection Summary		
HCM 6th Ctrl Delay		7.6
HCM 6th LOS		A

Intersection	
Int Delay, s/veh	48.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	355	0	0	509	266	426	2	8	0	0	0
Future Vol, veh/h	37	355	0	0	509	266	426	2	8	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	39	374	0	0	536	280	448	2	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	816	0	-	-	-	0	720	1268	187
Stage 1	-	-	-	-	-	-	452	452	-
Stage 2	-	-	-	-	-	-	268	816	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	820	-	0	0	-	-	~ 367	170	830
Stage 1	-	-	0	0	-	-	614	574	-
Stage 2	-	-	0	0	-	-	759	393	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	820	-	-	-	-	-	~ 349	0	830
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 349	0	-
Stage 1	-	-	-	-	-	-	585	0	-
Stage 2	-	-	-	-	-	-	759	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.9	0	178.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	349	830	820	-	-	-
HCM Lane V/C Ratio	1.291	0.01	0.047	-	-	-
HCM Control Delay (s)	182.1	9.4	9.6	-	-	-
HCM Lane LOS	F	A	A	-	-	-
HCM 95th %tile Q(veh)	20.8	0	0.1	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	163	106	566	1016	5
Future Vol, veh/h	1	163	106	566	1016	5
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	-	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	170	110	590	1058	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1871	1061	1063	0	-	0
Stage 1	1061	-	-	-	-	-
Stage 2	810	-	-	-	-	-
Critical Hdwy	6.4	6	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	80	291	663	-	-	-
Stage 1	336	-	-	-	-	-
Stage 2	441	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	67	291	663	-	-	-
Mov Cap-2 Maneuver	212	-	-	-	-	-
Stage 1	280	-	-	-	-	-
Stage 2	441	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	33.8	1.8	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	663	-	290	-	-
HCM Lane V/C Ratio	0.167	-	0.589	-	-
HCM Control Delay (s)	11.5	-	33.8	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.6	-	3.5	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1176	669	2	2	2
Future Vol, veh/h	3	1176	669	2	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	1225	697	2	2	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	699	0	-	0	1929	698
Stage 1	-	-	-	-	698	-
Stage 2	-	-	-	-	1231	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	907	-	-	-	74	444
Stage 1	-	-	-	-	497	-
Stage 2	-	-	-	-	278	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	907	-	-	-	74	444
Mov Cap-2 Maneuver	-	-	-	-	74	-
Stage 1	-	-	-	-	496	-
Stage 2	-	-	-	-	278	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	34.3
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	907	-	-	-	127
HCM Lane V/C Ratio	0.003	-	-	-	0.033
HCM Control Delay (s)	9	-	-	-	34.3
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	3.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1107	71	17	626	45	18
Future Vol, veh/h	1107	71	17	626	45	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	175	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1153	74	18	652	47	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1153	0	1841	1153
Stage 1	-	-	-	-	1153	-
Stage 2	-	-	-	-	688	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	613	-	84	243
Stage 1	-	-	-	-	303	-
Stage 2	-	-	-	-	503	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	613	-	82	243
Mov Cap-2 Maneuver	-	-	-	-	82	-
Stage 1	-	-	-	-	294	-
Stage 2	-	-	-	-	503	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	90.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	101	-	-	613	-
HCM Lane V/C Ratio	0.65	-	-	0.029	-
HCM Control Delay (s)	90.8	-	-	11	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	3.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	1080	1	0	596	21	0	0	0	23	0	48
Future Vol, veh/h	44	1080	1	0	596	21	0	0	0	23	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	155	-	315	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	47	1161	1	0	641	23	0	0	0	25	0	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	664	0	0	1162	0	0	1935	1920	1162	1897	1897	641
Stage 1	-	-	-	-	-	-	1256	1256	-	641	641	-
Stage 2	-	-	-	-	-	-	679	664	-	1256	1256	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	935	-	-	608	-	-	50	68	240	53	70	478
Stage 1	-	-	-	-	-	-	212	245	-	466	473	-
Stage 2	-	-	-	-	-	-	445	461	-	212	245	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	935	-	-	608	-	-	43	65	240	51	67	478
Mov Cap-2 Maneuver	-	-	-	-	-	-	43	65	-	51	67	-
Stage 1	-	-	-	-	-	-	201	233	-	443	473	-
Stage 2	-	-	-	-	-	-	397	461	-	201	233	-

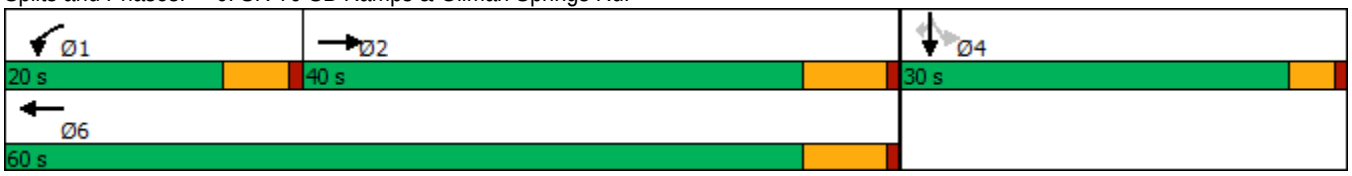
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0	0	67
HCM LOS			A	F

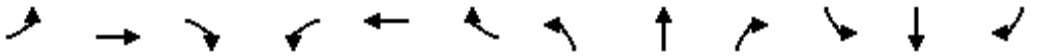
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	935	-	-	608	-	-	129
HCM Lane V/C Ratio	-	0.051	-	-	-	-	-	0.592
HCM Control Delay (s)	0	9.1	-	-	0	-	-	67
HCM Lane LOS	A	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	0.2	-	-	0	-	-	3

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	541	2	575	3	42
Future Volume (vph)	541	2	575	3	42
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.5	10.4	34.5	9.0	9.0
Total Split (s)	40.0	20.0	60.0	30.0	30.0
Total Split (%)	44.4%	22.2%	66.7%	33.3%	33.3%
Yellow Time (s)	5.5	4.4	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	5.4	6.5	4.0	4.0
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 59.3
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 6: SR-79 SB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	541	561	2	575	0	0	0	0	282	3	42
Future Volume (veh/h)	0	541	561	2	575	0	0	0	0	282	3	42
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	576	451	2	612	0				300	3	33
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	0	887	694	5	2033	0				434	4	390
Arrive On Green	0.00	0.46	0.46	0.00	0.56	0.00				0.24	0.24	0.24
Sat Flow, veh/h	0	2021	1508	1810	3705	0				1792	18	1610
Grp Volume(v), veh/h	0	540	487	2	612	0				303	0	33
Grp Sat Flow(s),veh/h/ln	0	1805	1629	1810	1805	0				1810	0	1610
Q Serve(g_s), s	0.0	12.4	12.4	0.1	4.8	0.0				8.2	0.0	0.9
Cycle Q Clear(g_c), s	0.0	12.4	12.4	0.1	4.8	0.0				8.2	0.0	0.9
Prop In Lane	0.00		0.93	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	831	750	5	2033	0				438	0	390
V/C Ratio(X)	0.00	0.65	0.65	0.40	0.30	0.00				0.69	0.00	0.08
Avail Cap(c_a), veh/h	0	1121	1012	490	3581	0				873	0	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.2	11.2	26.8	6.2	0.0				18.6	0.0	15.8
Incr Delay (d2), s/veh	0.0	1.8	2.0	86.2	0.2	0.0				4.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.5	3.2	0.1	1.0	0.0				3.4	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.0	13.2	113.0	6.4	0.0				22.7	0.0	16.0
LnGrp LOS	A	B	B	F	A	A				C	A	B
Approach Vol, veh/h		1027			614						336	
Approach Delay, s/veh		13.1			6.7						22.1	
Approach LOS		B			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	5.5	31.3		17.1		36.9
Change Period (Y+Rc), s	5.4	6.5		4.0		6.5
Max Green Setting (Gmax), s	14.6	33.5		26.0		53.5
Max Q Clear Time (g_c+I1), s	2.1	14.4		10.2		6.8
Green Ext Time (p_c), s	0.0	10.4		2.9		8.3

Intersection Summary		
HCM 6th Ctrl Delay		12.7
HCM 6th LOS		B

Intersection	
Int Delay, s/veh	34.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	789	0	0	329	223	248	1	7	0	0	0
Future Vol, veh/h	34	789	0	0	329	223	248	1	7	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	37	848	0	0	354	240	267	1	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	594	0	-	-	-	0	1099	1516	424
Stage 1	-	-	-	-	-	-	922	922	-
Stage 2	-	-	-	-	-	-	177	594	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	992	-	0	0	-	-	~ 210	121	584
Stage 1	-	-	0	0	-	-	353	352	-
Stage 2	-	-	0	0	-	-	842	496	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	992	-	-	-	-	-	~ 202	0	584
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 202	0	-
Stage 1	-	-	-	-	-	-	340	0	-
Stage 2	-	-	-	-	-	-	842	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	216.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	202	584	992	-	-	-
HCM Lane V/C Ratio	1.325	0.013	0.037	-	-	-
HCM Control Delay (s)	222.5	11.2	8.8	-	-	-
HCM Lane LOS	F	B	A	-	-	-
HCM 95th %tile Q(veh)	14.9	0	0.1	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX 6.2:

EAP (2018) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

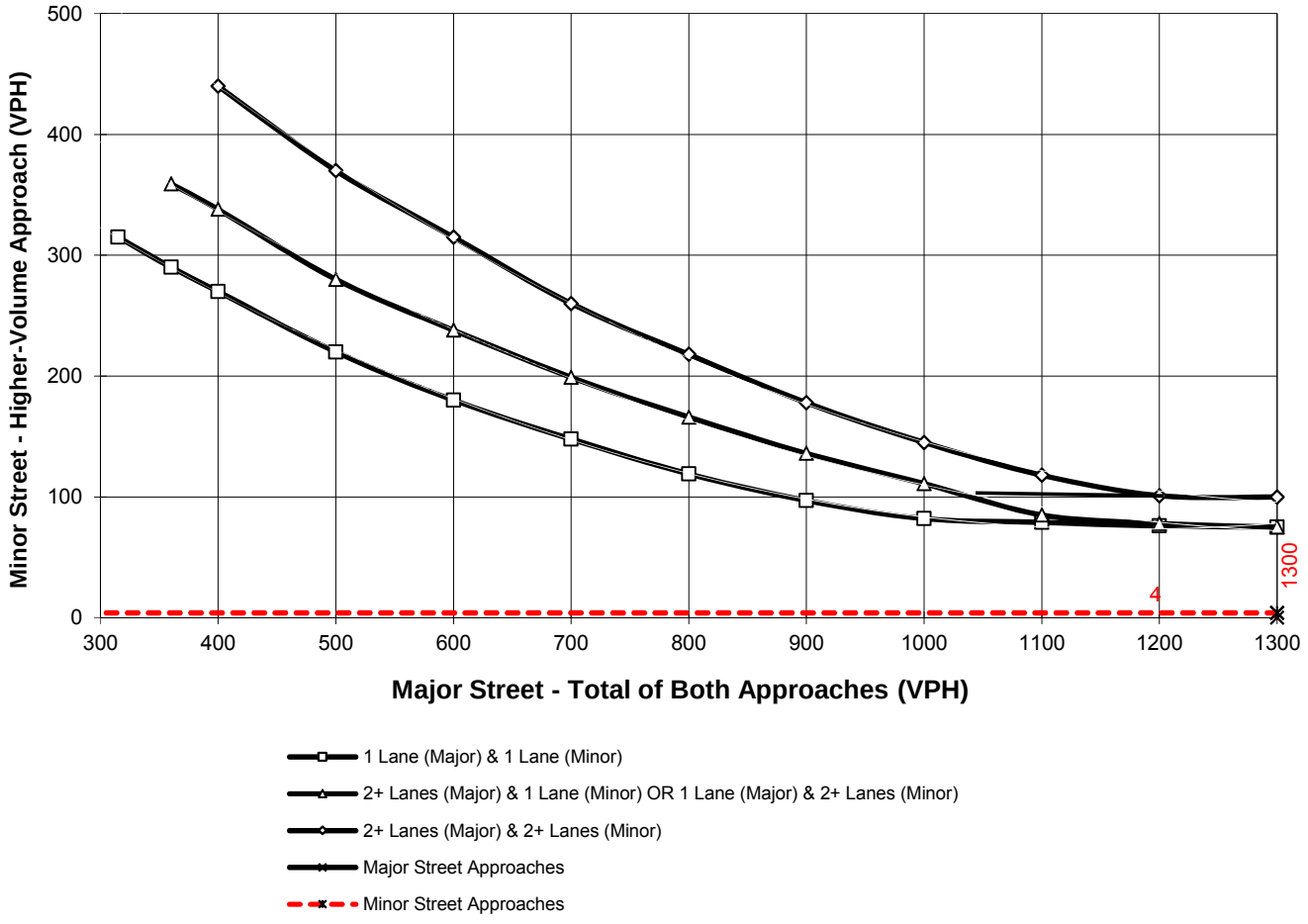
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP 2018 Conditions - Weekday PM Peak Hour**

Major Street Name = **Gilman Springs Rd.** Total of Both Approaches (VPH) = **1850**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Jack Rabbit Trail** High Volume Approach (VPH) = **4**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

