URBAN | CROSSROADS

1101 CALIFORNIA WAREHOUSE

TRAFFIC ANALYSIS

PREPARED BY: Charlene So | cso@urbanxroads.com
Aric Evatt | aevatt@urbanxroads.com

Reference Number	Agency	Date
15517-05 TA Report	City of Redlands	December 14, 2023

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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
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
OPR	Office of Planning and Research
PHF	Peak Hour Factor
Project	1101 California Warehouse
SBCTA	San Bernardino County Transportation Authority
TA	Traffic Analysis
TSF	Thousand Square Feet
VMT	Vehicle Miles Traveled

1 INTRODUCTION

This report presents the results of the traffic analysis (TA) for the proposed 1101 California Warehouse redevelopment (Project) which is located on the southwest corner of California Street and Lugonia Avenue in the City of Redlands, as shown on Exhibit 1-1. The Project is located on the former Splash Kingdom amusement park site (currently non-operational). The purpose of this traffic analysis is to evaluate the potential deficiencies to traffic and circulation associated with the development of the proposed Project, and to recommend improvements to address deficiencies in comparison to established regulatory thresholds. The scope of this study has been developed through consultation with the City of Redlands, and follows the City's traffic study requirements. The Project Traffic Study Scoping agreement with the City of Redlands is provided in Appendix 1.1 of this TA.

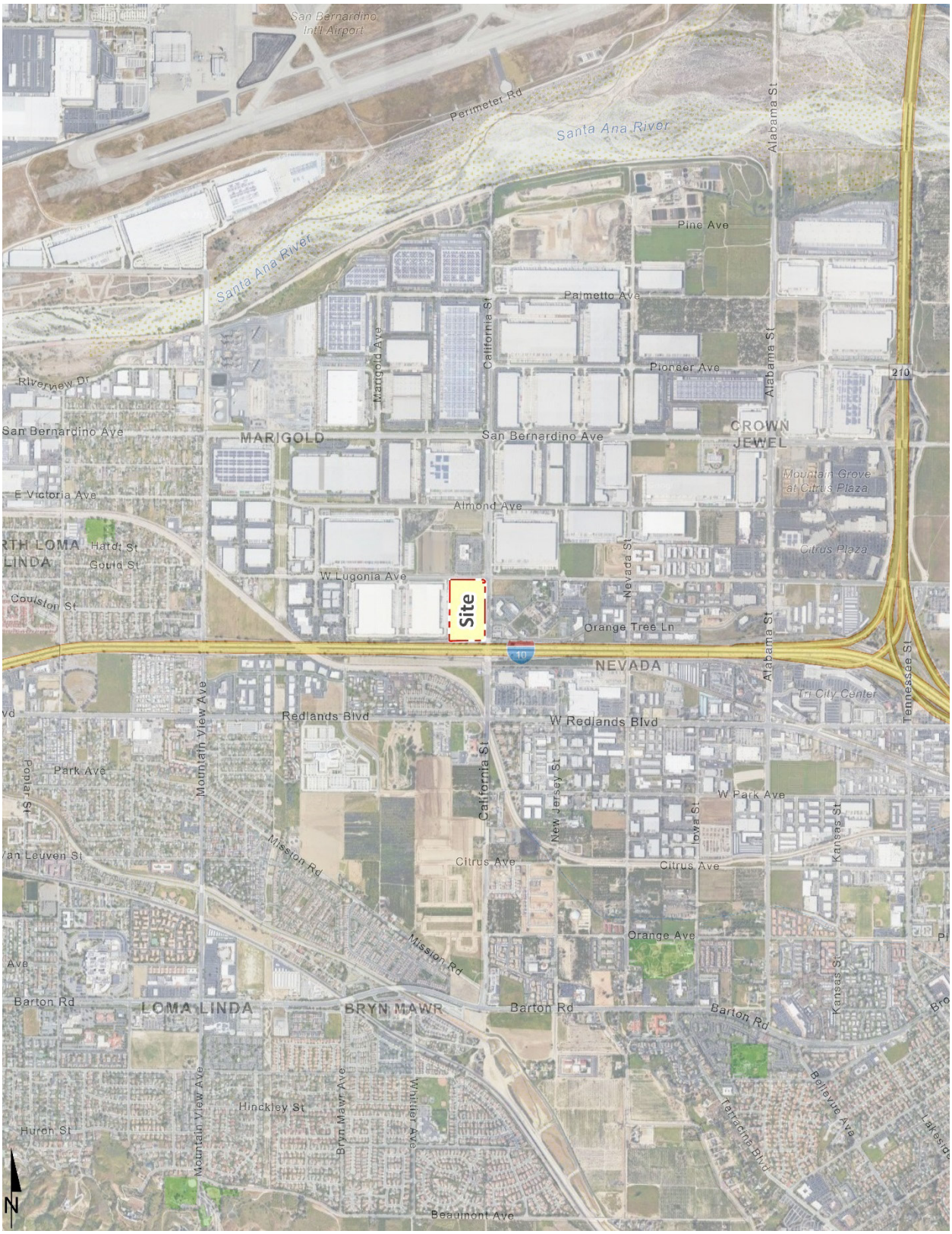
1.1 SUMMARY OF FINDINGS

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

- Both Project frontage roadways of Lugonia Avenue and California Street are currently constructed to their ultimate General Plan roadway half-section; however, the Project should construct curb and gutter, sidewalk, and landscaping improvements in compliance with the circulation recommendations found in the City of Redlands General Plan Circulation Element and as needed to facilitate site access, where applicable.

Additional details and intersection lane geometrics are provided in Section 1.6 *Recommendations* of this TA. All of the study area intersections are anticipated to operate at acceptable levels of service (per the City's thresholds), as such, there are no off-site improvements recommended as the addition of Project traffic is not anticipated to result in any deficiencies based on the City's thresholds and is therefore compliant with Measure U. As such, the Project Applicant's shall pay its requisite fees towards future regional roadway improvements consistent with the City's requirements (see Section 6 *Local and Regional Funding Mechanisms*).

EXHIBIT 1-1: LOCATION MAP



1.2 PROJECT OVERVIEW

The Project consists of the development of a 357,610 square foot warehouse building. For the purposes of this analysis, the trip generation will be calculated assuming 20% general light industrial use (71,522 square feet) and 80% general warehousing use (286,088 square feet). The Project is anticipated to be built out and occupied by the year 2025. The preliminary site plan is illustrated on Exhibit 1. The Project will have access to Lugonia Avenue and California Street via the following driveways:

- Driveway 1 on Lugonia Avenue would serve passenger cars and trucks. Driveway 1 would accommodate full access (e.g., no turn restrictions).
- Driveway 2 on Lugonia Avenue would serve passenger cars only and would be restricted to right-in/right-out access only.
- Driveway 3 on California Street is not anticipated to be modified from the current location on California Street and would serve passenger cars only. Driveway 3 would be restricted to right-in/right-out access only.
- Driveway 4 on California Street is not anticipated to be modified from the current location on California Street and would serve passenger cars only. Driveway 4 aligns with the existing Orange Tree Lane on the east and would accommodate full access with the existing traffic signal.
- Regional access to the Project site is provided via the I-10 Freeway at California Street interchange.

Trips generated by the Project's proposed land use have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) and published in their most current edition of the Trip Generation Manual, 11th Edition, 2021. (1) The trip generation rates for both the Warehousing (ITE 150) and General Light Industrial (ITE 110) land use codes account for ancillary office use that supports the primary use. As such, trip generation for the office space proposed (6,000 square feet) has not been calculated separately. The purpose in evaluating 20% of the total building square footage as general light industrial (as opposed to 100% warehousing) is to artificially increase the trip generation for the proposed Project in order to provide flexibility to potential future tenants and to conduct a more conservative analysis (i.e., not understanding potential deficiencies). The Project is anticipated to generate a total of 842 two-way trips per day with 102 AM peak hour trips and 99 PM peak hour trips (actual vehicles). The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in detail in Section 4.1 *Project Trip Generation* of this TA.

1.3 ANALYSIS SCENARIOS

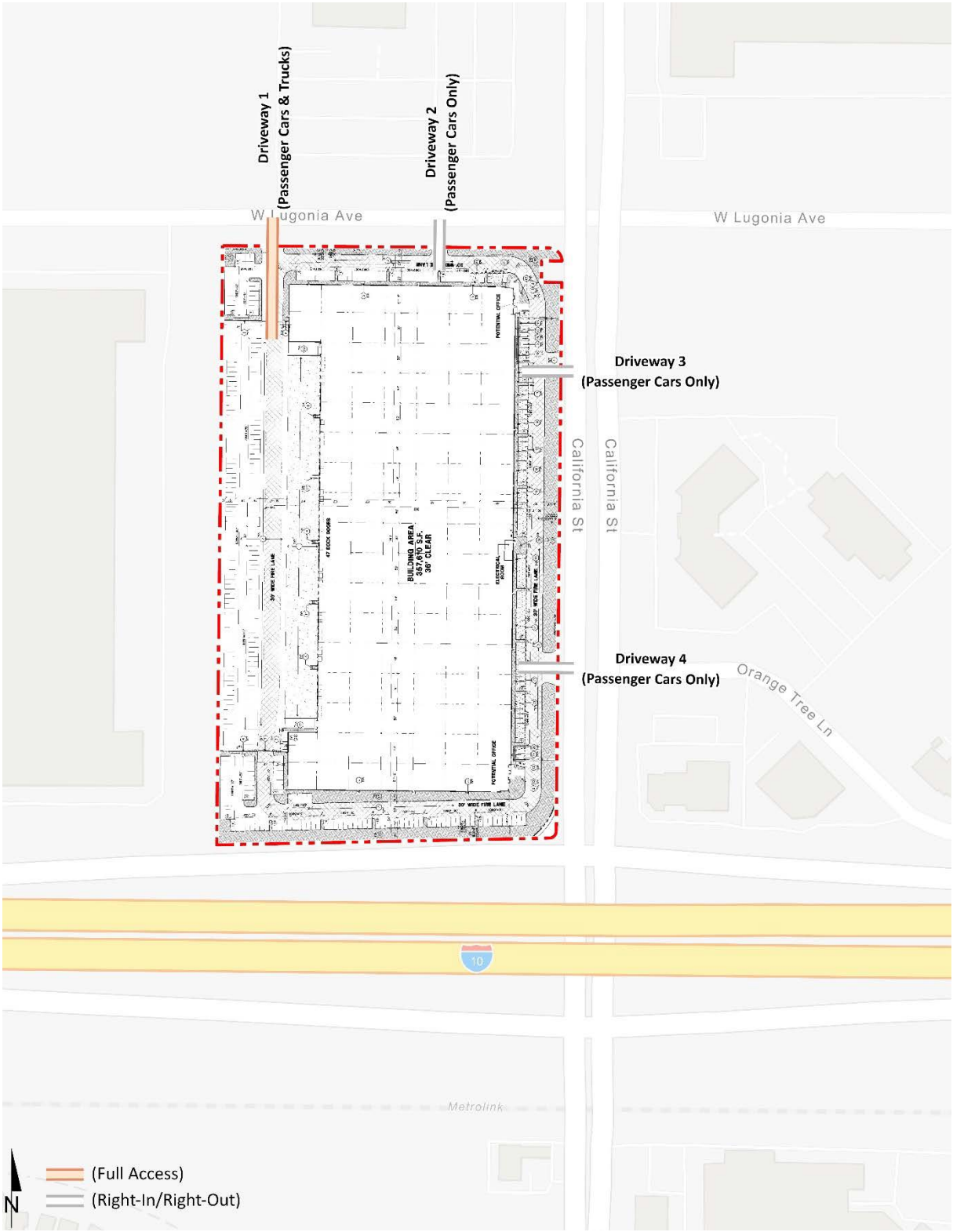
For the purposes of this traffic study, potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2023) Conditions
- Existing plus Project Conditions

1.3.1 EXISTING (2023) CONDITIONS

Information for Existing (2023) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared. For a detailed discussion on the existing traffic counts, see Section 3.6 *Existing Traffic Counts*.

EXHIBIT 1-2: PRELIMINARY SITE PLAN



1.3.2 EXISTING PLUS PROJECT CONDITIONS

The Existing Plus Project (E+P) analysis determines traffic deficiencies that would occur on the existing roadway system with the addition of Project traffic. The E+P analysis has been utilized to identify the project-specific deficiencies associated solely with the development of the proposed Project based on a comparison of the E+P traffic conditions to Existing conditions.

1.4 STUDY AREA

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

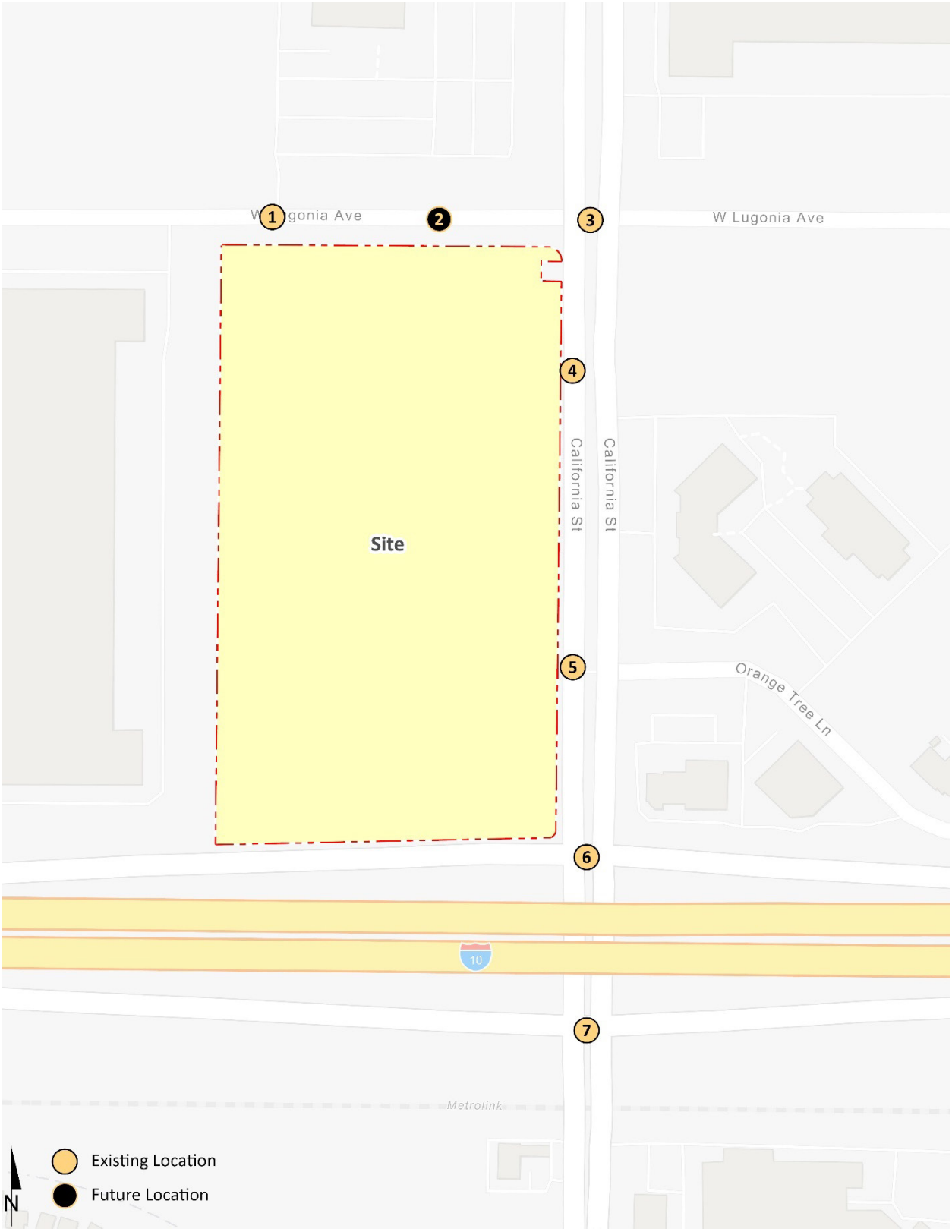
The following 7 study area intersections shown on Exhibit 1-3 and listed on Table 1-1 were selected for this TA based on consultation with City of Redlands staff. The "50 peak hour trip" criterion utilized by the City of Redlands is consistent with the methodology employed by the County of San Bernardino, and generally represents a minimum number of trips at which a typical intersection would have the potential to be substantively deficient 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 deficiency (i.e., study area).

The intent of a Congestion Management Program (CMP) is to better link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The County of San Bernardino CMP became effective with the passage of Proposition 111 in 1990 and last updated in 2016 with an updated Nexus Study completed in 2020. (2) There are no study area intersections identified as a San Bernardino County CMP intersection.

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

#	Intersection	Jurisdiction	CMP Facility?
1	Driveway 1 & Lugonia Avenue	Redlands	No
2	Driveway 2 & Lugonia Avenue	Redlands	No
3	California Street & Lugonia Avenue	Redlands	No
4	California Street & Driveway 3/Orange Tree Lane	Redlands	No
5	California Street & Driveway 4/Orange Tree Lane	Redlands	No
6	California Street & I-10 WB Ramps	Caltrans, Redlands	No
7	California Street & I-10 EB Ramps	Caltrans, Redlands	No

EXHIBIT 1-3: STUDY AREA



1.5 DEFICIENCIES

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

TABLE 1-2: SUMMARY OF LOS

		Existing		Existing + Project	
#	Intersection	AM	PM	AM	PM
1	Driveway 1 & Lugonia Av.	●	●	●	●
2	Driveway 2 & Lugonia Av.	N/A	N/A	●	●
3	California St. & Lugonia Av.	●	●	●	●
4	California St. & Driveway 3/Orange Tree Ln.	N/A	N/A	●	●
5	California St. & Driveway 4/Orange Tree Ln.	●	●	●	●
6	California St. & I-10 WB Ramps	●	●	●	●
7	California St. & I-10 EB Ramps	●	●	●	●

● = A - C ● = D/E ● = F

1.5.1 EXISTING (2023) CONDITIONS

As shown on Table 1-2, all of the study area intersections are currently operating at an acceptable LOS during the weekday AM and PM peak hours. In addition, there are currently no freeway off-ramp queuing issues at the I-10 Freeway and California Street ramps.

1.5.2 E+P CONDITIONS

All of the study area intersections are anticipated to continue to operate at an acceptable LOS with the addition of Project traffic under E+P traffic conditions. The I-10 Freeway and California Street ramps are anticipated to continue to operate without any queuing issues with the addition of Project traffic.

1.6 RECOMMENDATIONS

1.6.1 SITE ADJACENT AND SITE ACCESS RECOMMENDATIONS

The recommended site access driveway improvements for the Project are described below. Exhibit 1-4 also illustrates the site access improvements. Construction of on-site and site adjacent improvements shall occur in conjunction with adjacent Project development activity or as needed for Project access purposes.

Recommendation 1 – Driveway 1 & Lugonia Avenue (#1) – The following improvements are necessary to accommodate site access:

- Project to install stop control on the northbound approach and accommodate a minimum of one lane for ingress and egress at the access point (Project Driveway 1).
- Accommodate a westbound left turn lane within the existing median with a minimum storage of 100-feet.

Recommendation 2 – Driveway 2 & Lugonia Avenue (#2) – The following improvement is necessary to accommodate site access:

- Project to install stop control on the northbound approach and accommodate a minimum of one lane for ingress and egress at the access point (Project Driveway 2). Driveway 2 will be restricted to right-in/right-out access only.

Recommendation 3 – California Street & Driveway 3 (#4) – The following improvement is necessary to accommodate site access:

- Project to maintain the stop control on the eastbound approach and one lane for ingress and one lane for egress at the access point (Project Driveway 3). Driveway 3 will be restricted to right-in/right-out access only consistent with the existing access restriction. Driveway 3 is not anticipated to be modified from the current location on California Street and does not require any new curb cuts or curb radii improvements.

Recommendation 4 – California Street & Driveway 4/Orange Tree Lane (#5) – The following improvement is necessary to accommodate site access:

- Project shall maintain the existing traffic signal and maintain one lane for ingress and one lane for egress at the access point (Project Driveway 4). Driveway 4 currently aligns with the existing Orange Tree Lane. No other existing lane changes are proposed (including striping or turn pocket storage for existing lanes). Driveway 4 is not anticipated to be modified from the current location on California Street and does not require any new curb cuts or curb radii improvements.

Recommendation 5 – Lugonia Avenue is an east-west oriented roadway located on the Project's northern boundary. Lugonia Avenue is currently constructed to its ultimate General Plan roadway half-section; however, the Project should construct landscaping improvements in compliance with the circulation recommendations found in the City of Redlands General Plan Circulation Element and as needed to facilitate site access (modifications will be required to accommodate the proposed Driveway 2).

Recommendation 6 – California Street is a north-south oriented roadway located on the Project's eastern boundary. California Street is currently constructed to its ultimate General Plan roadway half-section; however, the Project should construct landscaping improvements in compliance with the circulation recommendations found in the City of Redlands General Plan Circulation Element. The existing access points on California Street will be maintained to facilitate site access.

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

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

1.6.2 OFF-SITE RECOMMENDATIONS

As discussed in Section 1.5 *Deficiencies* of this report, all study area intersections are currently operating and anticipated to continue to operate at an acceptable LOS during the peak hours for E+P traffic conditions. As such, no off-site intersection improvements are identified. However, the Project Applicant shall pay requisite fees for the applicable pre-existing fee programs (see Section 6 *Local and Regional Funding Mechanisms*.

1.7 TRUCK ACCESS

Due to the typical wide turning radius of large trucks, a truck turning template has been overlaid on the site plan at each applicable Project driveway anticipated to be utilized by heavy trucks in order to determine appropriate curb radii and to verify that trucks will have sufficient space to execute turning maneuvers (see Exhibit 1-5). A WB-67 truck (53-foot trailer) has been utilized for the purposes of this analysis. As shown on Exhibit 1-5, the proposed southwest and southeast curb radii at Driveway 1 on Lugonia Avenue are anticipated to accommodate the ingress and egress of heavy trucks.