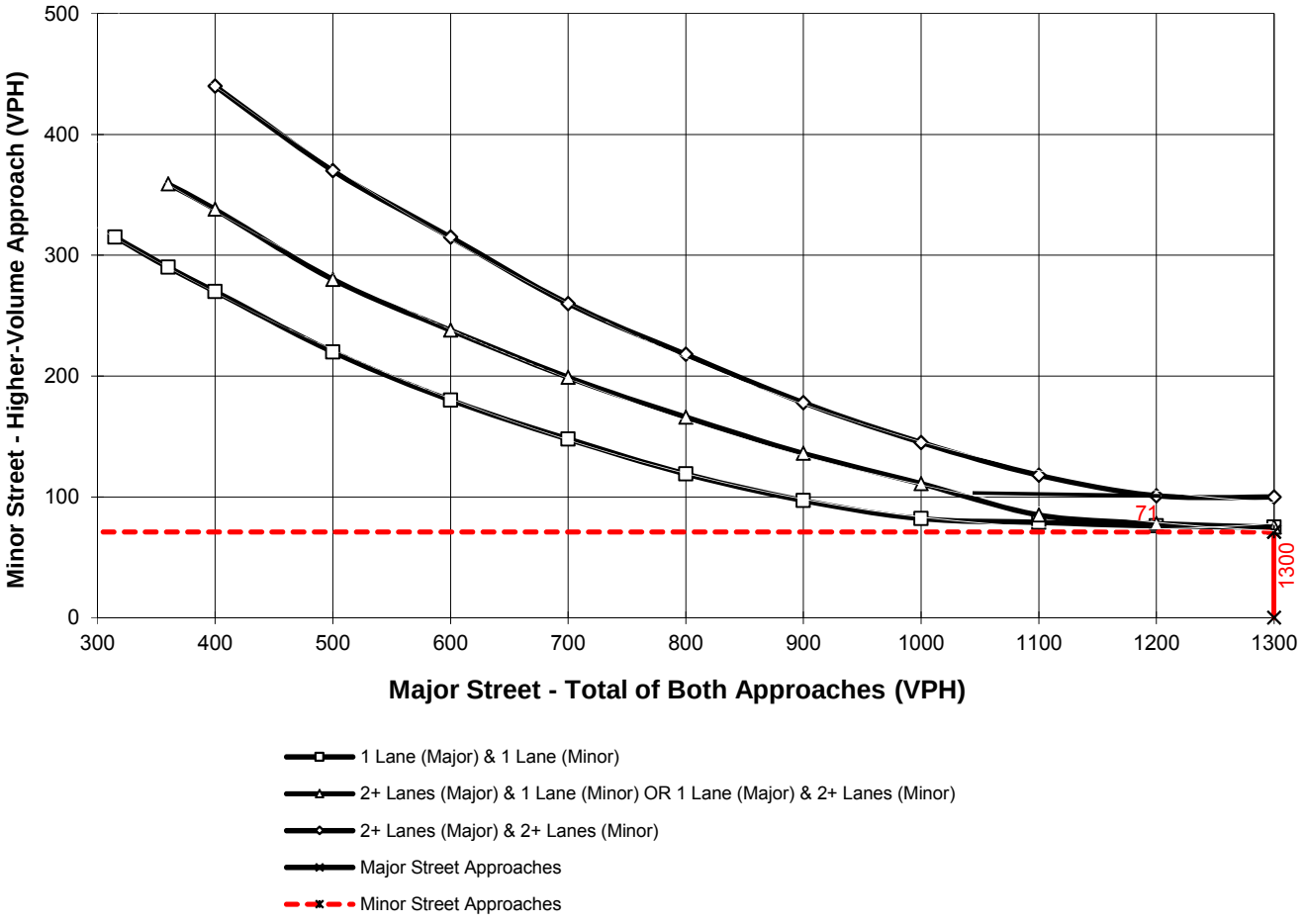
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP 2018 Conditions - Weekday PM Peak Hour**

Major Street Name = **Gilman Springs Rd.** Total of Both Approaches (VPH) = **1742**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Driveway** High Volume Approach (VPH) = **71**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 6.3:

EAP (2018) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	584	5	980	158	37
v/c Ratio	0.28	0.01	0.43	0.31	0.07
Control Delay	4.7	21.2	7.4	18.1	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.7	21.2	7.4	18.1	0.3
Queue Length 50th (ft)	16	1	78	34	0
Queue Length 95th (ft)	68	10	141	92	0
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2563	666	3516	1136	1053
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.23	0.01	0.28	0.14	0.04

Intersection Summary

Intersection	
Int Delay, s/veh	48.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	355	0	0	509	266	426	2	8	0	0	0
Future Vol, veh/h	37	355	0	0	509	266	426	2	8	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	39	374	0	0	536	280	448	2	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	816	0	-	-	-	0	720	1268	187
Stage 1	-	-	-	-	-	-	452	452	-
Stage 2	-	-	-	-	-	-	268	816	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	820	-	0	0	-	-	~ 367	170	830
Stage 1	-	-	0	0	-	-	614	574	-
Stage 2	-	-	0	0	-	-	759	393	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	820	-	-	-	-	-	~ 349	0	830
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 349	0	-
Stage 1	-	-	-	-	-	-	585	0	-
Stage 2	-	-	-	-	-	-	759	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.9	0	178.9
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	349	830	820	-	-	-
HCM Lane V/C Ratio	1.291	0.01	0.047	-	-	-
HCM Control Delay (s)	182.1	9.4	9.6	-	-	-
HCM Lane LOS	F	A	A	-	-	-
HCM 95th %tile Q(veh)	20.8	0	0.1	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1173	2	612	303	45
v/c Ratio	0.66	0.01	0.33	0.56	0.08
Control Delay	11.3	30.0	9.0	24.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	11.3	30.0	9.0	24.0	0.3
Queue Length 50th (ft)	90	1	57	89	0
Queue Length 95th (ft)	278	7	113	209	0
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2130	470	3177	841	808
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.55	0.00	0.19	0.36	0.06

Intersection Summary

Intersection	
Int Delay, s/veh	34.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	789	0	0	329	223	248	1	7	0	0	0
Future Vol, veh/h	34	789	0	0	329	223	248	1	7	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	37	848	0	0	354	240	267	1	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	594	0	-	-	-	0	1099	1516	424
Stage 1	-	-	-	-	-	-	922	922	-
Stage 2	-	-	-	-	-	-	177	594	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	992	-	0	0	-	-	~ 210	121	584
Stage 1	-	-	0	0	-	-	353	352	-
Stage 2	-	-	0	0	-	-	842	496	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	992	-	-	-	-	-	~ 202	0	584
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 202	0	-
Stage 1	-	-	-	-	-	-	340	0	-
Stage 2	-	-	-	-	-	-	842	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.4	0	216.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	202	584	992	-	-	-
HCM Lane V/C Ratio	1.325	0.013	0.037	-	-	-
HCM Control Delay (s)	222.5	11.2	8.8	-	-	-
HCM Lane LOS	F	B	A	-	-	-
HCM 95th %tile Q(veh)	14.9	0	0.1	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX 6.4:

EAP (2018) CONDITIONS BASIC FREEWAY SEGMENT ANALYSIS WORKSHEETS

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	4020	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2230
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.93
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	57.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	38.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Information

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Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3198	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1756
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.73
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	66.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	26.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Information

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Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3623	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2009
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.84
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	62.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	32.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3198	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1756
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.73
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	66.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	26.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Information

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Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1383	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	767
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	11.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Information

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Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1510	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	838
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	12.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1125	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	624
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.26
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	8.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1265	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	694
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	4144	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2275
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.95
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	56.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	40.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3644	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2000
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.83
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	62.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	31.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	4614	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2533
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.06
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3644	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2000
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.83
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	62.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	31.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1772	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	982
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.41
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	14.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	2027	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1113
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.46
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	15.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1240	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	680
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.28
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1246	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	684
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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APPENDIX 6.5:

EAP (2018) CONDITIONS MERGE/DIVERGE QUEUING ANALYSIS WORKSHEETS

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3188	832
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.952
Flow Rate (v_i), pc/h	3500	950
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.93	0.45

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	37.9
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.628
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	52.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3500	Ramp Junction Speed (S), mi/h	52.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4450	Average Density (D), pc/mi/ln	42.5
Level of Service (LOS)	E		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	190
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3198	10
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	30.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.769
Flow Rate (v_i), pc/h	3511	14
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.73	0.01

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	32.7
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.299
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3511	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	28.5
Level of Service (LOS)	D		

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HCS7 Freeway Diverge Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3623	430
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	11.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.901
Flow Rate (v_i), pc/h	4018	519
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.84	0.25

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	37.0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.345
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4018	Ramp Junction Speed (S), mi/h	60.3
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	33.3
Level of Service (LOS)	E		

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HCS7 Freeway Merge Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

	Freeway	Ramp
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

	Freeway	Ramp
Demand Volume (V_i), veh/h	3193	5
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	60.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.625
Flow Rate (v_i), pc/h	3506	9
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.73	0.00

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	31.1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.425
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	58.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3506	Ramp Junction Speed (S), mi/h	58.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3515	Average Density (D), pc/mi/ln	30.2
Level of Service (LOS)	D		

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HCS7 Freeway Diverge Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	110
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1383	163
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	10.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.909
Flow Rate (v_i), pc/h	1534	195
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.32	0.09

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	16.5
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.316
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1534	Ramp Junction Speed (S), mi/h	61.2
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	12.5
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

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Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1220	290
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.917
Flow Rate (v_i), pc/h	1339	344
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.35	0.16

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	16.0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.306
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1339	Ramp Junction Speed (S), mi/h	61.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1683	Average Density (D), pc/mi/ln	13.7
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

	Freeway	Ramp
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

	Freeway	Ramp
Demand Volume (V_i), veh/h	839	285
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.943
Flow Rate (v_i), pc/h	921	329
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.26	0.16

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	12.6
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.299
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	921	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1250	Average Density (D), pc/mi/ln	10.1
Level of Service (LOS)	B		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	155
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1265	425
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.980
Flow Rate (v_i), pc/h	1389	471
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.29	0.22

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	14.8
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.340
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1389	Ramp Junction Speed (S), mi/h	60.5
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	11.5
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3638	506
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.935
Flow Rate (v_i), pc/h	3994	588
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.95	0.28

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	39.1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.675
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	51.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3994	Ramp Junction Speed (S), mi/h	51.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4582	Average Density (D), pc/mi/ln	44.8
Level of Service (LOS)	E		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	190
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3644	6
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	50.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.667
Flow Rate (v_i), pc/h	4001	10
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.83	0.00

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	37.0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.299
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4001	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	32.5
Level of Service (LOS)	E		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	4614	977
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	3.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.971
Flow Rate (v_i), pc/h	5066	1094
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	1.06	0.52

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	46.0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	58.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	5066	Ramp Junction Speed (S), mi/h	-
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

	Freeway	Ramp
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

	Freeway	Ramp
Demand Volume (V_i), veh/h	3637	7
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	42.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.704
Flow Rate (v_i), pc/h	3993	11
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.83	0.01

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	34.9
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.508
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	55.8
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3993	Ramp Junction Speed (S), mi/h	55.8
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4004	Average Density (D), pc/mi/ln	35.9
Level of Service (LOS)	D		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	110
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1772	303
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.943
Flow Rate (v_i), pc/h	1965	349
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.41	0.17

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	20.2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.329
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.8
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1965	Ramp Junction Speed (S), mi/h	60.8
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	16.2
Level of Service (LOS)	C		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

	Freeway	Ramp
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

	Freeway	Ramp
Demand Volume (V_i), veh/h	1469	558
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.980
Flow Rate (v_i), pc/h	1613	619
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.47	0.29

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	20.2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.321
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1613	Ramp Junction Speed (S), mi/h	61.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2232	Average Density (D), pc/mi/ln	18.3
Level of Service (LOS)	C		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

Adjustment Factors

	Freeway	Ramp
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

	Freeway	Ramp
Demand Volume (V_i), veh/h	999	242
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.962
Flow Rate (v_i), pc/h	1097	273
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.29	0.13

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	13.6
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.300
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1097	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1370	Average Density (D), pc/mi/ln	11.1
Level of Service (LOS)	B		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAP (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	155
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1246	248
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.962
Flow Rate (v_i), pc/h	1368	280
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.29	0.13

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	14.6
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.323
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1368	Ramp Junction Speed (S), mi/h	61.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	11.2
Level of Service (LOS)	B		

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APPENDIX 6.6:

EAP (2018) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	553	38	14	971	98
Future Volume (vph)	553	38	14	971	98
Turn Type	NA	Perm	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		4			
Detector Phase	4	4	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	35.5	35.5	9.6	24.5	24.5
Total Split (s)	84.0	84.0	10.0	94.0	26.0
Total Split (%)	70.0%	70.0%	8.3%	78.3%	21.7%
Yellow Time (s)	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 79.8
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Bridge St. & Gilman Springs Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	553	38	14	971	98	39
Future Volume (veh/h)	553	38	14	971	98	39
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	608	0	15	1067	108	43
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1130		33	1287	174	69
Arrive On Green	0.59	0.00	0.02	0.68	0.14	0.14
Sat Flow, veh/h	1900	1610	1810	1900	1243	495
Grp Volume(v), veh/h	608	0	15	1067	152	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1749	0
Q Serve(g_s), s	13.6	0.0	0.6	29.5	5.8	0.0
Cycle Q Clear(g_c), s	13.6	0.0	0.6	29.5	5.8	0.0
Prop In Lane		1.00	1.00		0.71	0.28
Lane Grp Cap(c), veh/h	1130		33	1287	245	0
V/C Ratio(X)	0.54		0.46	0.83	0.62	0.00
Avail Cap(c_a), veh/h	2065		137	2332	478	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.6	0.0	34.7	8.5	28.9	0.0
Incr Delay (d2), s/veh	0.6	0.0	3.7	2.0	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.3	6.6	2.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.2	0.0	38.4	10.5	31.4	0.0
LnGrp LOS	A		D	B	C	A
Approach Vol, veh/h	608	A		1082	152	
Approach Delay, s/veh	9.2			10.9	31.4	
Approach LOS	A			B	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		16.5	5.9	48.9		54.8
Change Period (Y+Rc), s		6.5	4.6	6.5		6.5
Max Green Setting (Gmax), s		19.5	5.4	77.5		87.5
Max Q Clear Time (g_c+I1), s		7.8	2.6	15.6		31.5
Green Ext Time (p_c), s		0.3	0.0	6.0		16.8

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

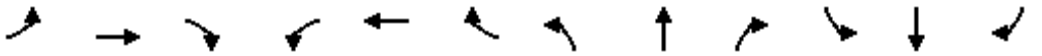
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBT	Ø2	Ø3
Lane Configurations								
Traffic Volume (vph)	64	528	933	32	26	0		
Future Volume (vph)	64	528	933	32	26	0		
Turn Type	Prot	NA	NA	Perm	Perm	NA		
Protected Phases	7	4	8			6	2	3
Permitted Phases				8	6			
Detector Phase	7	4	8	8	6	6		
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	30.5	30.5	30.5	14.6	14.6	14.6	9.6
Total Split (s)	10.0	94.4	94.0	94.0	16.0	16.0	16.0	9.6
Total Split (%)	8.3%	78.7%	78.3%	78.3%	13.3%	13.3%	13%	8%
Yellow Time (s)	3.6	5.5	5.5	5.5	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		
Total Lost Time (s)	4.6	6.5	6.5	6.5		4.6		
Lead/Lag	Lead	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	None	Min	Min	Min	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 82.9
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Driveway & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	528	0	0	933	32	0	0	0	26	0	52
Future Volume (veh/h)	64	528	0	0	933	32	0	0	0	26	0	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	69	568	0	0	1003	34	0	0	0	28	0	56
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	89	1395	0	2	1192	1010	0	239	0	104	23	134
Arrive On Green	0.05	0.73	0.00	0.00	0.63	0.63	0.00	0.00	0.00	0.13	0.00	0.13
Sat Flow, veh/h	1810	1900	0	1810	1900	1610	0	1900	0	346	186	1065
Grp Volume(v), veh/h	69	568	0	0	1003	34	0	0	0	84	0	0
Grp Sat Flow(s),veh/h/ln	1810	1900	0	1810	1900	1610	0	1900	0	1598	0	0
Q Serve(g_s), s	3.0	9.0	0.0	0.0	33.1	0.6	0.0	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	3.0	9.0	0.0	0.0	33.1	0.6	0.0	0.0	0.0	3.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	0.33		0.67
Lane Grp Cap(c), veh/h	89	1395	0	2	1192	1010	0	239	0	262	0	0
V/C Ratio(X)	0.77	0.41	0.00	0.00	0.84	0.03	0.00	0.00	0.00	0.32	0.00	0.00
Avail Cap(c_a), veh/h	123	2102	0	114	2092	1773	0	273	0	289	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	37.3	4.0	0.0	0.0	11.7	5.6	0.0	0.0	0.0	31.9	0.0	0.0
Incr Delay (d2), s/veh	12.0	0.3	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.6	0.0	0.0	9.8	0.2	0.0	0.0	0.0	1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.3	4.3	0.0	0.0	14.1	5.7	0.0	0.0	0.0	32.6	0.0	0.0
LnGrp LOS	D	A	A	A	B	A	A	A	A	C	A	A
Approach Vol, veh/h		637			1037			0			84	
Approach Delay, s/veh		9.1			13.8			0.0			32.6	
Approach LOS		A			B						C	

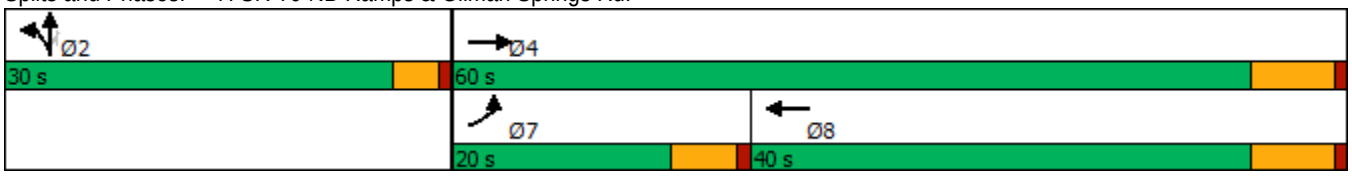
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.6	0.0	64.9		14.6	8.5	56.3				
Change Period (Y+Rc), s		4.6	4.6	6.5		4.6	4.6	6.5				
Max Green Setting (Gmax), s		11.4	5.0	87.9		11.4	5.4	87.5				
Max Q Clear Time (g_c+I1), s		0.0	0.0	11.0		5.7	5.0	35.1				
Green Ext Time (p_c), s		0.0	0.0	5.5		0.2	0.0	14.7				

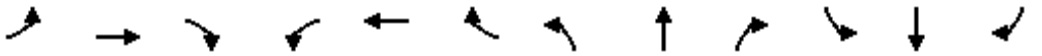
Intersection Summary												
HCM 6th Ctrl Delay			13.0									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Configurations					
Traffic Volume (vph)	37	355	509	2	8
Future Volume (vph)	37	355	509	2	8
Turn Type	Prot	NA	NA	NA	Perm
Protected Phases	7	4	8	2	
Permitted Phases					2
Detector Phase	7	4	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.4	34.5	32.5	9.0	9.0
Total Split (s)	20.0	60.0	40.0	30.0	30.0
Total Split (%)	22.2%	66.7%	44.4%	33.3%	33.3%
Yellow Time (s)	4.4	5.5	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.5	6.5	4.0	4.0
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 67.8
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 7: SR-79 NB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	355	0	0	509	266	426	2	8	0	0	0
Future Volume (veh/h)	37	355	0	0	509	266	426	2	8	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	39	374	0	0	536	280	448	2	8			
Peak Hour Factor	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			
Cap, veh/h	72	1821	0	0	855	446	572	3	511			
Arrive On Green	0.04	0.50	0.00	0.00	0.37	0.37	0.32	0.32	0.32			
Sat Flow, veh/h	1810	3705	0	0	2389	1196	1802	8	1610			
Grp Volume(v), veh/h	39	374	0	0	421	395	450	0	8			
Grp Sat Flow(s),veh/h/ln	1810	1805	0	0	1805	1685	1810	0	1610			
Q Serve(g_s), s	1.2	3.4	0.0	0.0	11.3	11.3	13.3	0.0	0.2			
Cycle Q Clear(g_c), s	1.2	3.4	0.0	0.0	11.3	11.3	13.3	0.0	0.2			
Prop In Lane	1.00		0.00	0.00		0.71	1.00		1.00			
Lane Grp Cap(c), veh/h	72	1821	0	0	673	628	575	0	511			
V/C Ratio(X)	0.54	0.21	0.00	0.00	0.63	0.63	0.78	0.00	0.02			
Avail Cap(c_a), veh/h	448	3275	0	0	1025	957	798	0	710			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	27.8	8.1	0.0	0.0	15.1	15.1	18.3	0.0	13.8			
Incr Delay (d2), s/veh	12.6	0.1	0.0	0.0	2.0	2.2	5.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.7	0.9	0.0	0.0	4.1	3.8	5.6	0.0	0.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.4	8.2	0.0	0.0	17.2	17.4	23.9	0.0	13.8			
LnGrp LOS	D	A	A	A	B	B	C	A	B			
Approach Vol, veh/h		413			816			458				
Approach Delay, s/veh		11.2			17.3			23.8				
Approach LOS		B			B			C				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		22.7		36.2			7.8	28.5				
Change Period (Y+Rc), s		4.0		6.5			5.4	6.5				
Max Green Setting (Gmax), s		26.0		53.5			14.6	33.5				
Max Q Clear Time (g_c+I1), s		15.3		5.4			3.2	13.3				
Green Ext Time (p_c), s		3.4		4.6			0.1	8.7				

Intersection Summary												
HCM 6th Ctrl Delay			17.6									
HCM 6th LOS			B									

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	1107	71	17	626	45
Future Volume (vph)	1107	71	17	626	45
Turn Type	NA	Perm	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		4			
Detector Phase	4	4	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	35.5	35.5	9.6	24.5	24.5
Total Split (s)	85.0	85.0	9.6	94.6	25.4
Total Split (%)	70.8%	70.8%	8.0%	78.8%	21.2%
Yellow Time (s)	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 89.3
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Bridge St. & Gilman Springs Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1107	71	17	626	45	18
Future Volume (veh/h)	1107	71	17	626	45	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1153	0	18	652	47	19
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1296		36	1428	132	54
Arrive On Green	0.68	0.00	0.02	0.75	0.11	0.11
Sat Flow, veh/h	1900	1610	1810	1900	1227	496
Grp Volume(v), veh/h	1153	0	18	652	67	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1749	0
Q Serve(g_s), s	45.5	0.0	0.9	12.0	3.3	0.0
Cycle Q Clear(g_c), s	45.5	0.0	0.9	12.0	3.3	0.0
Prop In Lane		1.00	1.00		0.70	0.28
Lane Grp Cap(c), veh/h	1296		36	1428	189	0
V/C Ratio(X)	0.89		0.50	0.46	0.35	0.00
Avail Cap(c_a), veh/h	1609		98	1806	357	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.9	0.0	45.0	4.3	38.3	0.0
Incr Delay (d2), s/veh	6.1	0.0	3.9	0.3	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.4	0.0	0.4	2.5	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.0	0.0	48.8	4.7	39.5	0.0
LnGrp LOS	B		D	A	D	A
Approach Vol, veh/h	1153	A		670	67	
Approach Delay, s/veh	18.0			5.9	39.5	
Approach LOS	B			A	D	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		16.5	6.5	69.7		76.2
Change Period (Y+Rc), s		6.5	4.6	6.5		6.5
Max Green Setting (Gmax), s		18.9	5.0	78.5		88.1
Max Q Clear Time (g_c+I1), s		5.3	2.9	47.5		14.0
Green Ext Time (p_c), s		0.1	0.0	15.8		6.7

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

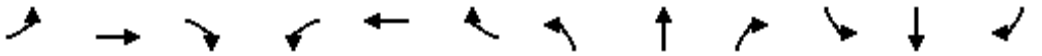
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBT	Ø2	Ø3
Lane Configurations								
Traffic Volume (vph)	44	1080	596	21	23	0		
Future Volume (vph)	44	1080	596	21	23	0		
Turn Type	Prot	NA	NA	Perm	Perm	NA		
Protected Phases	7	4	8			6	2	3
Permitted Phases				8	6			
Detector Phase	7	4	8	8	6	6		
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	30.5	30.5	30.5	14.6	14.6	14.6	9.6
Total Split (s)	9.6	95.0	95.0	95.0	15.4	15.4	15.4	9.6
Total Split (%)	8.0%	79.2%	79.2%	79.2%	12.8%	12.8%	13%	8%
Yellow Time (s)	3.6	5.5	5.5	5.5	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		
Total Lost Time (s)	4.6	6.5	6.5	6.5		4.6		
Lead/Lag	Lead	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	None	Min	Min	Min	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 74.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Driveway & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	1080	1	0	596	21	0	0	0	23	0	48
Future Volume (veh/h)	44	1080	1	0	596	21	0	0	0	23	0	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	47	1161	1	0	641	23	0	0	0	25	0	52
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	75	1376	1	2	1185	1004	0	248	0	104	26	141
Arrive On Green	0.04	0.72	0.72	0.00	0.62	0.62	0.00	0.00	0.00	0.13	0.00	0.13
Sat Flow, veh/h	1810	1898	2	1810	1900	1610	0	1900	0	323	197	1082
Grp Volume(v), veh/h	47	0	1162	0	641	23	0	0	0	77	0	0
Grp Sat Flow(s),veh/h/ln	1810	0	1900	1810	1900	1610	0	1900	0	1602	0	0
Q Serve(g_s), s	2.0	0.0	33.2	0.0	14.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.0	0.0	33.2	0.0	14.7	0.4	0.0	0.0	0.0	3.2	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	0.32		0.68
Lane Grp Cap(c), veh/h	75	0	1377	2	1185	1004	0	248	0	271	0	0
V/C Ratio(X)	0.63	0.00	0.84	0.00	0.54	0.02	0.00	0.00	0.00	0.28	0.00	0.00
Avail Cap(c_a), veh/h	118	0	2192	118	2193	1858	0	268	0	287	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.2	0.0	7.5	0.0	8.2	5.5	0.0	0.0	0.0	30.4	0.0	0.0
Incr Delay (d2), s/veh	3.2	0.0	2.4	0.0	0.5	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	6.6	0.0	4.1	0.1	0.0	0.0	0.0	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.4	0.0	9.9	0.0	8.7	5.5	0.0	0.0	0.0	30.9	0.0	0.0
LnGrp LOS	D	A	A	A	A	A	A	A	A	C	A	A
Approach Vol, veh/h		1209			664			0			77	
Approach Delay, s/veh		11.0			8.6			0.0			30.9	
Approach LOS		B			A						C	

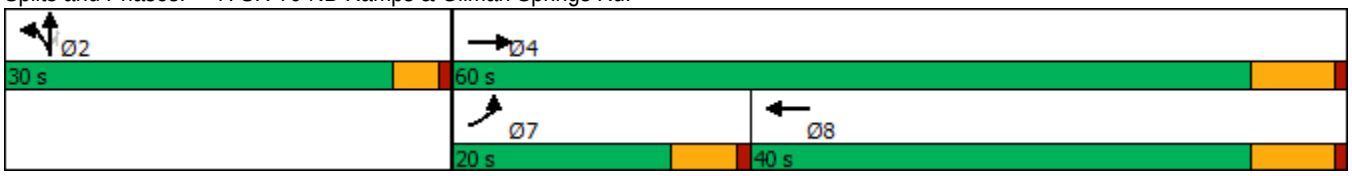
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.6	0.0	62.1		14.6	7.8	54.3				
Change Period (Y+Rc), s		4.6	4.6	6.5		4.6	4.6	6.5				
Max Green Setting (Gmax), s		10.8	5.0	88.5		10.8	5.0	88.5				
Max Q Clear Time (g_c+I1), s		0.0	0.0	35.2		5.2	4.0	16.7				
Green Ext Time (p_c), s		0.0	0.0	20.4		0.1	0.0	6.7				

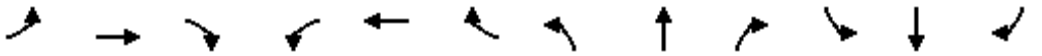
Intersection Summary												
HCM 6th Ctrl Delay			11.0									
HCM 6th LOS			B									

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Configurations					
Traffic Volume (vph)	34	789	329	1	7
Future Volume (vph)	34	789	329	1	7
Turn Type	Prot	NA	NA	NA	Perm
Protected Phases	7	4	8	2	
Permitted Phases					2
Detector Phase	7	4	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	4.5	4.5
Minimum Split (s)	10.4	34.5	32.5	9.0	9.0
Total Split (s)	20.0	60.0	40.0	30.0	30.0
Total Split (%)	22.2%	66.7%	44.4%	33.3%	33.3%
Yellow Time (s)	4.4	5.5	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.5	6.5	4.0	4.0
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	Min	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 52.2
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 7: SR-79 NB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	789	0	0	329	223	248	1	7	0	0	0
Future Volume (veh/h)	34	789	0	0	329	223	248	1	7	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	37	848	0	0	354	240	267	1	8			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	75	1853	0	0	715	476	432	2	386			
Arrive On Green	0.04	0.51	0.00	0.00	0.34	0.34	0.24	0.24	0.24			
Sat Flow, veh/h	1810	3705	0	0	2169	1382	1803	7	1610			
Grp Volume(v), veh/h	37	848	0	0	307	287	268	0	8			
Grp Sat Flow(s),veh/h/ln	1810	1805	0	0	1805	1651	1810	0	1610			
Q Serve(g_s), s	0.9	6.4	0.0	0.0	5.7	5.9	5.6	0.0	0.2			
Cycle Q Clear(g_c), s	0.9	6.4	0.0	0.0	5.7	5.9	5.6	0.0	0.2			
Prop In Lane	1.00		0.00	0.00		0.84	1.00		1.00			
Lane Grp Cap(c), veh/h	75	1853	0	0	622	569	434	0	386			
V/C Ratio(X)	0.49	0.46	0.00	0.00	0.49	0.50	0.62	0.00	0.02			
Avail Cap(c_a), veh/h	621	4542	0	0	1422	1301	1107	0	985			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.9	6.6	0.0	0.0	11.0	11.0	14.4	0.0	12.4			
Incr Delay (d2), s/veh	10.2	0.4	0.0	0.0	1.3	1.5	3.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.5	1.1	0.0	0.0	1.8	1.7	2.1	0.0	0.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.1	7.0	0.0	0.0	12.3	12.5	17.5	0.0	12.4			
LnGrp LOS	C	A	A	A	B	B	B	A	B			
Approach Vol, veh/h		885			594			276				
Approach Delay, s/veh		7.9			12.4			17.3				
Approach LOS		A			B			B				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		14.2		28.3			7.2	21.2				
Change Period (Y+Rc), s		4.0		6.5			5.4	6.5				
Max Green Setting (Gmax), s		26.0		53.5			14.6	33.5				
Max Q Clear Time (g_c+I1), s		7.6		8.4			2.9	7.9				
Green Ext Time (p_c), s		2.6		12.6			0.1	6.8				
Intersection Summary												
HCM 6th Ctrl Delay			10.9									
HCM 6th LOS			B									