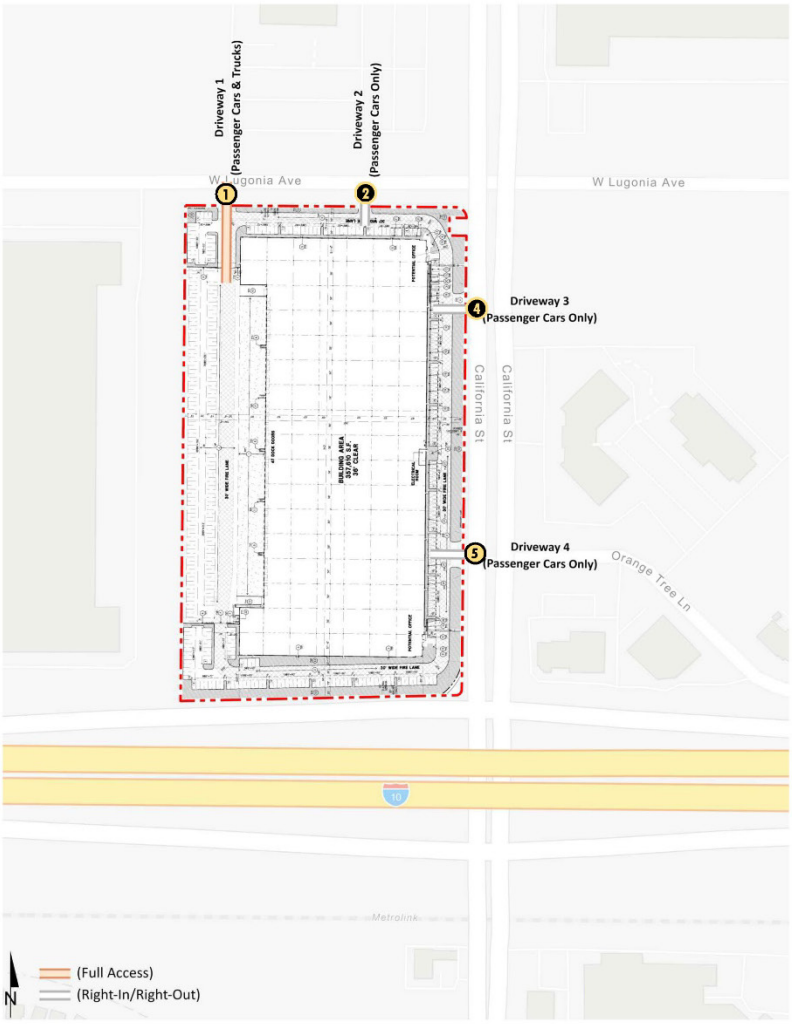
1.8 QUEUING ANALYSIS

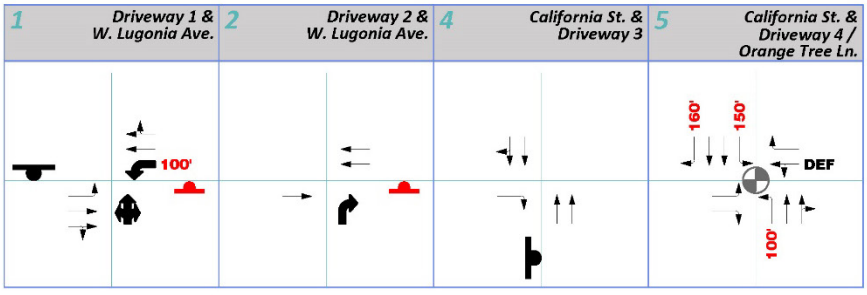
A queuing analysis was conducted along the site adjacent roadways for E+P traffic conditions to determine adequate spacing between driveways and intersections to accommodate near term 95th percentile queues (with no spillback into adjacent intersections). The analysis was conducted for both the weekday AM and weekday PM peak hours. The E+P queuing results are summarized in Table 1-3 and worksheets are provided in Appendix 1.2 of this TA.

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

SimTraffic is designed to model networks of signalized and unsignalized intersections, with the primary purpose of checking and fine-tuning signal operations. SimTraffic uses the input parameters from Synchro to generate random simulations. The 95th percentile queue is not necessarily ever observed; it is simply based on statistical calculations (or Average Queue plus 1.65 standard deviations). SimTraffic has been utilized to assess peak hour queuing at the site access driveways for E+P traffic conditions. The random simulations generated by SimTraffic have been utilized to determine the 50th and 95th percentile queue lengths observed for each turn lane. A SimTraffic simulation has been recorded five (5) times, during the weekday AM and weekday PM peak hours, and has been seeded for 30-minute periods with 60-minute recording intervals.

EXHIBIT 1-4: SITE ACCESS RECOMMENDATIONS





= Existing Intersection Analysis Location
= Future Intersection Analysis Location
= Existing Traffic Signal
= Existing Stop Sign
= Future Stop Sign
= Existing Lane
= Lane Improvement
100' = Minimum Turn Pocket Length
DEF = Defacto Right Turn

EXHIBIT 1-5: TRUCK ACCESS

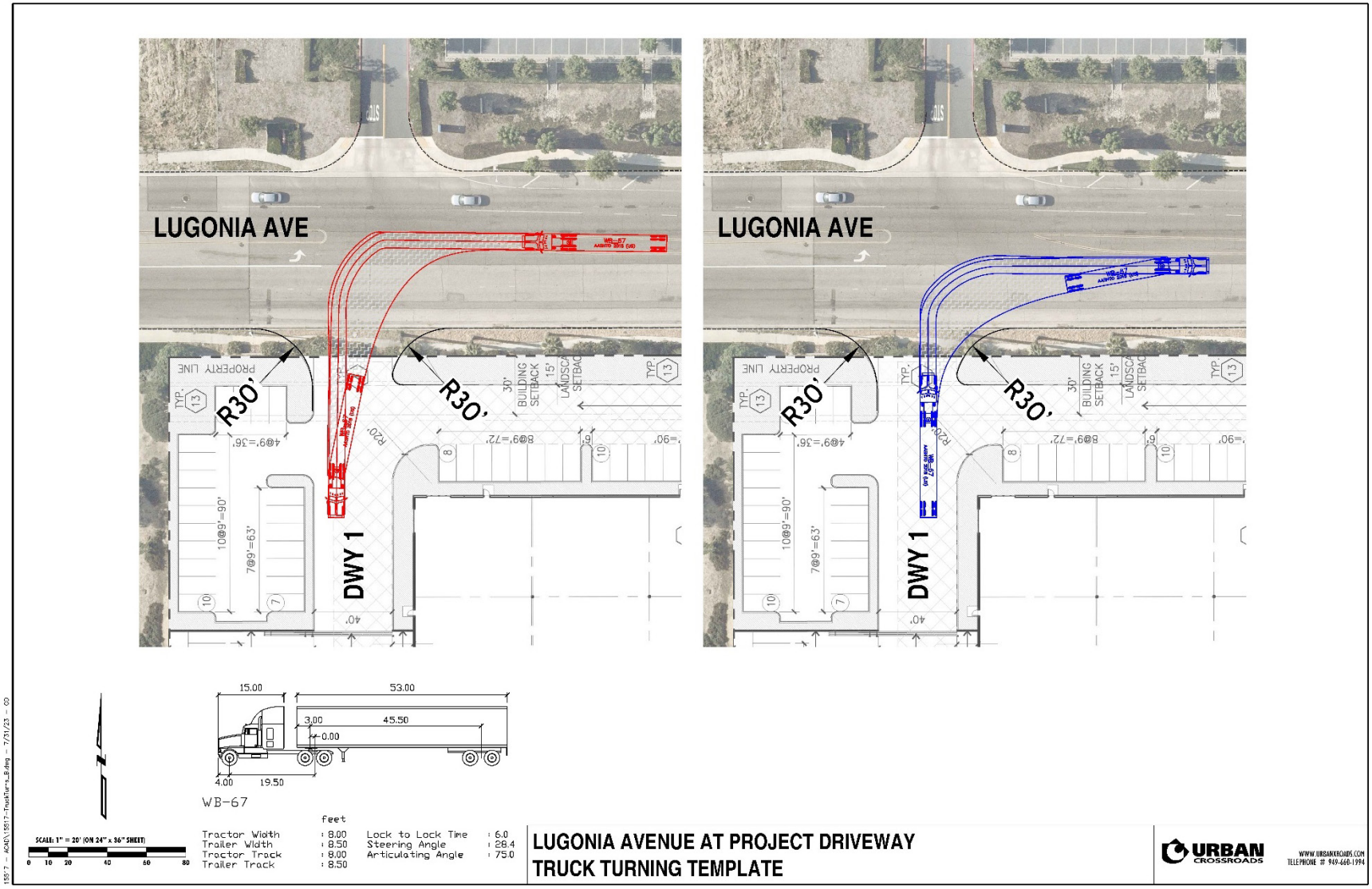


TABLE 1-3: QUEUING ANALYSIS FOR SITE ADJACENT INTERSECTIONS

Intersection	Movement	Available Stacking Distance (Feet)	95th Percentile Queue (Feet) AM Peak	95th Percentile Queue (Feet) PM Peak	Acceptable? [1] AM	Acceptable? [1] PM
1 Driveway 1 & Lugonia Av.	NBL/T/R	100	31	38	Yes	Yes
	SBL/T/R	80	43	58	Yes	Yes
	EBL	100	4	0	Yes	Yes
	WBL	100	12	12	Yes	Yes
2 Driveway 2 & Lugonia Av.	NBR	50	11	32	Yes	Yes
4 California St. & Driveway 3	NBT	520	5	0	Yes	Yes
	SBT	210	0	32	Yes	Yes
	EBR	60	17	39	Yes	Yes
5 California St. & Driveway 4	NBL	100	111	52	Yes	Yes
	NBT	280	217	138	Yes	Yes
	SBL	150	56	50	Yes	Yes
	SBT	520	117	355	Yes	Yes
	EBL/T	60	19	37	Yes	Yes
	WBR	60	18	40	Yes	Yes
	WBL/T	200	81	178	Yes	Yes
	WBR	200	30	28	Yes	Yes

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

1.9 SENATE BILL 743 – VEHICLE MILES TRAVELED (VMT)

Senate Bill 743 (SB 743), approved in 2013, endeavors to change the way transportation impacts will be determined according to the California Environmental Quality Act (CEQA). The Office of Planning and Research (OPR) has recommended the use of vehicle miles traveled (VMT) as the replacement for automobile delay-based LOS. In December 2018, the Natural Resources Agency finalized updates to CEQA Guidelines to incorporate SB 743 (i.e., VMT). While a lead agency has the option to immediately apply the new VMT based analysis methodology and thresholds for the purposes of evaluating transportation impacts, statewide application of the new guidelines is required July 1, 2020.

The City of Redlands City Council adopted their VMT guidelines only July 21, 2020. The City acknowledges automobile delay will no longer be considered a CEQA impact for development projects and will use VMT as the metric for determining. As such, the LOS operations included in this TA for study area intersections are informational and are not anticipated to support the environmental document. The VMT analysis for the proposed Project has been prepared under separate cover from the TA.

2 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. The methodologies described are generally consistent with City of Redlands and San Bernardino County CMP traffic study guidelines. (2)

2.1 LEVEL OF SERVICE

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

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The 6th Edition Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (3) The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The City of Redlands requires signalized intersection operations analysis based on the methodology described in the HCM. (3) Intersection LOS operations are based on an intersection's average control delay. Control delays include initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is related to the average control delay per vehicle and is correlated to a LOS designation as described on Table 2-1.

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

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Customary practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g., PHF = [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, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (3)

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

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

Source: HCM, 6th Edition

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

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Redlands requires the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (3) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2). At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. Delay for the intersection is reported for the worst individual movement at a two-way stop-controlled intersection. For all-way stop controlled intersections, LOS is computed for the intersection as a whole (average delay).