APPENDIX 6.7:

EAP (2018) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	584	5	980	158	37
v/c Ratio	0.28	0.01	0.43	0.31	0.07
Control Delay	4.7	21.2	7.4	18.1	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.7	21.2	7.4	18.1	0.3
Queue Length 50th (ft)	16	1	78	34	0
Queue Length 95th (ft)	68	10	141	92	0
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2563	666	3516	1136	1053
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.23	0.01	0.28	0.14	0.04

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	39	374	816	450	8
v/c Ratio	0.15	0.21	0.60	0.72	0.01
Control Delay	33.7	9.6	17.9	31.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	33.7	9.6	17.9	31.3	0.0
Queue Length 50th (ft)	17	46	146	190	0
Queue Length 95th (ft)	48	67	213	#388	0
Internal Link Dist (ft)		777	1139	1422	
Turn Bay Length (ft)	215				240
Base Capacity (vph)	425	2853	1906	759	740
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.09	0.13	0.43	0.59	0.01

Intersection Summary

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



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1173	2	612	303	45
v/c Ratio	0.66	0.01	0.33	0.56	0.08
Control Delay	11.3	30.0	9.0	24.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	11.3	30.0	9.0	24.0	0.3
Queue Length 50th (ft)	90	1	57	89	0
Queue Length 95th (ft)	278	7	113	209	0
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2130	470	3177	841	808
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.55	0.00	0.19	0.36	0.06

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	37	848	594	268	8
v/c Ratio	0.12	0.49	0.41	0.49	0.01
Control Delay	24.9	10.1	10.2	20.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	24.9	10.1	10.2	20.4	0.0
Queue Length 50th (ft)	9	80	31	59	0
Queue Length 95th (ft)	41	156	116	165	0
Internal Link Dist (ft)		777	1139	1422	
Turn Bay Length (ft)	215				240
Base Capacity (vph)	544	3303	2410	972	917
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.07	0.26	0.25	0.28	0.01

Intersection Summary

APPENDIX 7.1:

EAPC (2018) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	85	170	936	565	1
Future Vol, veh/h	0	85	170	936	565	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	88	175	965	582	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1898	583	583	0	-	0
Stage 1	583	-	-	-	-	-
Stage 2	1315	-	-	-	-	-
Critical Hdwy	6.4	6	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	77	533	1001	-	-	-
Stage 1	562	-	-	-	-	-
Stage 2	254	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	64	533	1001	-	-	-
Mov Cap-2 Maneuver	75	-	-	-	-	-
Stage 1	464	-	-	-	-	-
Stage 2	254	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.1	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1001	-	533	-	-
HCM Lane V/C Ratio	0.175	-	0.164	-	-
HCM Control Delay (s)	9.4	-	13.1	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.6	-	0.6	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	649	1104	2	1	2
Future Vol, veh/h	1	649	1104	2	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	698	1187	2	1	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1189	0	-	0	1888	1188
Stage 1	-	-	-	-	1188	-
Stage 2	-	-	-	-	700	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	594	-	-	-	78	231
Stage 1	-	-	-	-	292	-
Stage 2	-	-	-	-	496	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	594	-	-	-	78	231
Mov Cap-2 Maneuver	-	-	-	-	78	-
Stage 1	-	-	-	-	291	-
Stage 2	-	-	-	-	496	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	31.3
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	594	-	-	-	140
HCM Lane V/C Ratio	0.002	-	-	-	0.023
HCM Control Delay (s)	11.1	-	-	-	31.3
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	33

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	570	66	28	995	118	46
Future Vol, veh/h	570	66	28	995	118	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	175	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	626	73	31	1093	130	51

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	626	0	1781	626
Stage 1	-	-	-	-	626	-
Stage 2	-	-	-	-	1155	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	965	-	~ 91	488
Stage 1	-	-	-	-	537	-
Stage 2	-	-	-	-	303	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	965	-	~ 88	488
Mov Cap-2 Maneuver	-	-	-	-	~ 88	-
Stage 1	-	-	-	-	520	-
Stage 2	-	-	-	-	303	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	$ 366.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	114	-	-	965	-
HCM Lane V/C Ratio	1.581	-	-	0.032	-
HCM Control Delay (s)	$ 366.1	-	-	8.9	-
HCM Lane LOS	F	-	-	A	-
HCM 95th %tile Q(veh)	13.3	-	-	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	551	0	0	971	32	0	0	0	26	0	52
Future Vol, veh/h	64	551	0	0	971	32	0	0	0	26	0	52
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	155	-	315	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	69	592	0	0	1044	34	0	0	0	28	0	56

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1078	0	0	592	0	0	1819	1808	592	1774	1774	1044
Stage 1	-	-	-	-	-	-	730	730	-	1044	1044	-
Stage 2	-	-	-	-	-	-	1089	1078	-	730	730	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	655	-	-	994	-	-	61	80	510	65	84	281
Stage 1	-	-	-	-	-	-	417	431	-	279	309	-
Stage 2	-	-	-	-	-	-	263	297	-	417	431	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	655	-	-	994	-	-	45	72	510	60	75	281
Mov Cap-2 Maneuver	-	-	-	-	-	-	45	72	-	60	75	-
Stage 1	-	-	-	-	-	-	373	386	-	250	309	-
Stage 2	-	-	-	-	-	-	211	297	-	373	386	-

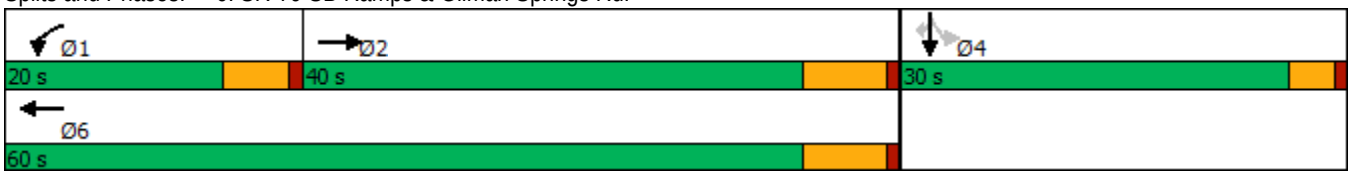
Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0	0	77.6
HCM LOS			A	F

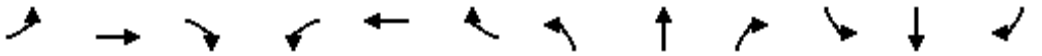
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	655	-	-	994	-	-	126
HCM Lane V/C Ratio	-	0.105	-	-	-	-	-	0.666
HCM Control Delay (s)	0	11.1	-	-	0	-	-	77.6
HCM Lane LOS	A	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	0.4	-	-	0	-	-	3.6

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	266	9	959	2	53
Future Volume (vph)	266	9	959	2	53
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.5	10.4	34.5	9.0	9.0
Total Split (s)	40.0	20.0	60.0	30.0	30.0
Total Split (%)	44.4%	22.2%	66.7%	33.3%	33.3%
Yellow Time (s)	5.5	4.4	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	5.4	6.5	4.0	4.0
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 46
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 6: SR-79 SB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	266	320	9	959	0	0	0	0	152	2	53
Future Volume (veh/h)	0	266	320	9	959	0	0	0	0	152	2	53
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	280	268	9	1009	0				160	2	50
Peak Hour Factor	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
Cap, veh/h	0	809	721	21	2127	0				285	4	256
Arrive On Green	0.00	0.45	0.45	0.01	0.59	0.00				0.16	0.16	0.16
Sat Flow, veh/h	0	1900	1610	1810	3705	0				1788	22	1610
Grp Volume(v), veh/h	0	280	268	9	1009	0				162	0	50
Grp Sat Flow(s),veh/h/ln	0	1805	1610	1810	1805	0				1811	0	1610
Q Serve(g_s), s	0.0	4.2	4.6	0.2	6.7	0.0				3.4	0.0	1.1
Cycle Q Clear(g_c), s	0.0	4.2	4.6	0.2	6.7	0.0				3.4	0.0	1.1
Prop In Lane	0.00		1.00	1.00		0.00				0.99		1.00
Lane Grp Cap(c), veh/h	0	809	721	21	2127	0				288	0	256
V/C Ratio(X)	0.00	0.35	0.37	0.42	0.47	0.00				0.56	0.00	0.19
Avail Cap(c_a), veh/h	0	1449	1292	633	4627	0				1128	0	1003
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	7.5	7.6	20.5	4.9	0.0				16.2	0.0	15.2
Incr Delay (d2), s/veh	0.0	0.5	0.7	25.5	0.4	0.0				3.6	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	0.9	0.9	0.2	0.6	0.0				1.4	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.1	8.3	46.0	5.2	0.0				19.8	0.0	16.0
LnGrp LOS	A	A	A	D	A	A				B	A	B
Approach Vol, veh/h		548			1018						212	
Approach Delay, s/veh		8.2			5.6						18.9	
Approach LOS		A			A						B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	5.9	25.2		10.6		31.1
Change Period (Y+Rc), s	5.4	6.5		4.0		6.5
Max Green Setting (Gmax), s	14.6	33.5		26.0		53.5
Max Q Clear Time (g_c+I1), s	2.2	6.6		5.4		8.7
Green Ext Time (p_c), s	0.0	6.1		1.8		15.9

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	66.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	374	0	0	519	271	444	2	8	0	0	0
Future Vol, veh/h	45	374	0	0	519	271	444	2	8	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	47	394	0	0	546	285	467	2	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	831	0	-	-	-	0	761	1319	197
Stage 1	-	-	-	-	-	-	488	488	-
Stage 2	-	-	-	-	-	-	273	831	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	810	-	0	0	-	-	~ 346	158	817
Stage 1	-	-	0	0	-	-	588	553	-
Stage 2	-	-	0	0	-	-	754	387	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	810	-	-	-	-	-	~ 326	0	817
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 326	0	-
Stage 1	-	-	-	-	-	-	554	0	-
Stage 2	-	-	-	-	-	-	754	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1	0	241.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	326	817	810	-	-	-
HCM Lane V/C Ratio	1.44	0.01	0.058	-	-	-
HCM Control Delay (s)	245.3	9.5	9.7	-	-	-
HCM Lane LOS	F	A	A	-	-	-
HCM 95th %tile Q(veh)	25	0	0.2	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	164	108	615	1057	5
Future Vol, veh/h	1	164	108	615	1057	5
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	-	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	171	113	641	1101	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1971	1104	1106	0	-	0
Stage 1	1104	-	-	-	-	-
Stage 2	867	-	-	-	-	-
Critical Hdwy	6.4	6	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	70	275	639	-	-	-
Stage 1	320	-	-	-	-	-
Stage 2	415	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	58	275	639	-	-	-
Mov Cap-2 Maneuver	196	-	-	-	-	-
Stage 1	263	-	-	-	-	-
Stage 2	415	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	37.9	1.8	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	639	-	274	-	-
HCM Lane V/C Ratio	0.176	-	0.627	-	-
HCM Control Delay (s)	11.8	-	37.9	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.6	-	3.9	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1218	722	3	3	2
Future Vol, veh/h	3	1218	722	3	3	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	1269	752	3	3	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	755	0	-	0	2029	754
Stage 1	-	-	-	-	754	-
Stage 2	-	-	-	-	1275	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	865	-	-	-	64	412
Stage 1	-	-	-	-	468	-
Stage 2	-	-	-	-	265	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	865	-	-	-	64	412
Mov Cap-2 Maneuver	-	-	-	-	64	-
Stage 1	-	-	-	-	467	-
Stage 2	-	-	-	-	265	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	44.2
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	865	-	-	-	97
HCM Lane V/C Ratio	0.004	-	-	-	0.054
HCM Control Delay (s)	9.2	-	-	-	44.2
HCM Lane LOS	A	-	-	-	E
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	10.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1132	92	25	643	69	34
Future Vol, veh/h	1132	92	25	643	69	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	175	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1179	96	26	670	72	35

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1179	0	1901	1179
Stage 1	-	-	-	-	1179	-
Stage 2	-	-	-	-	722	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	600	-	77	234
Stage 1	-	-	-	-	295	-
Stage 2	-	-	-	-	485	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	600	-	74	234
Mov Cap-2 Maneuver	-	-	-	-	74	-
Stage 1	-	-	-	-	282	-
Stage 2	-	-	-	-	485	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	208.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	96	-	-	600	-
HCM Lane V/C Ratio	1.118	-	-	0.043	-
HCM Control Delay (s)	208.8	-	-	11.3	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	7.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	1121	1	0	622	21	0	0	0	23	0	48
Future Vol, veh/h	44	1121	1	0	622	21	0	0	0	23	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	155	-	315	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	47	1205	1	0	669	23	0	0	0	25	0	52

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	692	0	0	1206	0	0	2007	1992	1206	1969	1969	669
Stage 1	-	-	-	-	-	-	1300	1300	-	669	669	-
Stage 2	-	-	-	-	-	-	707	692	-	1300	1300	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	912	-	-	586	-	-	45	61	226	48	63	461
Stage 1	-	-	-	-	-	-	200	233	-	450	459	-
Stage 2	-	-	-	-	-	-	429	448	-	200	233	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	912	-	-	586	-	-	38	58	226	46	60	461
Mov Cap-2 Maneuver	-	-	-	-	-	-	38	58	-	46	60	-
Stage 1	-	-	-	-	-	-	190	221	-	427	459	-
Stage 2	-	-	-	-	-	-	381	448	-	190	221	-

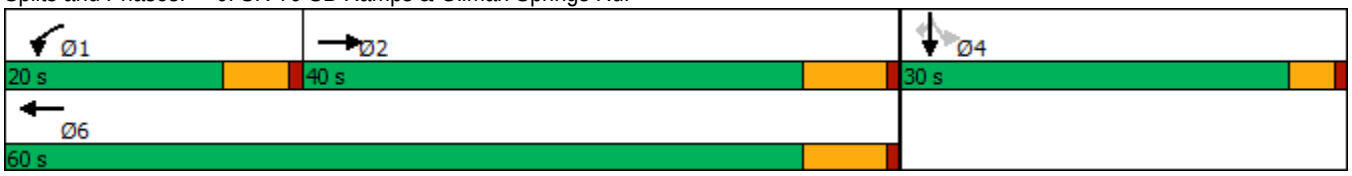
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	0	79.3
HCM LOS			A	F

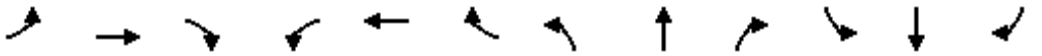
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	912	-	-	586	-	-	118
HCM Lane V/C Ratio	-	0.052	-	-	-	-	-	0.647
HCM Control Delay (s)	0	9.2	-	-	0	-	-	79.3
HCM Lane LOS	A	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	0.2	-	-	0	-	-	3.3

Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	561	4	591	7	51
Future Volume (vph)	561	4	591	7	51
Turn Type	NA	Prot	NA	NA	Perm
Protected Phases	2	1	6	4	
Permitted Phases					4
Detector Phase	2	1	6	4	4
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.5	10.4	34.5	9.0	9.0
Total Split (s)	40.0	20.0	60.0	30.0	30.0
Total Split (%)	44.4%	22.2%	66.7%	33.3%	33.3%
Yellow Time (s)	5.5	4.4	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	5.4	6.5	4.0	4.0
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 60.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 6: SR-79 SB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	561	576	4	591	0	0	0	0	283	7	51
Future Volume (veh/h)	0	561	576	4	591	0	0	0	0	283	7	51
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1900	1900	1900	1900	0				1900	1900	1900
Adj Flow Rate, veh/h	0	597	467	4	629	0				301	7	42
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	0	896	700	10	2047	0				432	10	393
Arrive On Green	0.00	0.46	0.46	0.01	0.57	0.00				0.24	0.24	0.24
Sat Flow, veh/h	0	2023	1506	1810	3705	0				1770	41	1610
Grp Volume(v), veh/h	0	559	505	4	629	0				308	0	42
Grp Sat Flow(s),veh/h/ln	0	1805	1629	1810	1805	0				1811	0	1610
Q Serve(g_s), s	0.0	13.3	13.4	0.1	5.1	0.0				8.6	0.0	1.1
Cycle Q Clear(g_c), s	0.0	13.3	13.4	0.1	5.1	0.0				8.6	0.0	1.1
Prop In Lane	0.00		0.92	1.00		0.00				0.98		1.00
Lane Grp Cap(c), veh/h	0	838	757	10	2047	0				442	0	393
V/C Ratio(X)	0.00	0.67	0.67	0.41	0.31	0.00				0.70	0.00	0.11
Avail Cap(c_a), veh/h	0	1089	983	476	3478	0				848	0	754
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.5	11.5	27.5	6.3	0.0				19.1	0.0	16.3
Incr Delay (d2), s/veh	0.0	2.0	2.2	50.0	0.2	0.0				4.2	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	3.9	3.6	0.2	1.1	0.0				3.6	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	13.6	13.8	77.5	6.5	0.0				23.3	0.0	16.6
LnGrp LOS	A	B	B	E	A	A				C	A	B
Approach Vol, veh/h		1064			633						350	
Approach Delay, s/veh		13.7			6.9						22.5	
Approach LOS		B			A						C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	5.7	32.3		17.5		38.0						
Change Period (Y+Rc), s	5.4	6.5		4.0		6.5						
Max Green Setting (Gmax), s	14.6	33.5		26.0		53.5						
Max Q Clear Time (g_c+I1), s	2.1	15.4		10.6		7.1						
Green Ext Time (p_c), s	0.0	10.4		3.0		8.5						

Intersection Summary												
HCM 6th Ctrl Delay			13.1									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	44.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	51	796	0	0	333	228	250	5	16	0	0	0
Future Vol, veh/h	51	796	0	0	333	228	250	5	16	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	856	0	0	358	245	269	5	17	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	603	0	-	-	-	0	1145	1569	428
Stage 1	-	-	-	-	-	-	966	966	-
Stage 2	-	-	-	-	-	-	179	603	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	984	-	0	0	-	-	~ 196	112	581
Stage 1	-	-	0	0	-	-	335	336	-
Stage 2	-	-	0	0	-	-	840	492	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	984	-	-	-	-	-	~ 185	0	581
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 185	0	-
Stage 1	-	-	-	-	-	-	316	0	-
Stage 2	-	-	-	-	-	-	840	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.5	0	273.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	185	581	984	-	-	-
HCM Lane V/C Ratio	1.482	0.03	0.056	-	-	-
HCM Control Delay (s)	290.2	11.4	8.9	-	-	-
HCM Lane LOS	F	B	A	-	-	-
HCM 95th %tile Q(veh)	17.1	0.1	0.2	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX 7.2:

EAPC (2018) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

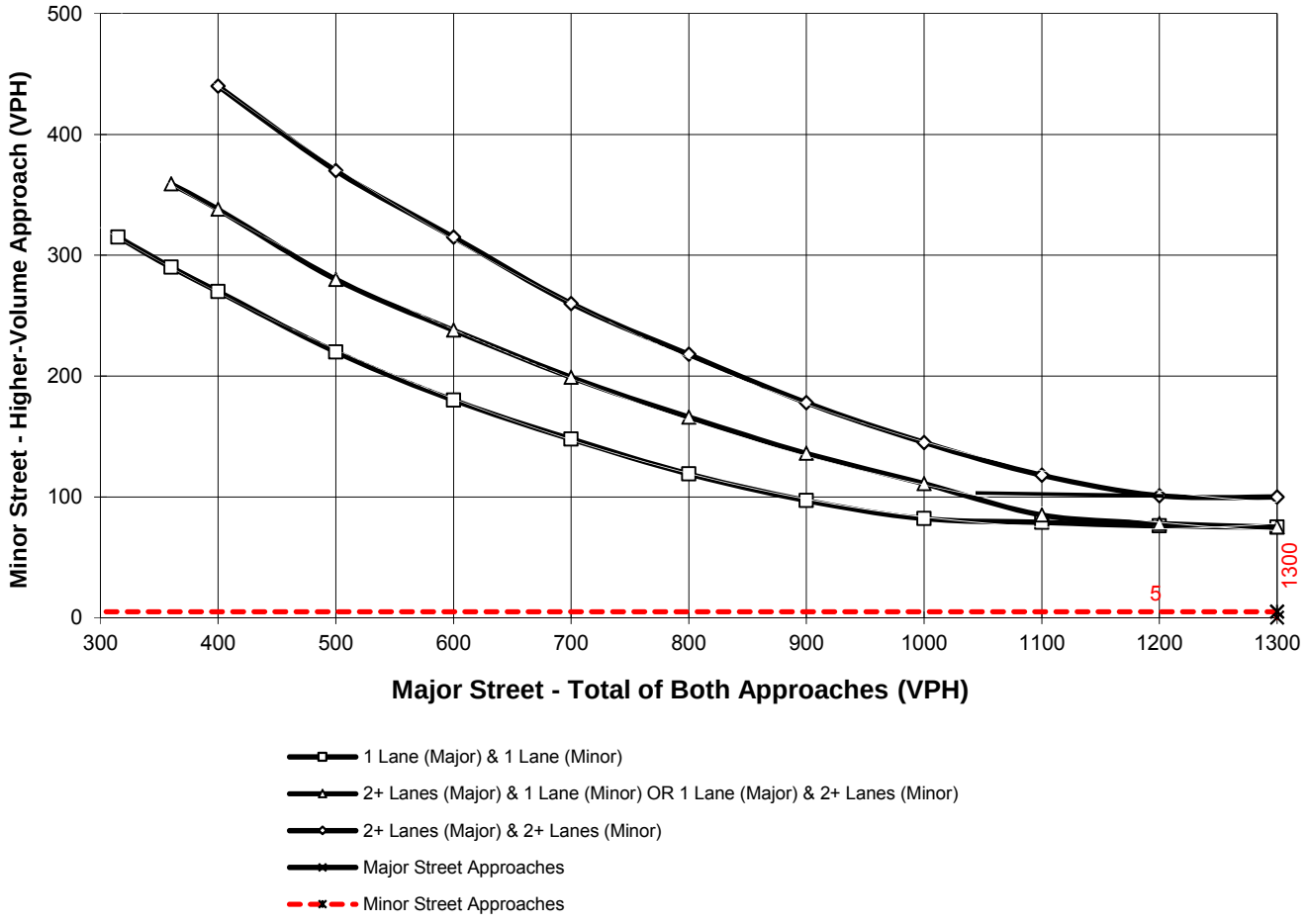
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAPC 2018 Conditions - Weekday PM Peak Hour**

Major Street Name = **Gilman Springs Rd.** Total of Both Approaches (VPH) = **1946**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Jack Rabbit Trail** High Volume Approach (VPH) = **5**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

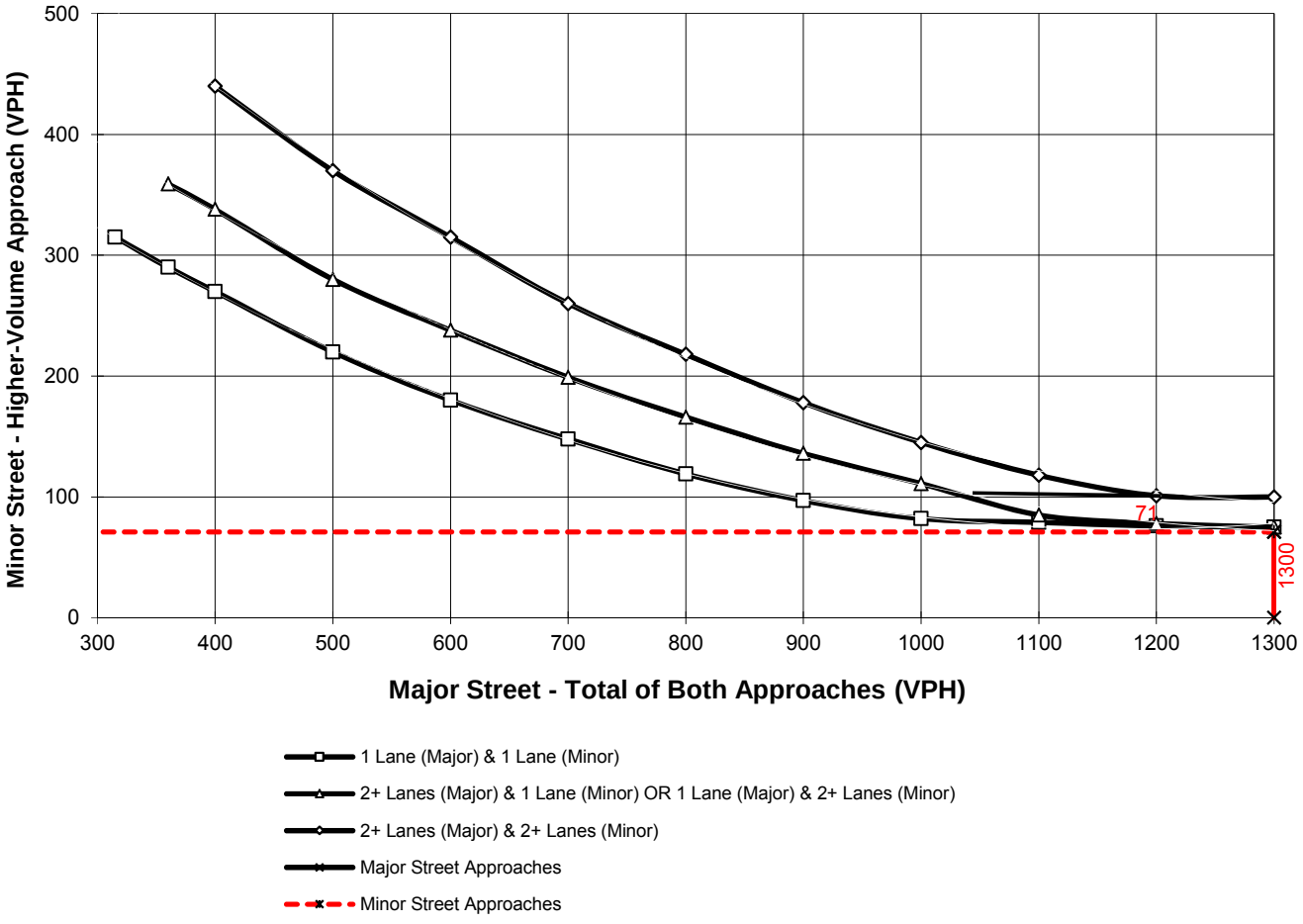
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAPC 2018 Conditions - Weekday PM Peak Hour**

Major Street Name = **Gilman Springs Rd.**
Total of Both Approaches (VPH) = **1809**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Driveway**
High Volume Approach (VPH) = **71**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 7.3:

EAPC (2018) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	617	9	1009	162	56
v/c Ratio	0.30	0.03	0.44	0.32	0.11
Control Delay	4.8	22.3	7.6	18.8	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.8	22.3	7.6	18.8	1.6
Queue Length 50th (ft)	17	2	82	36	0
Queue Length 95th (ft)	76	15	155	98	7
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2516	648	3479	1110	1031
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	0.01	0.29	0.15	0.05

Intersection Summary

Intersection	
Int Delay, s/veh	66.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	374	0	0	519	271	444	2	8	0	0	0
Future Vol, veh/h	45	374	0	0	519	271	444	2	8	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	47	394	0	0	546	285	467	2	8	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	831	0	-	-	-	0	761	1319	197
Stage 1	-	-	-	-	-	-	488	488	-
Stage 2	-	-	-	-	-	-	273	831	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	810	-	0	0	-	-	~ 346	158	817
Stage 1	-	-	0	0	-	-	588	553	-
Stage 2	-	-	0	0	-	-	754	387	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	810	-	-	-	-	-	~ 326	0	817
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 326	0	-
Stage 1	-	-	-	-	-	-	554	0	-
Stage 2	-	-	-	-	-	-	754	0	-