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

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

Source: HCM, 6th Edition

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

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or determine the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD). (4)

The signal warrant criteria for Existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (4) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions and for all future analysis scenarios for existing unsignalized intersections. Warrant 3 is appropriate to use for this TA because it provides specialized warrant criteria for intersections with rural characteristics. 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. Urban warrants have been used as posted speed limits on the major roadways with unsignalized intersections are 40 miles per hour or below and rural warrants have been used on roadways with speeds greater than 40 miles per hour.

Traffic signal warrant analyses were performed at the intersection of Driveway 1 and Lugonia Avenue only. Driveway 2 on Lugonia Avenue and Driveway 3 on California Street are both restricted to right-in/right-out and would not be eligible for signalization. All remaining study area intersections are currently signalized.

The Existing conditions traffic signal warrant analysis is presented in the subsequent section, Section 3 *Area Conditions* of this report. The traffic signal warrant analyses for future conditions are presented in Section 5 *Existing plus Project Traffic Conditions* of this report. It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in

order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.4 OFF-RAMP QUEUING ANALYSIS

Consistent with Caltrans requirements, the 95th percentile queuing of vehicles has been assessed at the off-ramps to determine potential queuing deficiencies at the freeway ramp intersections at the I-10 Freeway at the California Street interchange. Specifically, the off-ramp queuing analysis is utilized to identify any potential queuing and "spill back" onto the I-10 Freeway mainline from the off-ramps.

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

2.5 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

Minimum Acceptable LOS and associated definitions of intersection deficiencies has been obtained from each of the applicable surrounding jurisdictions.

2.5.1 CITY OF REDLANDS

The City of Redlands has established specific performance criteria for intersection operations. These performance criteria include standards related to determining the effect of project deficiencies on the roadway system. The City of Redlands has established LOS C as the minimum level of service for its intersections. Therefore, any intersection operating at LOS D or worse will be considered deficient for the purposes of this analysis. Additionally, General Plan Policy 5.20c from the Redlands General Plan states that: Where the current level of service at a location within the City of Redlands is below the LOS C standard, no development project shall be approved that cannot be improved so that it does not reduce the existing level of service at that location (i.e. intersections in Redlands that are deficient to start out with are acceptable as long as they do not further degrade LOS) except as provided in Section 5.20b.

2.5.2 SAN BERNARDINO COUNTY CMP

The CMP definition of deficiency is based on maintaining a level of service standard of LOS E or better, where feasible, except where an existing LOS F condition is identified in the CMP document. (2)

2.5.3 MEASURE U

Per Section 2-A (Principles of Managed Development, 1A.60 Principle Six:

a) *Levels of Traffic Service throughout the City Shall Be Maintained- To assure the adequacy of various public services and to prevent degradation of the quality of life experienced by the citizens of Redlands, all new development projects shall assure by appropriate mitigation measures that, at a minimum, traffic levels of service are maintained at a minimum of LOS C throughout the City, except where the current level of service is lower than LOS C, or as provided in Section 5.20 of the Redlands General Plan where a more intense LOS is specifically permitted. In any location where the level of service is below LOS C at the time an application for a development project is submitted, mitigation measures shall be imposed on that development project to assure, at a minimum, that the level of traffic service is maintained at levels of service that are no worse than those existing at the time an application for development is filed, except as provided in Section 5.20b.*

b) *Collector and Local Street Standards Shall Be Maintained- No development project shall be approved which will generate traffic volume on residential collector streets or local residential streets in excess of the standards set forth in the Redlands General Plan at Sections 5.32a and 5.32b. Roadways shall be designed and designated for use in accord with the standards set forth in GP Figure 5.3 of the Redlands General Plan.*

General Plan Policy 5.20 Measure U Policies (see also GP Figure 5-1):

a) *Maintain LOS C or better as the standard at all intersections presently at LOS C or better.*

b) *Within the identified GP Figure 5-1, including that unincorporated Cunty area identified on GP Figure 5-1 as the "donut hold," maintain LOS C or better, however, accept a reduced LOS on a case-by-case basis upon approval by a four-fifths vote of the total authorized membership of the City Council.*

c) *Where the current level of service at a location within the City of Redlands is below the Level of Service (LOS) C standard, no development project shall be approved that cannot be mitigated so that it does not reduce the existing level of service at that location except as provided in Section 5.20b.*

2.6 THRESHOLDS OF SIGNIFICANCE

2.6.1 CITY OF REDLANDS INTERSECTIONS

The following thresholds will be utilized to determine whether the addition of Project traffic at a study intersection results in a project-related deficiency:

- A project deficiency occurs at a study intersection if the addition of project-generated trips reduces the peak hour level of service of the study intersection to change from acceptable operation (e.g., LOS A, B or C) to deficient operation (e.g., LOS D, E or F) and, if applicable, also causes an unsignalized intersection to satisfy a Caltrans traffic signal warrant; or
- A project deficiency occurs at a study intersection if the addition of project-generated trips worsens the pre-project level of service grade at a deficiently operating (e.g., LOS D, E or F) intersection and, if applicable, also causes an unsignalized intersection to satisfy a Caltrans traffic signal warrant.

2.6.2 CMP INTERSECTIONS

To determine whether the addition of project traffic (as defined through the comparison of Existing traffic conditions to E+P traffic conditions) at a CMP study intersection would result in a direct project-specific traffic deficiency, the following will be utilized:

- When the pre-Project condition is at or better than LOS E for CMP intersections (i.e., acceptable LOS), and project-generated traffic, as measured by 50 or more peak hour trips, causes deterioration below LOS E (i.e., unacceptable LOS), a deficiency is deemed to occur.

In the event that an intersection is operating at or is forecast to operate at a deficient LOS, the CMP guidelines have defined a series of steps to be completed to determine the Project's contribution to the deficiency of intersections, which has been applied to both CMP and non-CMP study area intersections. The steps are as follows:

- Identify the improvements (will become conditions of approval) necessary to achieve an acceptable service level,
- Calculate the Project's share in the future traffic volume projections for the peak hours,
- Estimate the cost to implement recommended improvements, and
- Calculate the Project's fair-share contribution of traffic deficiencies

2.6.3 MEASURE U

Levels of service throughout the City shall be maintained to assure the adequacy of various public services and to prevent degradation of the quality of life experienced by the citizens of Redlands. As such, all new development projects shall assure by appropriate mitigation measures that, at a minimum, traffic levels of service are maintained at a minimum of LOS C throughout the City, except where the current level of service is lower than LOS C, or as provided in Section 5.20 of the Redlands General Plan where a more intense LOS is permitted. Per 5.20c of Measure U, where the current LOS at a location within the City of Redlands is below the LOS C standard, no development project shall be approved that cannot be improved so that it does not reduce the existing LOS at that location except as provided in Section 5.20b.

If none of the study intersections fall below LOS C, then no deficiencies are created. Thus, no improvements would be needed as pertaining to Measure U.

3 AREA CONDITIONS

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

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the Traffic Study Scoping Agreement (Appendix 1.1) and discussion with City of Redlands staff, the study area includes a total of 7 existing and future intersections as shown previously on Exhibit 1-3. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 CITY OF REDLANDS GENERAL PLAN CIRCULATION ELEMENT

As previously noted, the Project site is located within the City of Redlands. Exhibit 3-2 shows the City of Redlands General Plan Circulation Element. Exhibit 3-3 shows the City of Redlands General Plan roadway cross-sections.

Major Arterial are typically four-lane or six-lane divided streets with center a left turn lane and medians mid-block to separate the two directions of travel and limit access. These roadways usually carry the highest volumes and have the longest trips with moderately high-speed routes. The following study area roadways within the study area are classified as a Major Arterial:

- California Street
- Lugonia Avenue west of California Street

Minor Arterial are no more than four-lanes wide and may be undivided to minimize roadway width and right-of-way (i.e., no median). Lower volume minor arterials may be two lanes wide with left turn lanes at intersections or have a painted two-way-left-turn-lane median. These roadways interconnect with and augment the major arterial system and serve trips of a moderate length. The following study area roadway within the study area is classified as a Minor Arterial:

- Lugonia Avenue

3.3 TRUCK ROUTES

Exhibit 3-4 shows the City of Redlands truck routes. As shown, both California Street and Lugonia Avenue are identified as truck routes. These truck routes have been utilized to route truck traffic associated with the proposed Project for the purposes of this TA.

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

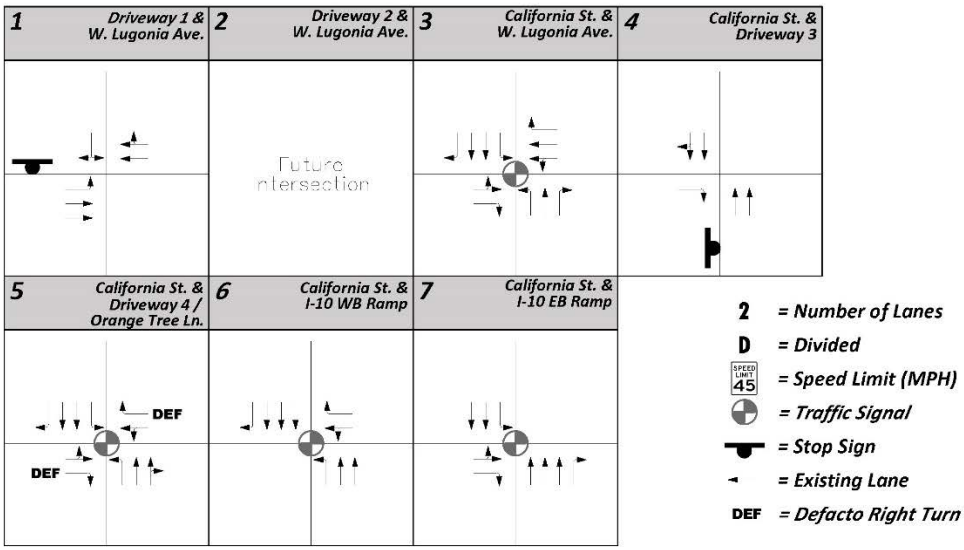


EXHIBIT 3-2: CITY OF REDLANDS GENERAL PLAN CIRCULATION ELEMENT

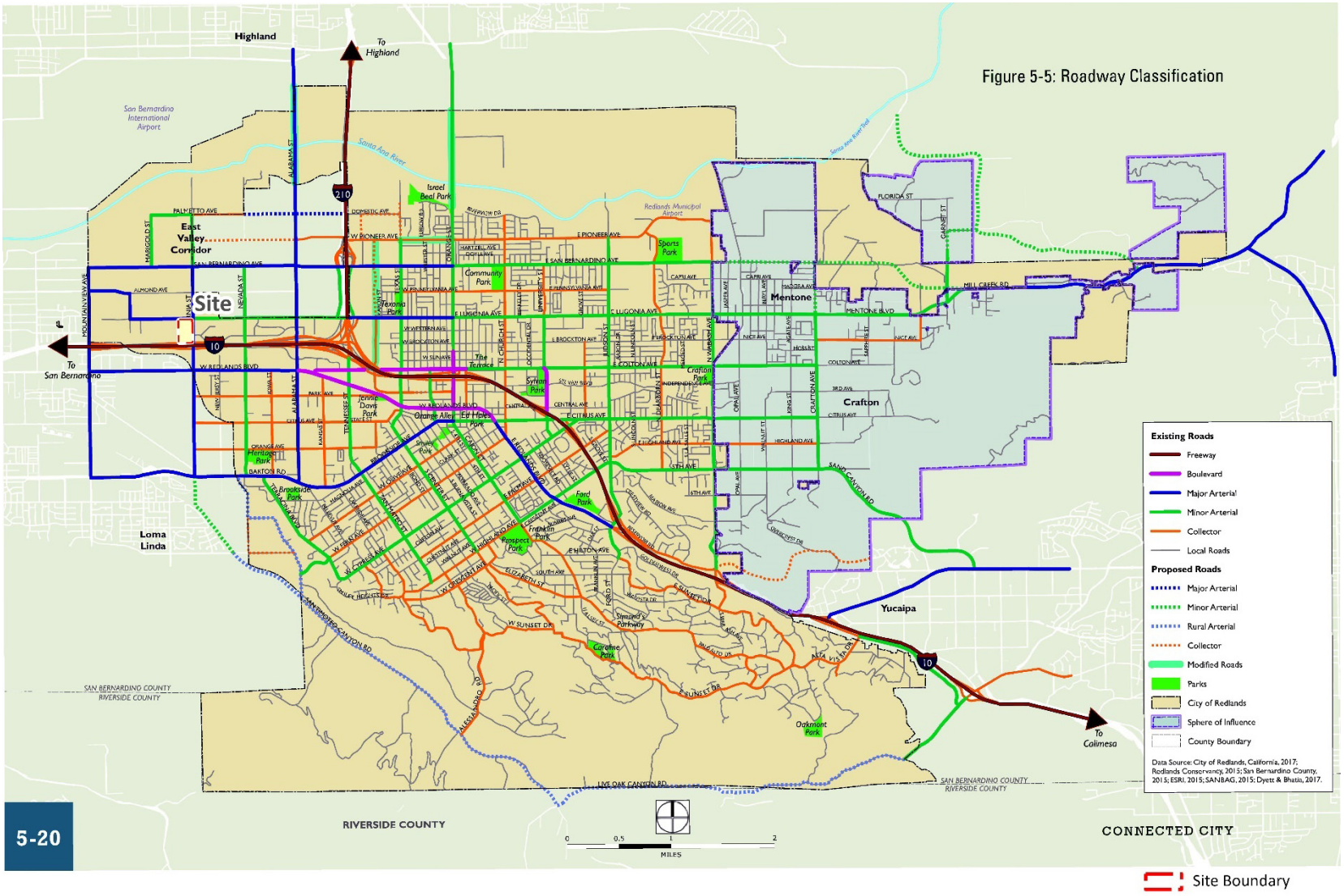
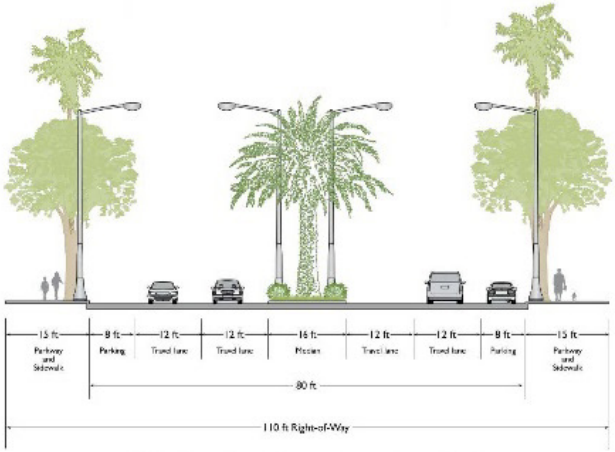
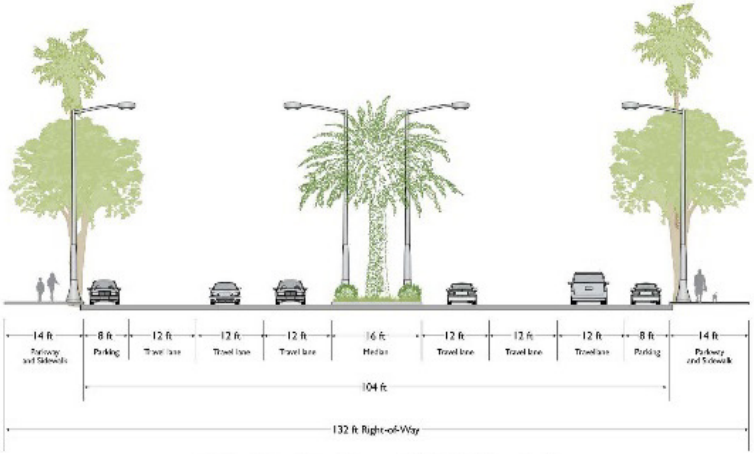


EXHIBIT 3-3: CITY OF REDLANDS GENERAL PLAN ROADWAY CROSS-SECTIONS

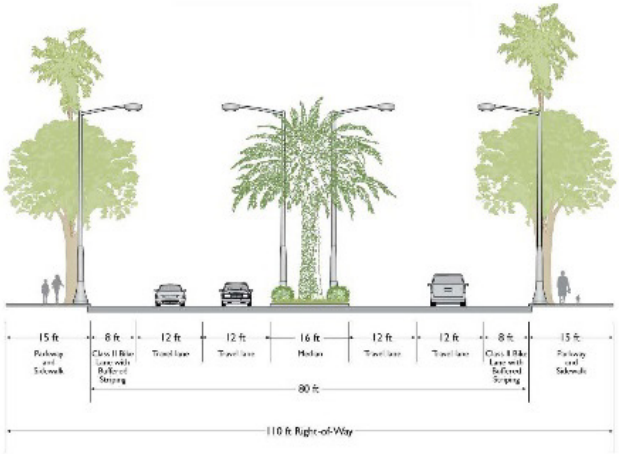
MAJOR ARTERIALS



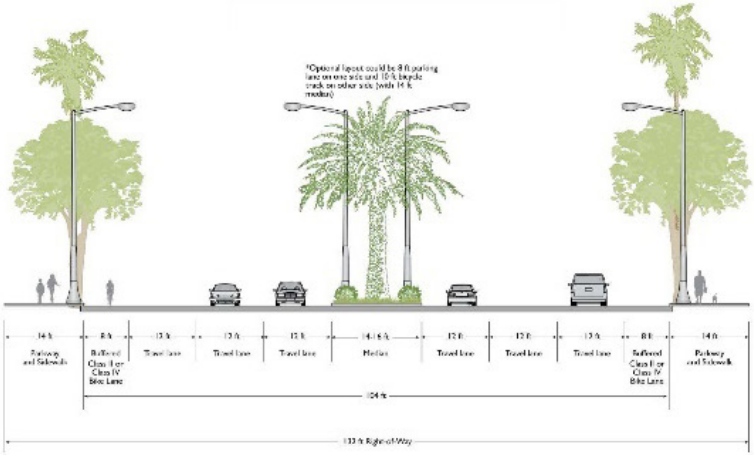
n. Major Arterial – 4 Lanes Divided(Standard)



p. Major Arterial – 6 Lanes Divided (Standard)



o. Major Arterial – 4 Lanes Divided (Complete Streets)

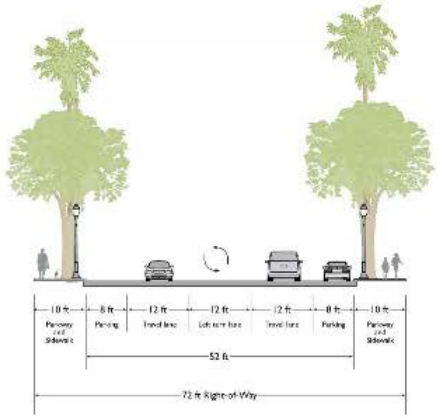


q. Major Arterial – 6 Lanes Divided (Complete Streets)

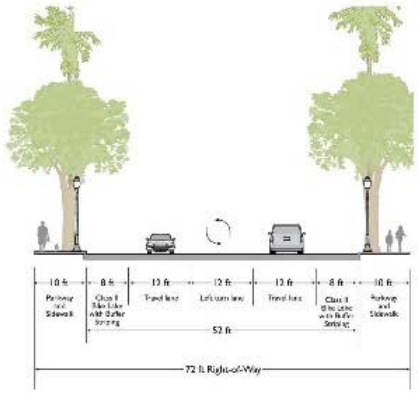
Notes:

1. Street sections are illustrative. Minor variations and deviations from dimensions are permitted, and would not require a General Plan Amendment.
2. Bicycle facilities are based on dimensions included in the Bicycle Facility Design Guidelines for the Bicycle Master Plan (2015).

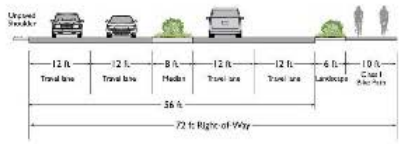
MINOR AND RURAL ARTERIALS



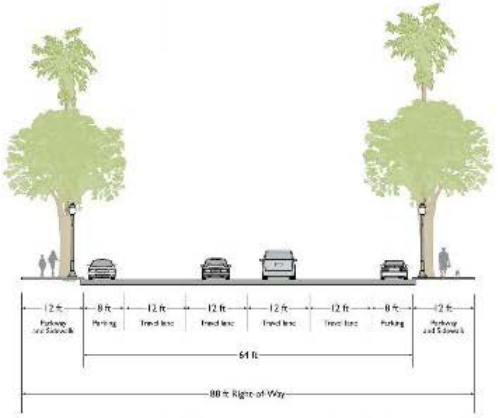
i. Minor Arterial – 2 Lanes Plus Left Turn Lane (Standard)



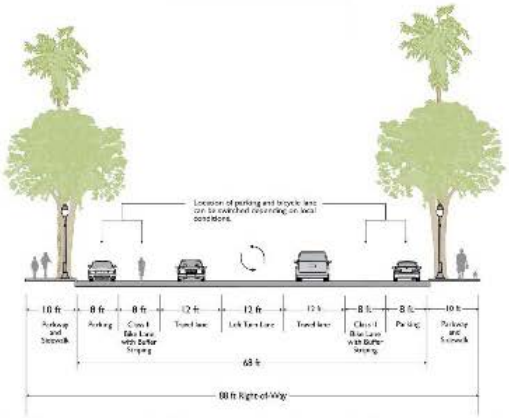
k. Minor Arterial – 2 Lanes Plus Left Turn Lane (Complete Streets)



m. Rural Arterial



j. Minor Arterial – 4 Lanes Undivided (Standard)

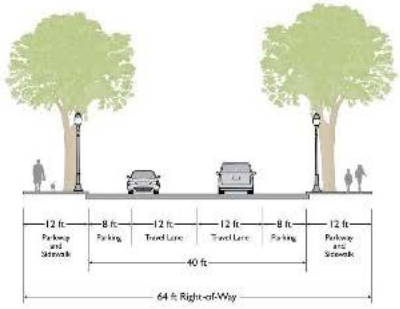


l. Minor Arterial – 2 Lanes Plus Left Turn Lane, Bicycle Lanes, and Parking (Complete Streets)

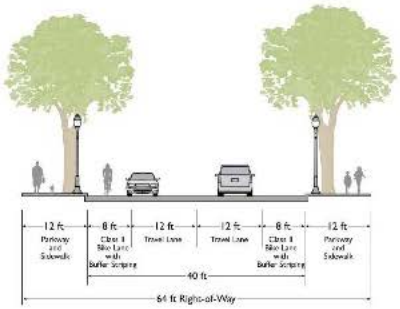
Notes:

1. Street sections are illustrative. Minor variations and deviations from dimensions are permitted, and would not require a General Plan Amendment.
2. Bicycle facilities are based on dimensions included in the Bicycle Facility Design Guidelines for the Bicycle Master Plan (2015).