Approach	EB	WB	NB
HCM Control Delay, s	1	0	241.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	326	817	810	-	-	-
HCM Lane V/C Ratio	1.44	0.01	0.058	-	-	-
HCM Control Delay (s)	245.3	9.5	9.7	-	-	-
HCM Lane LOS	F	A	A	-	-	-
HCM 95th %tile Q(veh)	25	0	0.2	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1210	4	629	308	54
v/c Ratio	0.67	0.02	0.33	0.58	0.10
Control Delay	11.7	30.2	9.0	24.8	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	11.7	30.2	9.0	24.8	0.9
Queue Length 50th (ft)	97	1	60	97	0
Queue Length 95th (ft)	297	11	116	213	4
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2075	456	3144	816	787
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.58	0.01	0.20	0.38	0.07

Intersection Summary

Intersection	
Int Delay, s/veh	44.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	51	796	0	0	333	228	250	5	16	0	0	0
Future Vol, veh/h	51	796	0	0	333	228	250	5	16	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	215	-	-	-	-	-	-	-	240	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	856	0	0	358	245	269	5	17	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	603	0	-	-	-	0	1145	1569	428
Stage 1	-	-	-	-	-	-	966	966	-
Stage 2	-	-	-	-	-	-	179	603	-
Critical Hdwy	4.1	-	-	-	-	-	6.8	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.8	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.8	5.5	-
Follow-up Hdwy	2.2	-	-	-	-	-	3.5	4	3.3
Pot Cap-1 Maneuver	984	-	0	0	-	-	~ 196	112	581
Stage 1	-	-	0	0	-	-	335	336	-
Stage 2	-	-	0	0	-	-	840	492	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	984	-	-	-	-	-	~ 185	0	581
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 185	0	-
Stage 1	-	-	-	-	-	-	316	0	-
Stage 2	-	-	-	-	-	-	840	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0.5	0	273.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	185	581	984	-	-	-
HCM Lane V/C Ratio	1.482	0.03	0.056	-	-	-
HCM Control Delay (s)	290.2	11.4	8.9	-	-	-
HCM Lane LOS	F	B	A	-	-	-
HCM 95th %tile Q(veh)	17.1	0.1	0.2	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX 7.4:

EAPC (2018) CONDITIONS BASIC FREEWAY SEGMENT ANALYSIS WORKSHEETS

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	4024	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2232
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.93
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	57.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	38.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3204	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1759
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.73
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	66.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	26.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3637	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2017
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.84
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	62.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	32.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3200	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1756
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.73
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	66.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	26.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1391	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	772
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.32
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	11.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1511	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	838
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	12.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1127	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	625
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.26
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	8.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1270	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	697
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	10.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	4157	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2306
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.96
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	55.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	41.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3646	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2002
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.83
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	62.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	32.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	4620	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2536
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.06
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	3649	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	2003
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.83
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	62.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	32.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1775	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	984
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.41
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	14.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	2031	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	1115
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.46
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	15.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

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Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1248	Heavy Vehicle Adjustment Factor (f_{HV})	0.980
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	692
Total Trucks, %	2.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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HCS7 Basic Freeway Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Urban Crossroads, Inc.	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	70.0	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	70.0
Right-Side Lateral Clearance, ft	-		

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

Demand Volume (V), veh/h	1248	Heavy Vehicle Adjustment Factor (f_{HV})	0.990
Peak Hour Factor (PHF)	0.92	Flow Rate (v_p), pc/h/ln	685
Total Trucks, %	1.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.29
Passenger Car Equivalent (E_T)	2.000		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	70.0		

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APPENDIX 7.5:

EAPC (2018) CONDITIONS MERGE/DIVERGE ANALYSIS WORKSHEETS

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3188	836
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.952
Flow Rate (v_i), pc/h	3500	955
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.93	0.45

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	38.0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.630
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	52.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3500	Ramp Junction Speed (S), mi/h	52.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4455	Average Density (D), pc/mi/ln	42.5
Level of Service (LOS)	E		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	190
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3204	16
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	30.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.769
Flow Rate (v_i), pc/h	3518	23
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.73	0.01

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	32.8
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.300
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3518	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	28.6
Level of Service (LOS)	D		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3637	444
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	12.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.893
Flow Rate (v_i), pc/h	4034	540
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.84	0.26

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	37.1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.347
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4034	Ramp Junction Speed (S), mi/h	60.3
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	33.4
Level of Service (LOS)	E		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3193	7
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	57.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.637
Flow Rate (v_i), pc/h	3506	12
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.73	0.01

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	31.1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.425
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	58.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3506	Ramp Junction Speed (S), mi/h	58.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3518	Average Density (D), pc/mi/ln	30.3
Level of Service (LOS)	D		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	110
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1391	171
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	12.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.893
Flow Rate (v_i), pc/h	1543	208
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.32	0.10

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	16.5
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.317
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1543	Ramp Junction Speed (S), mi/h	61.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	12.6
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1220	291
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	9.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.917
Flow Rate (v_i), pc/h	1339	345
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.35	0.16

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	16.0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.306
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1339	Ramp Junction Speed (S), mi/h	61.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1684	Average Density (D), pc/mi/ln	13.7
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	839	287
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.943
Flow Rate (v_i), pc/h	921	331
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.26	0.16

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	12.7
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.299
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	921	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1252	Average Density (D), pc/mi/ln	10.2
Level of Service (LOS)	B		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	AM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	155
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1270	430
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.980
Flow Rate (v_i), pc/h	1394	477
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.29	0.23

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	14.8
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.341
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1394	Ramp Junction Speed (S), mi/h	60.5
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	11.5
Level of Service (LOS)	B		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3638	519
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	8.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.926
Flow Rate (v_i), pc/h	3994	609
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.96	0.29

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	39.3
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.683
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	50.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3994	Ramp Junction Speed (S), mi/h	50.9
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4603	Average Density (D), pc/mi/ln	45.2
Level of Service (LOS)	E		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	190
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3646	8
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	50.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.667
Flow Rate (v_i), pc/h	4003	13
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.83	0.01

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	37.0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.299
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4003	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	32.5
Level of Service (LOS)	E		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	4620	983
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	3.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.971
Flow Rate (v_i), pc/h	5072	1100
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	1.06	0.52

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	46.1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	58.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	5072	Ramp Junction Speed (S), mi/h	-
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
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Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	3637	12
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	41.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.709
Flow Rate (v_i), pc/h	3993	18
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.84	0.01

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	34.9
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.509
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	55.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3993	Ramp Junction Speed (S), mi/h	55.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4011	Average Density (D), pc/mi/ln	36.0
Level of Service (LOS)	D		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	110
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1775	306
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	2.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.980	0.943
Flow Rate (v_i), pc/h	1969	353
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.41	0.17

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	20.2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.330
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.8
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1969	Ramp Junction Speed (S), mi/h	60.8
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	16.2
Level of Service (LOS)	C		

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HCS7 Freeway Merge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1469	562
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	2.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.980
Flow Rate (v_i), pc/h	1613	623
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.47	0.30

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	20.2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.321
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1613	Ramp Junction Speed (S), mi/h	61.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2236	Average Density (D), pc/mi/ln	18.3
Level of Service (LOS)	C		

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HCS7 Freeway Merge Report

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Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Acceleration Length (L_A), ft	1500	400
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	999	250
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	5.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.952
Flow Rate (v_i), pc/h	1097	285
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.29	0.14

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	13.7
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.301
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1097	Ramp Junction Speed (S), mi/h	61.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1382	Average Density (D), pc/mi/ln	11.2
Level of Service (LOS)	B		

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HCS7 Freeway Diverge Report

Project Information

Analyst	RV	Date	3/22/2018
Agency	Urban Crossroads, Inc.	Analysis Year	EAPC (2018)
Jurisdiction	Caltrans	Time Period Analyzed	PM Peak Hour
Project Description	Gilman Springs Mine TIA (JN 11379)		

Geometric Data

	Freeway	Ramp
Number of Lanes (N)	2	1
Free-Flow Speed (FFS), mi/h	70.0	45.0
Segment Length (L) / Deceleration Length (L_D), ft	1500	155
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Side	Freeway	Right

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 (V_i), veh/h	1248	250
Peak Hour Factor (PHF)	0.92	0.92
Total Trucks, %	1.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.990	0.962
Flow Rate (v_i), pc/h	1370	282
Capacity (c), pc/h	4800	2100
Volume-to-Capacity Ratio (v/c)	0.29	0.13

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Density in Ramp Influence Area (D_R), pc/mi/ln	14.6
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.323
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	61.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	1370	Ramp Junction Speed (S), mi/h	61.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	11.2
Level of Service (LOS)	B		

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APPENDIX 7.6:

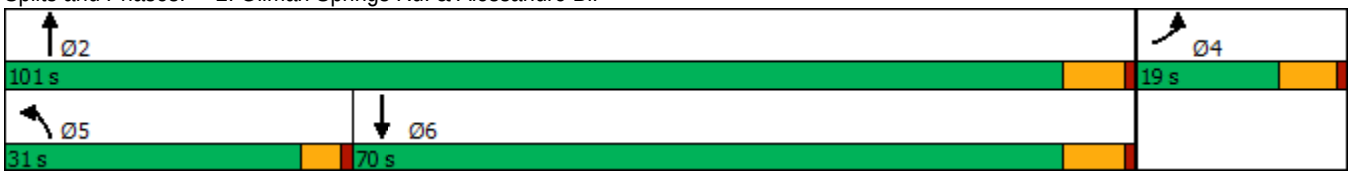
EAPC (2018) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

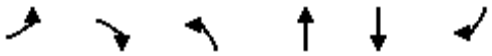
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Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	0	170	936	565
Future Volume (vph)	0	170	936	565
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	16.2	9.6	16.5	35.5
Total Split (s)	19.0	31.0	101.0	70.0
Total Split (%)	15.8%	25.8%	84.2%	58.3%
Yellow Time (s)	5.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	4.6	6.5	6.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 64.9
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Gilman Springs Rd. & Alessandro Bl.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	85	170	936	565	1
Future Volume (veh/h)	0	85	170	936	565	1
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	88	175	965	582	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	211	224	1225	835	1
Arrive On Green	0.00	0.13	0.12	0.64	0.44	0.44
Sat Flow, veh/h	0	1595	1810	1900	1896	3
Grp Volume(v), veh/h	0	89	175	965	0	583
Grp Sat Flow(s),veh/h/ln	0	1613	1810	1900	0	1899
Q Serve(g_s), s	0.0	2.9	5.4	20.9	0.0	14.1
Cycle Q Clear(g_c), s	0.0	2.9	5.4	20.9	0.0	14.1
Prop In Lane	0.00	0.99	1.00			0.00
Lane Grp Cap(c), veh/h	0	214	224	1225	0	836
V/C Ratio(X)	0.00	0.42	0.78	0.79	0.00	0.70
Avail Cap(c_a), veh/h	0	362	837	3147	0	2114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	22.7	24.2	7.3	0.0	12.9
Incr Delay (d2), s/veh	0.0	1.3	2.2	1.6	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	2.1	3.7	0.0	4.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	24.0	26.5	9.0	0.0	14.4
LnGrp LOS	A	C	C	A	A	B
Approach Vol, veh/h	89			1140	583	
Approach Delay, s/veh	24.0			11.6	14.4	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		43.3		13.8	11.7	31.6
Change Period (Y+Rc), s		6.5		6.2	4.6	6.5
Max Green Setting (Gmax), s		94.5		12.8	26.4	63.5
Max Q Clear Time (g_c+I1), s		22.9		4.9	7.4	16.1
Green Ext Time (p_c), s		13.9		0.1	0.2	5.6

Intersection Summary		
HCM 6th Ctrl Delay		13.1
HCM 6th LOS		B

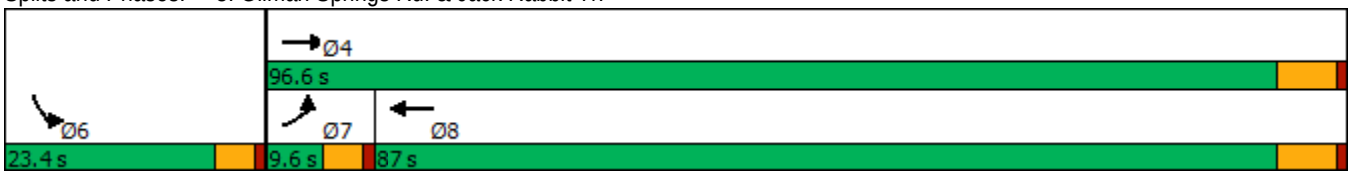
Notes

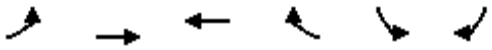
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	SBL
Lane Configurations				
Traffic Volume (vph)	1	649	1104	1
Future Volume (vph)	1	649	1104	1
Turn Type	Prot	NA	NA	Prot
Protected Phases	7	4	8	6
Permitted Phases				
Detector Phase	7	4	8	6
Switch Phase				
Minimum Initial (s)	5.0	10.0	10.0	10.0
Minimum Split (s)	9.6	16.5	24.5	14.6
Total Split (s)	9.6	96.6	87.0	23.4
Total Split (%)	8.0%	80.5%	72.5%	19.5%
Yellow Time (s)	3.6	5.5	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	6.5	4.6
Lead/Lag	Lead		Lag	
Lead-Lag Optimize?	Yes		Yes	
Recall Mode	None	None	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 84.3
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Gilman Springs Rd. & Jack Rabbit Tr.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	649	1104	2	1	2
Future Volume (veh/h)	1	649	1104	2	1	2
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	698	1187	2	1	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2	1449	1346	2	48	97
Arrive On Green	0.00	0.76	0.71	0.71	0.11	0.11
Sat Flow, veh/h	1810	1900	1896	3	431	862
Grp Volume(v), veh/h	1	698	0	1189	4	0
Grp Sat Flow(s),veh/h/ln	1810	1900	0	1899	1723	0
Q Serve(g_s), s	0.0	12.3	0.0	43.2	0.2	0.0
Cycle Q Clear(g_c), s	0.0	12.3	0.0	43.2	0.2	0.0
Prop In Lane	1.00			0.00	0.25	0.50
Lane Grp Cap(c), veh/h	2	1449	0	1348	194	0
V/C Ratio(X)	0.40	0.48	0.00	0.88	0.02	0.00
Avail Cap(c_a), veh/h	102	1925	0	1719	364	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.4	4.0	0.0	10.0	35.1	0.0
Incr Delay (d2), s/veh	34.8	0.4	0.0	5.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.2	0.0	12.1	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	79.1	4.3	0.0	15.2	35.2	0.0
LnGrp LOS	E	A	A	B	D	A
Approach Vol, veh/h		699	1189		4	
Approach Delay, s/veh		4.4	15.2		35.2	
Approach LOS		A	B		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			74.3		14.6	4.7	69.6
Change Period (Y+Rc), s			6.5		4.6	4.6	6.5
Max Green Setting (Gmax), s			90.1		18.8	5.0	80.5
Max Q Clear Time (g_c+I1), s			14.3		2.2	2.0	45.2
Green Ext Time (p_c), s			7.5		0.0	0.0	17.9