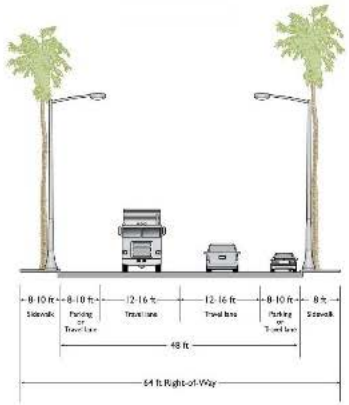
COLLECTORS



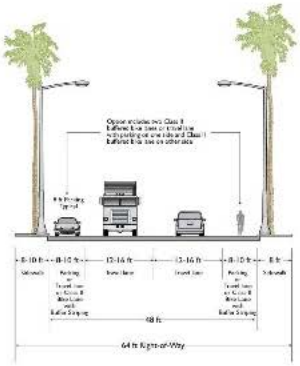
d. Collector – Residential (Standard)



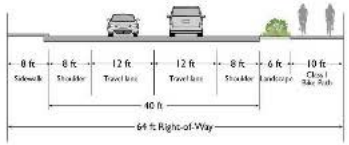
e. Collector – Residential (Complete Streets)



f. Collector – Industrial (Standard)



g. Collector – Industrial (Complete Streets)

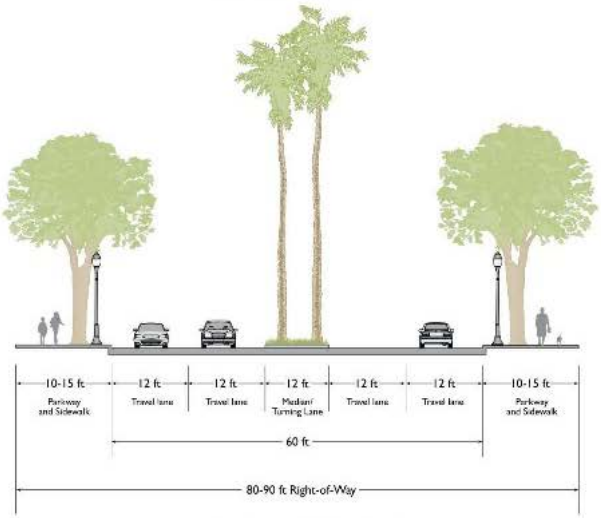


h. Alternative Collector

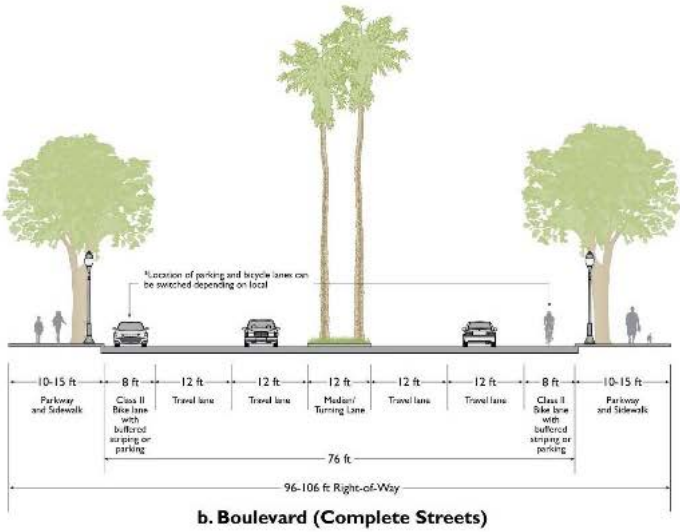
Notes:

1. Street sections are illustrative. Minor variations and deviations from dimensions are permitted, and would not require a General Plan Amendment.
2. Bicycle facilities are based on dimensions included in the Bicycle Facility Design Guidelines for the Bicycle Master Plan (2015).

BOULEVARDS

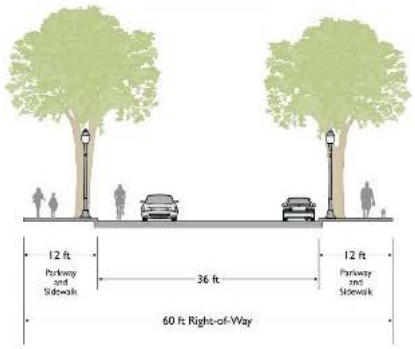


a. Boulevard (Standard)



b. Boulevard (Complete Streets)

LOCAL STREET

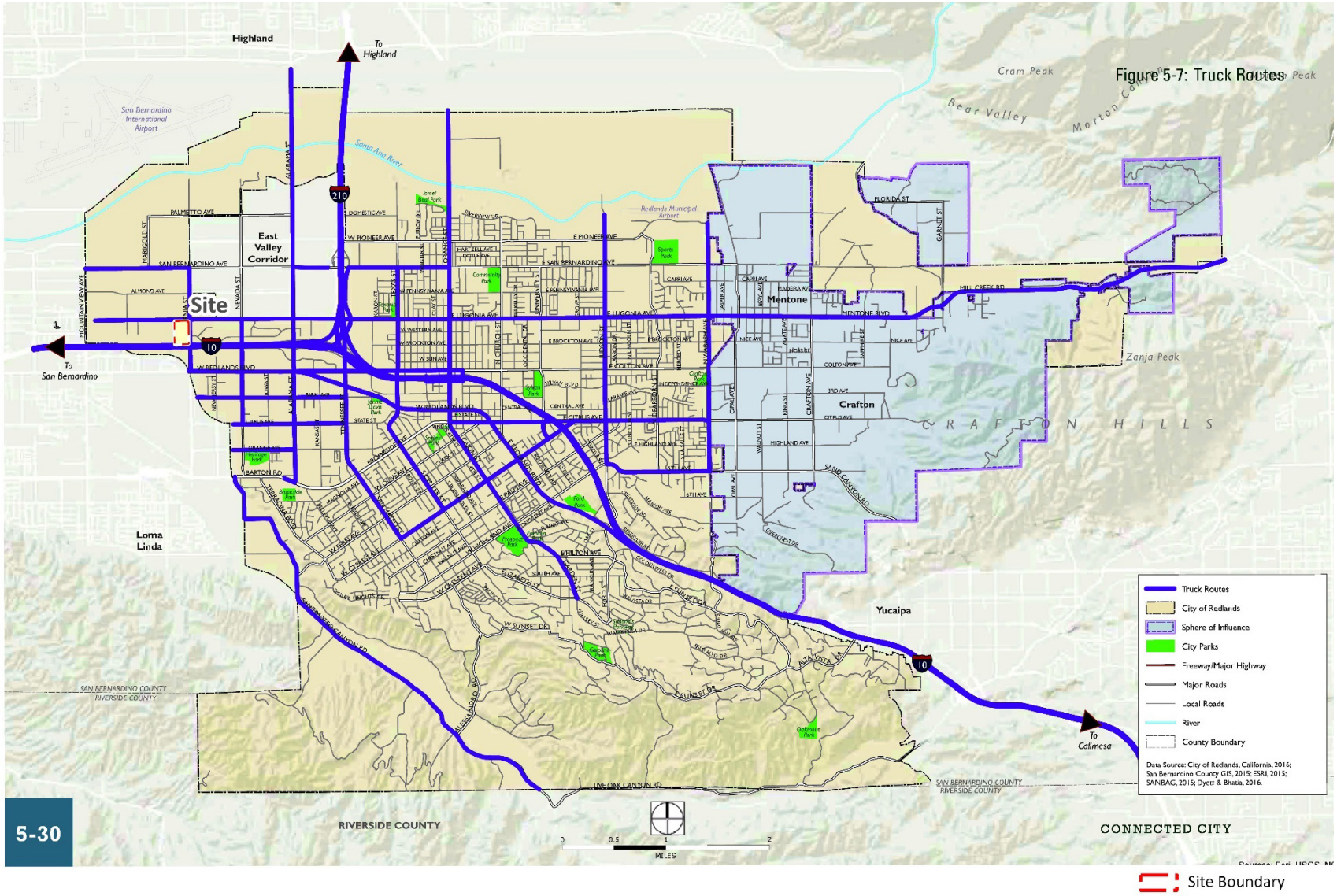


c. Local Street (Standard)

Notes:

1. Street sections are illustrative. Minor variations and deviations from dimensions are permitted, and would not require a General Plan Amendment.
2. Bicycle facilities are based on dimensions included in the Bicycle Facility Design Guidelines for the Bicycle Master Plan (2015).

EXHIBIT 3-4: CITY OF REDLANDS TRUCK ROUTES



3.4 BICYCLE, EQUESTRIAN, & PEDESTRIAN FACILITIES

The existing pedestrian facilities within the study area are shown on Exhibit 3-5. Existing crosswalks and sidewalks are shown. The Project will maintain the existing sidewalks along its frontage on both Lugonia Avenue and California Street. Exhibits 3-6 and 3-7 illustrate the planned bicycle facilities and trails in the vicinity of the Project as included on the City of Redlands General Plan Bicycle Facilities and Multi-Use Trails. There are no existing bike routes along the study area roadways however, there are proposed bike routes along both Lugonia Avenue and California Street. The closest existing multi-use trail is located to the south of the I-10 Freeway, along Orange Blossom Trail.

3.5 TRANSIT SERVICE

The City is currently served by Omnitrans, a public transit agency serving the County of San Bernardino and the City of Redlands. However, there is currently no bus service along the study area roadways. The closest existing transit line is Route 8, which operates along Redlands Boulevard south of the I-10 Freeway and currently has stops near the corner of California Street and Redlands Boulevard. Transit service is reviewed and updated by Omnitrans periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

3.6 EXISTING (2023) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in June 2023. The following peak hours were selected for analysis:

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

The traffic counts include the following vehicle classifications: Passenger Cars, 2-Axle Trucks, 3-Axle Trucks, and 4 or More Axle Trucks. To represent the effects large trucks, buses and recreational vehicles have on traffic flow; all trucks were converted into passenger car equivalent (PCE). 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 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 City's Traffic Study Guidelines. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1.

EXHIBIT 3-5: EXISTING PEDESTRIAN FACILITIES

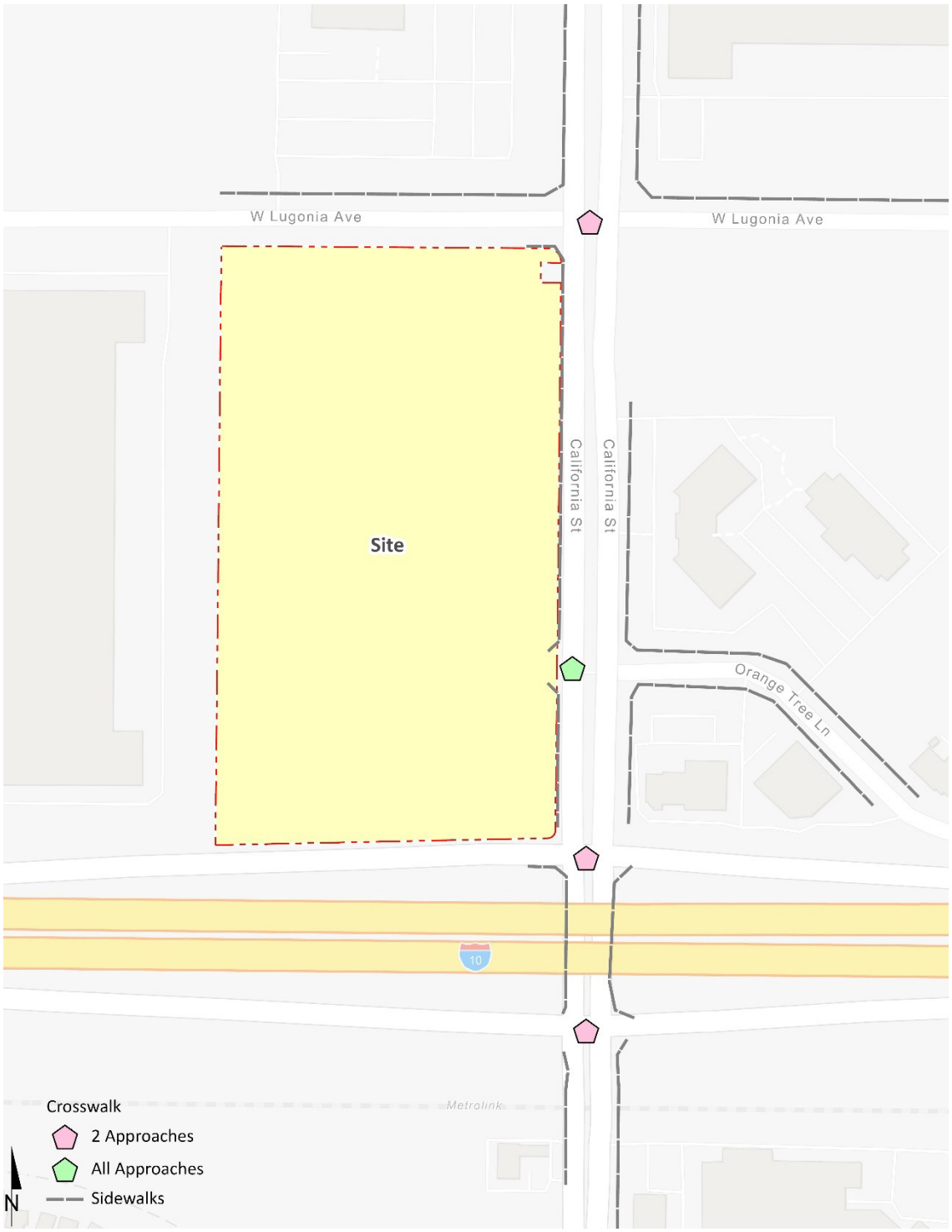


EXHIBIT 3-6: CITY OF REDLANDS GENERAL PLAN BICYCLE FACILITIES

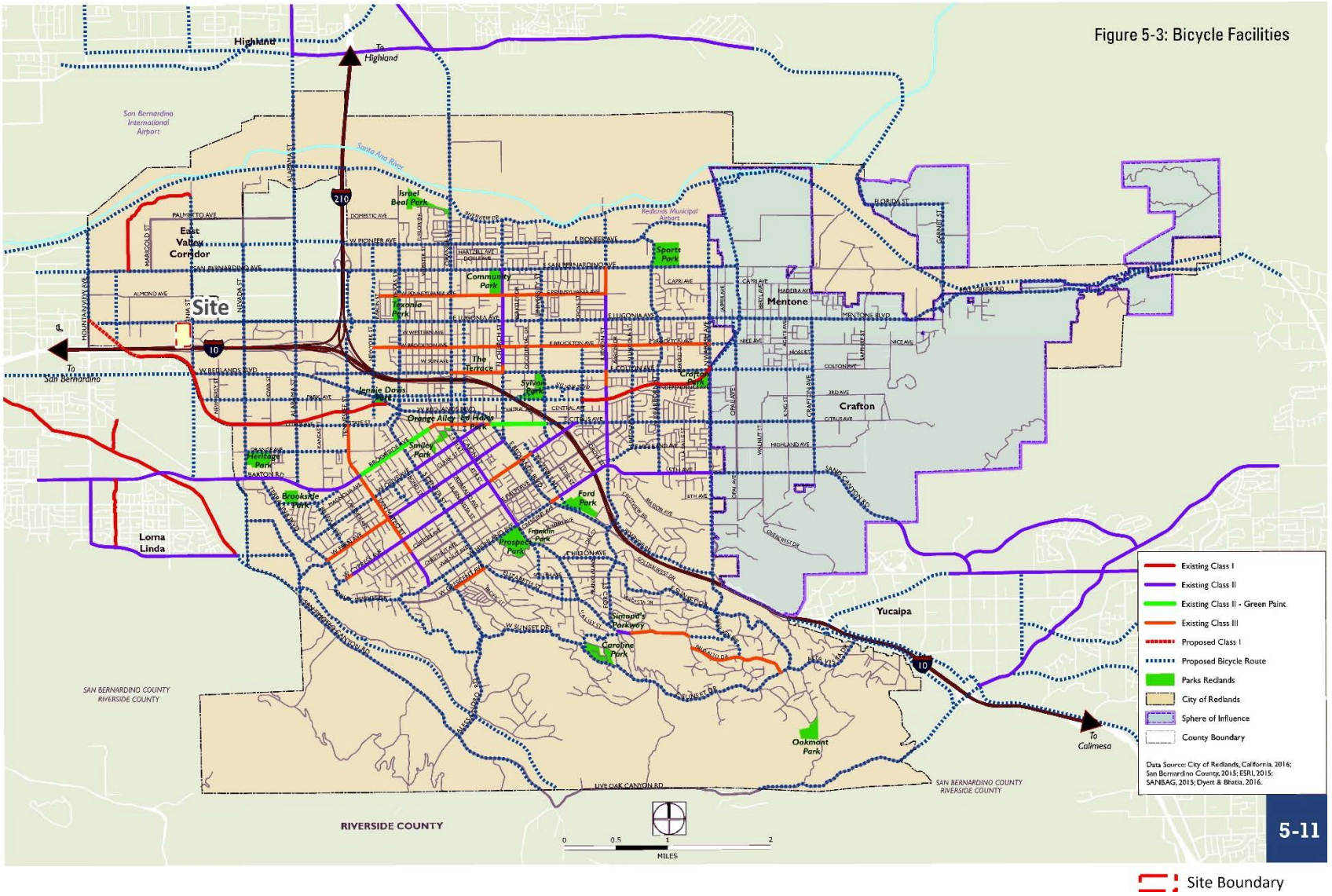
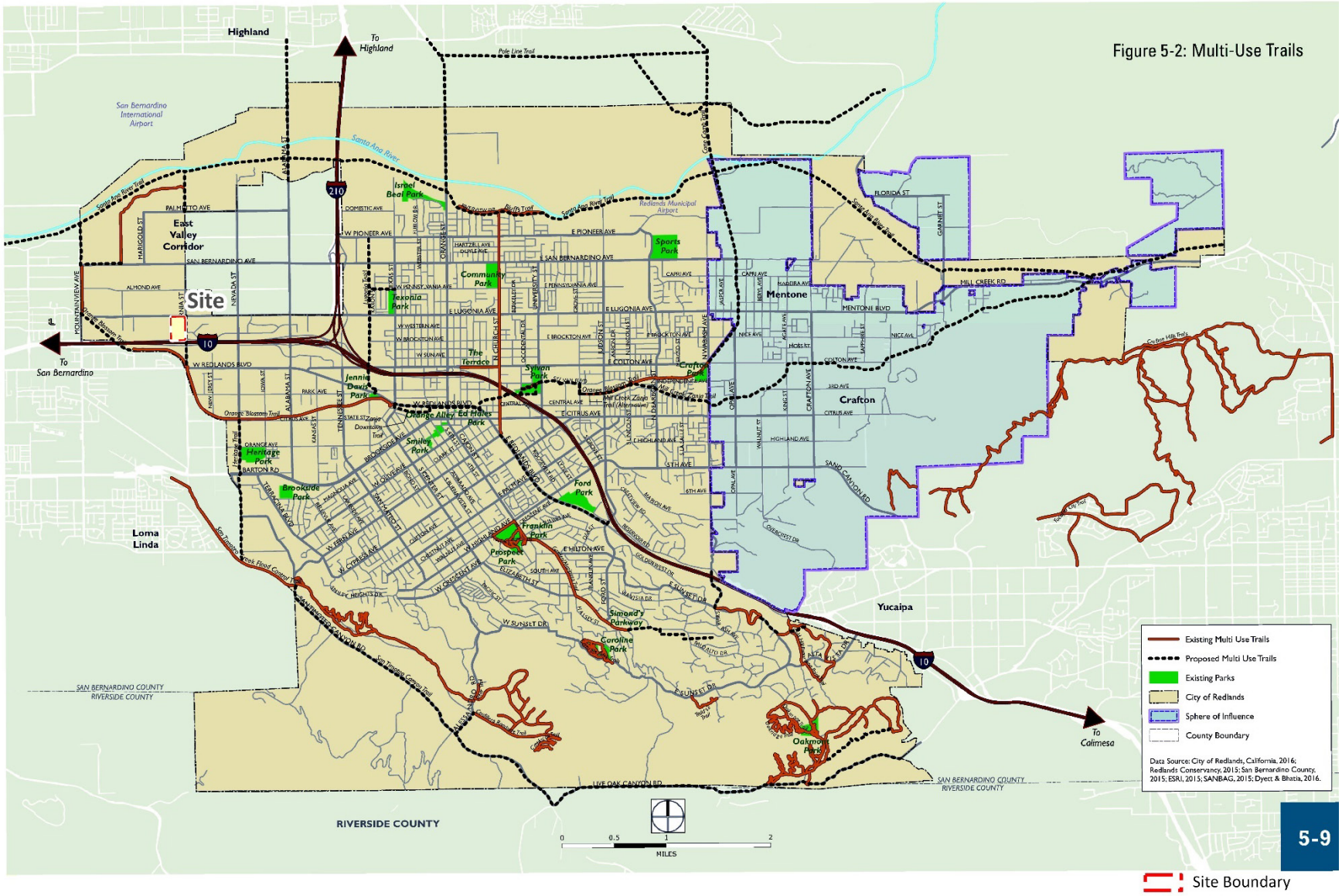


EXHIBIT 3-7: CITY OF REDLANDS GENERAL PLAN MULTI-USE TRAILS



Existing weekday ADT volumes are shown on Exhibit 3-8. 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 14.04 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 7.12 percent. As such, the above equation utilizing a factor of 14.04 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of 7.12 percent (i.e., 1/0.0712 = 14.04) and was assumed to sufficiently estimate average daily traffic (ADT) volumes for planning-level analyses. Existing weekday peak hour intersection volumes are also shown on Exhibit 3-8. Weekday peak hour and daily volumes shown on Exhibit 3-8 are presented in actual vehicles. However, all intersection operations analyses utilize the PCE-based volumes which have been provided in Appendix 3.1 for all applicable scenarios.

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

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

#	Intersection	Traffic Control[2]	Delay[1] (secs.) AM	Delay[1] (secs.) PM	Level of Service AM	Level of Service PM
1	Driveway 1 & Lugonia Av.	CSS	10.7	10.5	B	B
2	Driveway 2 & Lugonia Av.		Future Intersection			
3	California St. & Lugonia Av.	TS	11.9	11.2	B	B
4	California St. & Driveway 3/Orange Tree Ln.		Future Intersection			
5	California St. & Driveway 4/Orange Tree Ln.	TS	8.6	11.4	A	B
6	California St. & I-10 WB Ramps	TS	24.4	27.0	C	C
7	California St. & I-10 EB Ramps	TS	24.7	20.5	C	C

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. HCM delay reported in seconds.