Intersection Summary		
HCM 6th Ctrl Delay		11.3
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	570	66	28	995	118
Future Volume (vph)	570	66	28	995	118
Turn Type	NA	Perm	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		4			
Detector Phase	4	4	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	35.5	35.5	9.6	24.5	24.5
Total Split (s)	84.0	84.0	10.0	94.0	26.0
Total Split (%)	70.0%	70.0%	8.3%	78.3%	21.7%
Yellow Time (s)	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 84.2
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Bridge St. & Gilman Springs Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	570	66	28	995	118	46
Future Volume (veh/h)	570	66	28	995	118	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	626	0	31	1093	130	51
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1129		58	1308	169	66
Arrive On Green	0.59	0.00	0.03	0.69	0.14	0.14
Sat Flow, veh/h	1900	1610	1810	1900	1249	490
Grp Volume(v), veh/h	626	0	31	1093	182	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1749	0
Q Serve(g_s), s	14.7	0.0	1.2	31.2	7.4	0.0
Cycle Q Clear(g_c), s	14.7	0.0	1.2	31.2	7.4	0.0
Prop In Lane		1.00	1.00		0.71	0.28
Lane Grp Cap(c), veh/h	1129		58	1308	237	0
V/C Ratio(X)	0.55		0.54	0.84	0.77	0.00
Avail Cap(c_a), veh/h	1994		132	2252	462	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.1	0.0	35.2	8.4	30.8	0.0
Incr Delay (d2), s/veh	0.6	0.0	2.9	2.1	5.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.5	6.9	3.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.7	0.0	38.1	10.5	36.0	0.0
LnGrp LOS	A		D	B	D	A
Approach Vol, veh/h	626	A		1124	182	
Approach Delay, s/veh	9.7			11.3	36.0	
Approach LOS	A			B	D	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		16.5	7.0	50.4		57.3
Change Period (Y+Rc), s		6.5	4.6	6.5		6.5
Max Green Setting (Gmax), s		19.5	5.4	77.5		87.5
Max Q Clear Time (g_c+I1), s		9.4	3.2	16.7		33.2
Green Ext Time (p_c), s		0.3	0.0	6.3		17.7

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

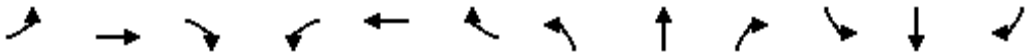
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBT	Ø2	Ø3
Lane Configurations								
Traffic Volume (vph)	64	551	971	32	26	0		
Future Volume (vph)	64	551	971	32	26	0		
Turn Type	Prot	NA	NA	Perm	Perm	NA		
Protected Phases	7	4	8			6	2	3
Permitted Phases				8	6			
Detector Phase	7	4	8	8	6	6		
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	30.5	30.5	30.5	14.6	14.6	14.6	9.6
Total Split (s)	10.0	94.4	94.0	94.0	16.0	16.0	16.0	9.6
Total Split (%)	8.3%	78.7%	78.3%	78.3%	13.3%	13.3%	13%	8%
Yellow Time (s)	3.6	5.5	5.5	5.5	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		
Total Lost Time (s)	4.6	6.5	6.5	6.5		4.6		
Lead/Lag	Lead	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	None	Min	Min	Min	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 87.3
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Driveway & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	551	0	0	971	32	0	0	0	26	0	52
Future Volume (veh/h)	64	551	0	0	971	32	0	0	0	26	0	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	69	592	0	0	1044	34	0	0	0	28	0	56
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	89	1423	0	2	1225	1038	0	226	0	99	21	127
Arrive On Green	0.05	0.75	0.00	0.00	0.64	0.64	0.00	0.00	0.00	0.12	0.00	0.12
Sat Flow, veh/h	1810	1900	0	1810	1900	1610	0	1900	0	352	180	1064
Grp Volume(v), veh/h	69	592	0	0	1044	34	0	0	0	84	0	0
Grp Sat Flow(s),veh/h/ln	1810	1900	0	1810	1900	1610	0	1900	0	1596	0	0
Q Serve(g_s), s	3.2	9.5	0.0	0.0	36.4	0.6	0.0	0.0	0.0	0.7	0.0	0.0
Cycle Q Clear(g_c), s	3.2	9.5	0.0	0.0	36.4	0.6	0.0	0.0	0.0	3.9	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	0.33		0.67
Lane Grp Cap(c), veh/h	89	1423	0	2	1225	1038	0	226	0	247	0	0
V/C Ratio(X)	0.77	0.42	0.00	0.00	0.85	0.03	0.00	0.00	0.00	0.34	0.00	0.00
Avail Cap(c_a), veh/h	116	1988	0	108	1978	1677	0	258	0	273	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	39.5	3.8	0.0	0.0	11.8	5.4	0.0	0.0	0.0	34.3	0.0	0.0
Incr Delay (d2), s/veh	15.2	0.3	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.7	0.0	0.0	10.9	0.2	0.0	0.0	0.0	1.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.7	4.1	0.0	0.0	14.6	5.4	0.0	0.0	0.0	35.1	0.0	0.0
LnGrp LOS	D	A	A	A	B	A	A	A	A	D	A	A
Approach Vol, veh/h		661			1078			0			84	
Approach Delay, s/veh		9.4			14.3			0.0			35.1	
Approach LOS		A			B						D	

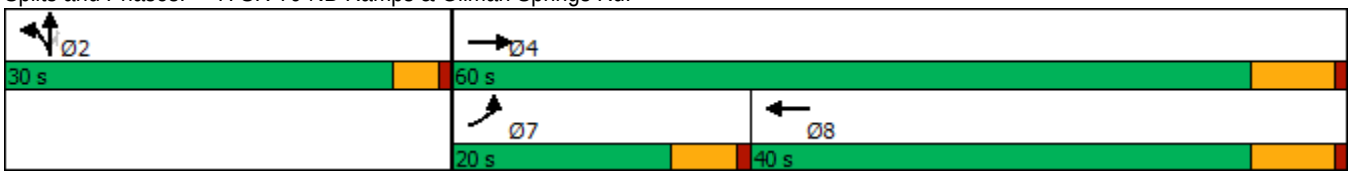
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.6	0.0	69.4		14.6	8.7	60.7				
Change Period (Y+Rc), s		4.6	4.6	6.5		4.6	4.6	6.5				
Max Green Setting (Gmax), s		11.4	5.0	87.9		11.4	5.4	87.5				
Max Q Clear Time (g_c+I1), s		0.0	0.0	11.5		5.9	5.2	38.4				
Green Ext Time (p_c), s		0.0	0.0	5.8		0.1	0.0	15.8				

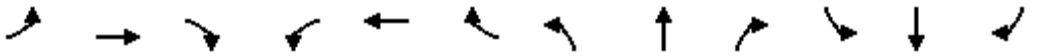
Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Configurations					
Traffic Volume (vph)	45	374	519	2	8
Future Volume (vph)	45	374	519	2	8
Turn Type	Prot	NA	NA	NA	Perm
Protected Phases	7	4	8	2	
Permitted Phases					2
Detector Phase	7	4	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.4	34.5	32.5	9.0	9.0
Total Split (s)	20.0	60.0	40.0	30.0	30.0
Total Split (%)	22.2%	66.7%	44.4%	33.3%	33.3%
Yellow Time (s)	4.4	5.5	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.5	6.5	4.0	4.0
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 69.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 7: SR-79 NB Ramps & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	374	0	0	519	271	444	2	8	0	0	0
Future Volume (veh/h)	45	374	0	0	519	271	444	2	8	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	47	394	0	0	546	285	467	2	8			
Peak Hour Factor	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			
Cap, veh/h	81	1822	0	0	852	444	583	2	521			
Arrive On Green	0.04	0.50	0.00	0.00	0.37	0.37	0.32	0.32	0.32			
Sat Flow, veh/h	1810	3705	0	0	2389	1195	1802	8	1610			
Grp Volume(v), veh/h	47	394	0	0	429	402	469	0	8			
Grp Sat Flow(s),veh/h/ln	1810	1805	0	0	1805	1685	1810	0	1610			
Q Serve(g_s), s	1.6	3.7	0.0	0.0	12.0	12.0	14.5	0.0	0.2			
Cycle Q Clear(g_c), s	1.6	3.7	0.0	0.0	12.0	12.0	14.5	0.0	0.2			
Prop In Lane	1.00		0.00	0.00		0.71	1.00		1.00			
Lane Grp Cap(c), veh/h	81	1822	0	0	670	626	585	0	521			
V/C Ratio(X)	0.58	0.22	0.00	0.00	0.64	0.64	0.80	0.00	0.02			
Avail Cap(c_a), veh/h	432	3160	0	0	989	924	770	0	685			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	28.6	8.4	0.0	0.0	15.8	15.9	18.9	0.0	14.1			
Incr Delay (d2), s/veh	13.1	0.1	0.0	0.0	2.2	2.4	6.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.9	1.0	0.0	0.0	4.4	4.2	6.2	0.0	0.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.7	8.5	0.0	0.0	18.0	18.2	25.6	0.0	14.1			
LnGrp LOS	D	A	A	A	B	B	C	A	B			
Approach Vol, veh/h		441			831			477				
Approach Delay, s/veh		12.1			18.1			25.4				
Approach LOS		B			B			C				

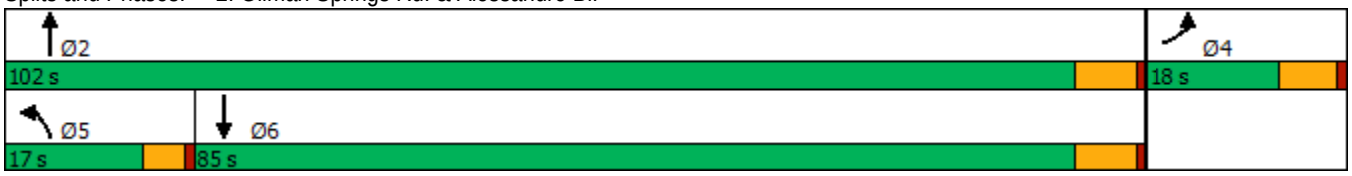
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		23.8		37.3			8.1	29.2				
Change Period (Y+Rc), s		4.0		6.5			5.4	6.5				
Max Green Setting (Gmax), s		26.0		53.5			14.6	33.5				
Max Q Clear Time (g_c+I1), s		16.5		5.7			3.6	14.0				
Green Ext Time (p_c), s		3.3		4.9			0.1	8.7				

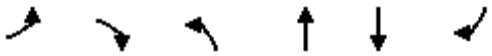
Intersection Summary												
HCM 6th Ctrl Delay			18.6									
HCM 6th LOS			B									

Lane Group	EBL	NBL	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	1	108	615	1057
Future Volume (vph)	1	108	615	1057
Turn Type	Prot	Prot	NA	NA
Protected Phases	4	5	2	6
Permitted Phases				
Detector Phase	4	5	2	6
Switch Phase				
Minimum Initial (s)	10.0	5.0	10.0	10.0
Minimum Split (s)	16.2	9.6	16.5	35.5
Total Split (s)	18.0	17.0	102.0	85.0
Total Split (%)	15.0%	14.2%	85.0%	70.8%
Yellow Time (s)	5.2	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	4.6	6.5	6.5
Lead/Lag		Lead		Lag
Lead-Lag Optimize?		Yes		Yes
Recall Mode	None	None	Min	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 104.5
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 2: Gilman Springs Rd. & Alessandro Bl.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	164	108	615	1057	5
Future Volume (veh/h)	1	164	108	615	1057	5
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	171	112	641	1101	5
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1	181	140	1452	1214	6
Arrive On Green	0.11	0.11	0.08	0.76	0.64	0.64
Sat Flow, veh/h	9	1594	1810	1900	1890	9
Grp Volume(v), veh/h	173	0	112	641	0	1106
Grp Sat Flow(s),veh/h/ln	1613	0	1810	1900	0	1898
Q Serve(g_s), s	11.1	0.0	6.3	12.5	0.0	51.8
Cycle Q Clear(g_c), s	11.1	0.0	6.3	12.5	0.0	51.8
Prop In Lane	0.01	0.99	1.00			0.00
Lane Grp Cap(c), veh/h	183	0	140	1452	0	1220
V/C Ratio(X)	0.94	0.00	0.80	0.44	0.00	0.91
Avail Cap(c_a), veh/h	183	0	216	1747	0	1435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.7	0.0	47.1	4.4	0.0	15.9
Incr Delay (d2), s/veh	50.4	0.0	5.5	0.3	0.0	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	0.0	2.9	2.8	0.0	19.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	96.1	0.0	52.6	4.7	0.0	24.1
LnGrp LOS	F	A	D	A	A	C
Approach Vol, veh/h	173			753	1106	
Approach Delay, s/veh	96.1			11.8	24.1	
Approach LOS	F			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		85.8		18.0	12.6	73.2
Change Period (Y+Rc), s		6.5		6.2	4.6	6.5
Max Green Setting (Gmax), s		95.5		11.8	12.4	78.5
Max Q Clear Time (g_c+I1), s		14.5		13.1	8.3	53.8
Green Ext Time (p_c), s		6.6		0.0	0.0	12.9

Intersection Summary	
HCM 6th Ctrl Delay	25.7
HCM 6th LOS	C

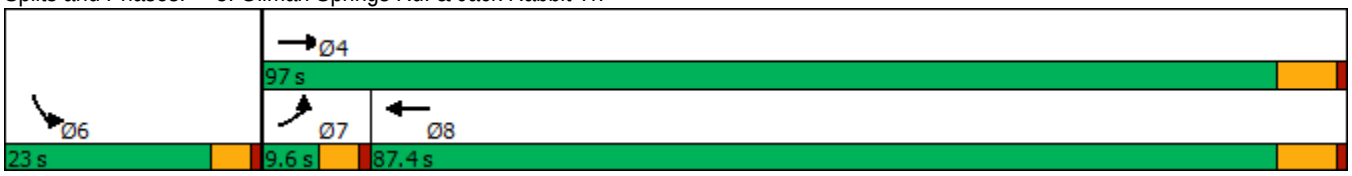
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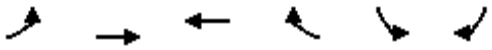
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	SBL
Lane Configurations				
Traffic Volume (vph)	3	1218	722	3
Future Volume (vph)	3	1218	722	3
Turn Type	Prot	NA	NA	Prot
Protected Phases	7	4	8	6
Permitted Phases				
Detector Phase	7	4	8	6
Switch Phase				
Minimum Initial (s)	5.0	10.0	10.0	10.0
Minimum Split (s)	9.6	16.5	23.5	14.6
Total Split (s)	9.6	97.0	87.4	23.0
Total Split (%)	8.0%	80.8%	72.8%	19.2%
Yellow Time (s)	3.6	5.5	5.5	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	6.5	4.6
Lead/Lag	Lead		Lag	
Lead-Lag Optimize?	Yes		Yes	
Recall Mode	None	None	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 87.8
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Gilman Springs Rd. & Jack Rabbit Tr.





Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	1218	722	3	3	2
Future Volume (veh/h)	3	1218	722	3	3	2
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	1269	752	3	3	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	7	1450	1338	5	98	65
Arrive On Green	0.00	0.76	0.71	0.71	0.11	0.11
Sat Flow, veh/h	1810	1900	1891	8	876	584
Grp Volume(v), veh/h	3	1269	0	755	6	0
Grp Sat Flow(s),veh/h/ln	1810	1900	0	1899	1751	0
Q Serve(g_s), s	0.1	42.4	0.0	17.2	0.3	0.0
Cycle Q Clear(g_c), s	0.1	42.4	0.0	17.2	0.3	0.0
Prop In Lane	1.00			0.00	0.50	0.33
Lane Grp Cap(c), veh/h	7	1450	0	1344	196	0
V/C Ratio(X)	0.41	0.87	0.00	0.56	0.03	0.00
Avail Cap(c_a), veh/h	101	1928	0	1722	361	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.3	7.5	0.0	6.3	35.3	0.0
Incr Delay (d2), s/veh	13.3	4.3	0.0	0.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	8.8	0.0	4.2	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.6	11.8	0.0	6.8	35.3	0.0
LnGrp LOS	E	B	A	A	D	A
Approach Vol, veh/h		1272	755		6	
Approach Delay, s/veh		11.9	6.8		35.3	
Approach LOS		B	A		D	

Timer - Assigned Phs			4		6	7	8
Phs Duration (G+Y+Rc), s			74.6		14.6	5.0	69.6
Change Period (Y+Rc), s			6.5		4.6	4.6	6.5
Max Green Setting (Gmax), s			90.5		18.4	5.0	80.9
Max Q Clear Time (g_c+I1), s			44.4		2.3	2.1	19.2
Green Ext Time (p_c), s			23.6		0.0	0.0	8.5

Intersection Summary	
HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBT	EBR	WBL	WBT	NBL
Lane Configurations					
Traffic Volume (vph)	1132	92	25	643	69
Future Volume (vph)	1132	92	25	643	69
Turn Type	NA	Perm	Prot	NA	Prot
Protected Phases	4		3	8	2
Permitted Phases		4			
Detector Phase	4	4	3	8	2
Switch Phase					
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	35.5	35.5	9.6	24.5	24.5
Total Split (s)	85.0	85.0	9.6	94.6	25.4
Total Split (%)	70.8%	70.8%	8.0%	78.8%	21.2%
Yellow Time (s)	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes		
Recall Mode	None	None	None	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 98.3
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Bridge St. & Gilman Springs Rd.





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1132	92	25	643	69	34
Future Volume (veh/h)	1132	92	25	643	69	34
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1179	0	26	670	72	35
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1308		47	1447	120	58
Arrive On Green	0.69	0.00	0.03	0.76	0.10	0.10
Sat Flow, veh/h	1900	1610	1810	1900	1160	564
Grp Volume(v), veh/h	1179	0	26	670	108	0
Grp Sat Flow(s),veh/h/ln	1900	1610	1810	1900	1740	0
Q Serve(g_s), s	49.2	0.0	1.4	12.5	5.7	0.0
Cycle Q Clear(g_c), s	49.2	0.0	1.4	12.5	5.7	0.0
Prop In Lane		1.00	1.00		0.67	0.32
Lane Grp Cap(c), veh/h	1308		47	1447	180	0
V/C Ratio(X)	0.90		0.55	0.46	0.60	0.00
Avail Cap(c_a), veh/h	1544		94	1733	341	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.4	0.0	46.5	4.2	41.4	0.0
Incr Delay (d2), s/veh	7.3	0.0	3.7	0.3	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.2	0.0	0.6	2.6	2.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.7	0.0	50.2	4.6	44.5	0.0
LnGrp LOS	B		D	A	D	A
Approach Vol, veh/h	1179	A		696	108	
Approach Delay, s/veh	19.7			6.3	44.5	
Approach LOS	B			A	D	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		16.5	7.1	73.0		80.1
Change Period (Y+Rc), s		6.5	4.6	6.5		6.5
Max Green Setting (Gmax), s		18.9	5.0	78.5		88.1
Max Q Clear Time (g_c+I1), s		7.7	3.4	51.2		14.5
Green Ext Time (p_c), s		0.2	0.0	15.2		7.0

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

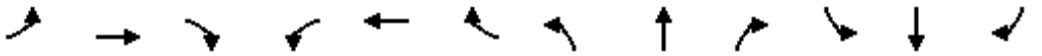
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBT	Ø2	Ø3
Lane Configurations								
Traffic Volume (vph)	44	1121	622	21	23	0		
Future Volume (vph)	44	1121	622	21	23	0		
Turn Type	Prot	NA	NA	Perm	Perm	NA		
Protected Phases	7	4	8			6	2	3
Permitted Phases				8	6			
Detector Phase	7	4	8	8	6	6		
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	30.5	30.5	30.5	14.6	14.6	14.6	9.6
Total Split (s)	9.6	95.0	95.0	95.0	15.4	15.4	15.4	9.6
Total Split (%)	8.0%	79.2%	79.2%	79.2%	12.8%	12.8%	13%	8%
Yellow Time (s)	3.6	5.5	5.5	5.5	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		
Total Lost Time (s)	4.6	6.5	6.5	6.5		4.6		
Lead/Lag	Lead	Lag	Lag	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	None	None	None	None	Min	Min	Min	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 80.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Driveway & Gilman Springs Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	1121	1	0	622	21	0	0	0	23	0	48
Future Volume (veh/h)	44	1121	1	0	622	21	0	0	0	23	0	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	47	1205	1	0	669	23	0	0	0	25	0	52
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	73	1407	1	2	1225	1038	0	233	0	99	23	133
Arrive On Green	0.04	0.74	0.74	0.00	0.64	0.64	0.00	0.00	0.00	0.12	0.00	0.12
Sat Flow, veh/h	1810	1898	2	1810	1900	1610	0	1900	0	328	191	1081
Grp Volume(v), veh/h	47	0	1206	0	669	23	0	0	0	77	0	0
Grp Sat Flow(s),veh/h/ln	1810	0	1900	1810	1900	1610	0	1900	0	1601	0	0
Q Serve(g_s), s	2.1	0.0	36.7	0.0	15.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.1	0.0	36.7	0.0	15.7	0.4	0.0	0.0	0.0	3.4	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.00		0.00	0.32		0.68
Lane Grp Cap(c), veh/h	73	0	1408	2	1225	1038	0	233	0	255	0	0
V/C Ratio(X)	0.65	0.00	0.86	0.00	0.55	0.02	0.00	0.00	0.00	0.30	0.00	0.00
Avail Cap(c_a), veh/h	111	0	2063	111	2063	1748	0	252	0	270	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	38.5	0.0	7.5	0.0	7.9	5.2	0.0	0.0	0.0	32.9	0.0	0.0
Incr Delay (d2), s/veh	3.6	0.0	3.1	0.0	0.5	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	7.3	0.0	4.3	0.1	0.0	0.0	0.0	1.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.1	0.0	10.6	0.0	8.5	5.2	0.0	0.0	0.0	33.5	0.0	0.0
LnGrp LOS	D	A	B	A	A	A	A	A	A	C	A	A
Approach Vol, veh/h		1253			692			0			77	
Approach Delay, s/veh		11.8			8.4			0.0			33.5	
Approach LOS		B			A						C	

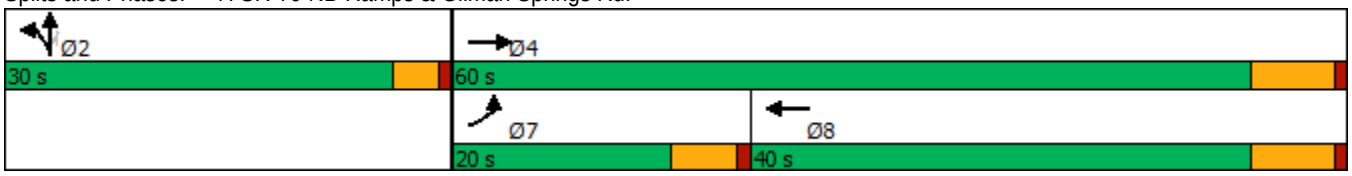
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.6	0.0	66.9		14.6	7.9	59.0				
Change Period (Y+Rc), s		4.6	4.6	6.5		4.6	4.6	6.5				
Max Green Setting (Gmax), s		10.8	5.0	88.5		10.8	5.0	88.5				
Max Q Clear Time (g_c+I1), s		0.0	0.0	38.7		5.4	4.1	17.7				
Green Ext Time (p_c), s		0.0	0.0	21.7		0.1	0.0	7.1				

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Configurations					
Traffic Volume (vph)	51	796	333	5	16
Future Volume (vph)	51	796	333	5	16
Turn Type	Prot	NA	NA	NA	Perm
Protected Phases	7	4	8	2	
Permitted Phases					2
Detector Phase	7	4	8	2	2
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	4.5	4.5
Minimum Split (s)	10.4	34.5	32.5	9.0	9.0
Total Split (s)	20.0	60.0	40.0	30.0	30.0
Total Split (%)	22.2%	66.7%	44.4%	33.3%	33.3%
Yellow Time (s)	4.4	5.5	5.5	3.0	3.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.4	6.5	6.5	4.0	4.0
Lead/Lag	Lead		Lag		
Lead-Lag Optimize?	Yes		Yes		
Recall Mode	None	None	None	Min	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 55.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 7: SR-79 NB Ramps & Gilman Springs Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	796	0	0	333	228	250	5	16	0	0	0
Future Volume (veh/h)	51	796	0	0	333	228	250	5	16	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1900	1900	0	0	1900	1900	1900	1900	1900			
Adj Flow Rate, veh/h	55	856	0	0	358	245	269	5	17			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	101	1879	0	0	707	476	429	8	389			
Arrive On Green	0.06	0.52	0.00	0.00	0.34	0.34	0.24	0.24	0.24			
Sat Flow, veh/h	1810	3705	0	0	2160	1390	1778	33	1610			
Grp Volume(v), veh/h	55	856	0	0	312	291	274	0	17			
Grp Sat Flow(s),veh/h/ln	1810	1805	0	0	1805	1650	1811	0	1610			
Q Serve(g_s), s	1.3	6.6	0.0	0.0	6.1	6.2	6.0	0.0	0.4			
Cycle Q Clear(g_c), s	1.3	6.6	0.0	0.0	6.1	6.2	6.0	0.0	0.4			
Prop In Lane	1.00		0.00	0.00		0.84	0.98		1.00			
Lane Grp Cap(c), veh/h	101	1879	0	0	618	565	437	0	389			
V/C Ratio(X)	0.55	0.46	0.00	0.00	0.51	0.51	0.63	0.00	0.04			
Avail Cap(c_a), veh/h	599	4381	0	0	1372	1254	1068	0	950			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	20.3	6.6	0.0	0.0	11.5	11.6	14.9	0.0	12.8			
Incr Delay (d2), s/veh	9.5	0.4	0.0	0.0	1.4	1.6	3.1	0.0	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.7	1.2	0.0	0.0	1.9	1.8	2.3	0.0	0.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	7.0	0.0	0.0	12.9	13.1	18.1	0.0	12.9			
LnGrp LOS	C	A	A	A	B	B	B	A	B			
Approach Vol, veh/h		911			603			291				
Approach Delay, s/veh		8.4			13.0			17.8				
Approach LOS		A			B			B				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		14.6		29.4			7.9	21.6				
Change Period (Y+Rc), s		4.0		6.5			5.4	6.5				
Max Green Setting (Gmax), s		26.0		53.5			14.6	33.5				
Max Q Clear Time (g_c+I1), s		8.0		8.6			3.3	8.2				
Green Ext Time (p_c), s		2.7		12.7			0.1	6.9				
Intersection Summary												
HCM 6th Ctrl Delay			11.4									
HCM 6th LOS			B									

APPENDIX 7.7:

EAPC (2018) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	617	9	1009	162	56
v/c Ratio	0.30	0.03	0.44	0.32	0.11
Control Delay	4.8	22.3	7.6	18.8	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.8	22.3	7.6	18.8	1.6
Queue Length 50th (ft)	17	2	82	36	0
Queue Length 95th (ft)	76	15	155	98	7
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2516	648	3479	1110	1031
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	0.01	0.29	0.15	0.05

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	47	394	831	469	8
v/c Ratio	0.18	0.22	0.62	0.74	0.01
Control Delay	33.8	9.7	18.5	32.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	33.8	9.7	18.5	32.6	0.0
Queue Length 50th (ft)	21	49	152	204	0
Queue Length 95th (ft)	55	71	222	#416	0
Internal Link Dist (ft)		777	1139	1422	
Turn Bay Length (ft)	215				240
Base Capacity (vph)	413	2838	1858	739	723
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.11	0.14	0.45	0.63	0.01

Intersection Summary

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



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1210	4	629	308	54
v/c Ratio	0.67	0.02	0.33	0.58	0.10
Control Delay	11.7	30.2	9.0	24.8	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	11.7	30.2	9.0	24.8	0.9
Queue Length 50th (ft)	97	1	60	97	0
Queue Length 95th (ft)	297	11	116	213	4
Internal Link Dist (ft)	2294		777	1566	
Turn Bay Length (ft)		220			150
Base Capacity (vph)	2075	456	3144	816	787
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.58	0.01	0.20	0.38	0.07

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	55	856	603	274	17
v/c Ratio	0.17	0.47	0.45	0.52	0.03
Control Delay	26.0	9.9	11.7	22.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	26.0	9.9	11.7	22.3	0.1
Queue Length 50th (ft)	16	82	55	79	0
Queue Length 95th (ft)	55	161	122	173	0
Internal Link Dist (ft)		777	1139	1422	
Turn Bay Length (ft)	215				240
Base Capacity (vph)	518	3227	2306	925	878
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.11	0.27	0.26	0.30	0.02

Intersection Summary