2 TS = Traffic Signal; CSS = Cross-street Stop

3.8 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. The existing driveway and Lugonia Avenue intersection does not currently warrant a traffic signal under Existing traffic conditions. Existing conditions traffic signal warrant analysis worksheets are provided in Appendix 3.3.

3.9 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the study area off-ramps at the I-10 Freeway at the California Street 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 I-10 Freeway mainline. Queuing analysis findings are presented in Table 3-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 3-2, there are no movements that are currently experiencing queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows. Worksheets for Existing (2023) traffic conditions off-ramp queuing analysis are provided in Appendix 3.4.

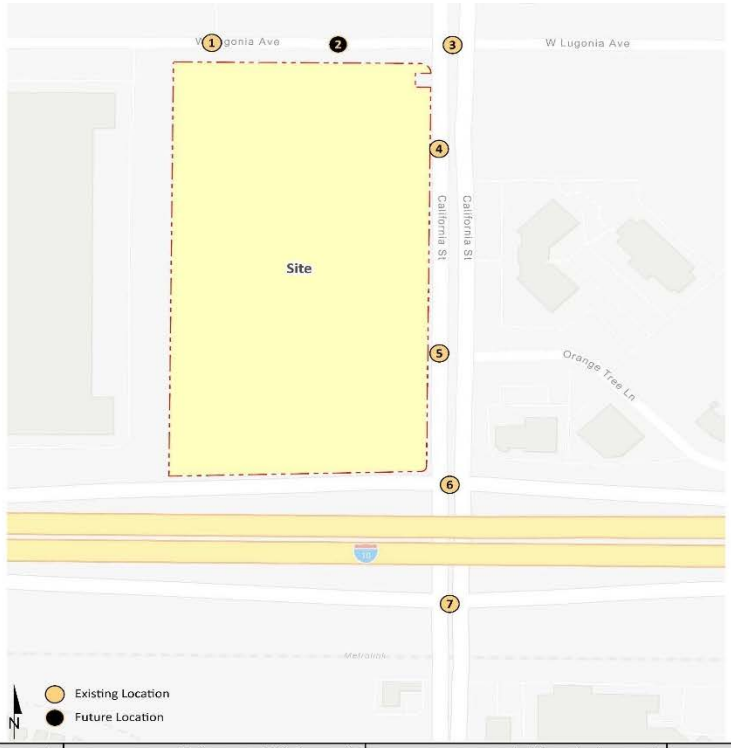
TABLE 3-2: PEAK HOUR OFF-RAMP QUEUING SUMMARY FOR EXISTING (2023) CONDITIONS

#	Intersection	Movement	Stacking Distance (Feet)	95th Percentile Queue (Feet) AM Peak Hour	95th Percentile Queue (Feet) PM Peak Hour	Acceptable? [1] AM	Acceptable? [1] PM
6	California Av. & I-10 WB Ramps	WBL/T	590	356	309 [2]	Yes	Yes
		WBR	1,590	225	49	Yes	Yes
7	California Av. & I-10 EB Ramps	EBL/T	2,320	358	266	Yes	Yes
		EBR	740	315	142	Yes	Yes

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

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

EXHIBIT 3-8: EXISTING (2023) TRAFFIC VOLUMES



1 Driveway 1 & Lugonia Avenue

1,950 | 5,450
- 2(6) ↲ 27(93) ↳
- ↑ 106(40)
- ← 156(77)
- 2(0) ↳
- 71(159) →

3,400

2 Driveway 2 & Lugonia Avenue

5,450
- ← 262(117)
- 98(252) →

5,450

3 California Street & Lugonia Avenue

11,850 | 6,100
- 14(8) ↲ 254(444) ← 18(62) ↳
- ↑ 24(32)
- ← 49(36)
- ↰ 108(136)
- 11(20) ↳
- 16(51) →
- 71(181) ↲
- 199(73) ↰ 421(278) ↑ 87(119) ↱

5,450 | 19,450

4 California Street & Driveway 3/Orange Tree

19,450 | 19,450
- ← 433(761)
- 707(470) →

5 California Street & Driveway 4/Orange Tree

19,450 | 5,950
- 401(734) ← 32(27) ↳
- ↑ 14(12)
- ↰ 87(276)
- 24(32) ↰ 718(427) ↑ 210(110) ↱

450 | 22,150

6 California Street & I-10 WB Ramps

22,150 | 5,350
- 277(551) ↲ 211(459) ↓
- ↑ 355(114)
- ← 14(3)
- ↰ 373(263)
- 302(384) ↰ 597(455) ↑

13,150 | 21,900

7 California Street & I-10 EB Ramps

21,900 | 8,500
- 513(523) ← 71(199) ↳
- 395(229) ↳
- 1(3) →
- 495(382) ↲
- 504(610) ↑ 252(402) ↱

8,600 | 26,900

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

Average Daily Trips

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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 Project consists of the development of a 357,610 square foot warehouse building. For the purposes of this analysis, the trip generation will be calculated assuming 20% general light industrial use (71,522 square feet) and 80% general warehousing use (286,088 square feet). The Project will have access to Lugonia Avenue and California Street via the following driveways:

- Driveway 1 on Lugonia Avenue would serve passenger cars and trucks. Driveway 1 would accommodate full access (e.g., no turn restrictions).
- Driveway 2 on Lugonia Avenue would serve passenger cars only and would be restricted to right-in/right-out access only.
- Driveway 3 on California Street is not anticipated to be modified from the current location on California Street and would serve passenger cars only. Driveway 3 would be restricted to right-in/right-out access only.
- Driveway 4 on California Street is not anticipated to be modified from the current location on California Street and would serve passenger cars only. Driveway 4 aligns with the existing Orange Tree Lane on the east and would accommodate full access with the existing traffic signal.

Regional access to the Project site is provided via the I-10 Freeway at California Street interchange.

4.1 PROJECT TRIP GENERATION

The Project is located on the former Splash Kingdom Waterpark site. The waterpark started operations in 2006 and the interior was later transformed into a trampoline park in 2012. There was a massive fire that caused property damage in May 2020 and the facilities license to operate was revoked in October 2020. By 2021 the remaining building structures on the site were demolished. Due to the time that has passed since the closure of the prior use and the site is not currently generating any traffic, a trip credit for the existing use has not been applied.

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development. Trip generation estimates for the proposed Project have been developed using data from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021). The trip generation rates used to estimate Project traffic are summarized in Table 4-1. The following ITE land use codes and vehicle mixes were utilized for the Project:

- ITE land use code 110 (General Light Industrial) has been used to derive site specific trip generation estimates for up to 71,522 square feet of the proposed Project (20% of the overall building square footage). A light industrial facility is a free-standing facility devoted to a single use that has an emphasis on activities other than manufacturing. Typically, there is minimum office space. The vehicle mix has been obtained from the ITE's Trip Generation Manual. The truck percentages were further broken down by axle type per the following South Coast Air Quality Management District (SCAQMD) recommended truck mix: 2-Axle = 16.7%; 3-Axle = 20.7%; 4+-Axle = 62.6%.

- ITE land use code 150 (Warehousing) has been used to derive site specific trip generation estimates for up to 286,088 square feet of the proposed Project (remaining 80% of the overall building square footage). A warehouse is primarily devoted to the storage of materials but may also include office and maintenance areas. The vehicle mix has been obtained from the ITE's Trip Generation Manual. The truck percentages were further broken down by axle type per the following SCAQMD recommended truck mix: 2-Axle = 16.7%; 3-Axle = 20.7%; 4+-Axle = 62.6%.

The trip generation rates for both the Warehousing (ITE 150) and General Light Industrial (ITE 110) land use codes account for ancillary office use that supports the primary use. As such, trip generation for the office space proposed (6,000 square feet) has not been calculated separately. The purpose in evaluating 20% of the total building square footage as general light industrial (as opposed to 100% warehousing) is to artificially increase the trip generation for the proposed Project in order to provide flexibility to potential future tenants and to conduct a more conservative analysis (i.e., not understanding potential deficiencies).

PCE factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). The following PCE factors have been used: 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+-axle trucks. As shown on Table 4-2, the Project is anticipated to generate a net total of approximately 842 two-way trips per day with 102 AM peak hour trips and 99 PM peak hour trips. The PCE-based Project trip generation is also summarized in Table 4-2 and was utilized for the operations analyses.

TABLE 4-1: PROJECT TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
General Light Industrial[3]	TSF	110	0.651	0.089	0.740	0.091	0.559	0.650	4.870
Passenger Cars (AM=98.6%, PM=98.5%, Daily=94.9%)			0.645	0.085	0.730	0.086	0.554	0.640	4.620
2-Axle Trucks (AM=0.23%, PM=0.25%, Daily=0.85%)			0.001	0.001	0.002	0.001	0.001	0.002	0.042
3-Axle Trucks (AM=0.29%, PM=0.31%, Daily=1.05%)			0.001	0.001	0.002	0.001	0.001	0.002	0.052
4+-Axle Trucks (AM=0.88%, PM=0.94%, Daily=3.20%)			0.004	0.002	0.006	0.003	0.003	0.006	0.157
Warehousing[3]	TSF	150	0.131	0.039	0.170	0.050	0.130	0.180	1.710
Passenger Cars (AM=88.2%, PM=83.3%, Daily=64.9%)			0.120	0.030	0.150	0.034	0.116	0.150	1.110
2-Axle Trucks (AM=1.97%, PM=2.79%, Daily=5.86%)			0.002	0.001	0.003	0.003	0.002	0.005	0.100
3-Axle Trucks (AM=2.44%, PM=3.46%, Daily=7.27%)			0.002	0.002	0.004	0.003	0.003	0.006	0.124
4+-Axle Trucks (AM=7.39%, PM=10.45%, Daily=21.97%)			0.007	0.006	0.013	0.010	0.009	0.019	0.376

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

[2] TSF = thousand square feet

[3] Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

NOTE: PCE factors: 2-axle trucks = 1.5, 3-axle trucks = 2.0, and 4+-axle = 3.0.

TABLE 4-2: PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
General Light Industrial (20%)	71.522	TSF							
Passenger Cars:			46	6	52	6	40	46	330
2-axle Trucks:			0	0	0	0	0	0	4
3-axle Trucks:			0	0	0	0	0	0	4
4+-axle Trucks:			0	0	0	0	0	0	12
Total Truck Trips (Actual Vehicles):			0	0	0	0	0	0	20
Total Trips (Actual Vehicles)[2]			46	6	52	6	40	46	350
Warehousing (80%)	286.088	TSF							
Passenger Cars:			34	9	43	10	33	43	318
2-axle Trucks:			1	0	1	1	1	2	30
3-axle Trucks:			1	1	2	1	1	2	36
4+-axle Trucks:			2	2	4	3	3	6	108
Total Truck Trips (Actual Vehicles):			4	3	7	5	5	10	174
Total Trips (Actual Vehicles)[2]			38	12	50	15	38	53	492
Passenger Cars			80	15	95	16	73	89	648
Trucks			4	3	7	5	5	10	194
Total Trips (Actual Vehicles)[2]			**84**	**18**	**102**	**21**	**78**	**99**	**842**
Passenger Car Equivalent (PCE):									
General Light Industrial (20%)	71.522	TSF							
Passenger Cars:			46	6	52	6	40	46	330
2-axle Trucks (PCE = 1.5):			0	0	0	0	0	0	4
3-axle Trucks (PCE = 2.0):			0	0	0	0	0	0	8
4+-axle Trucks (PCE = 3.0):			1	0	1	1	1	1	34
Total Truck Trips (PCE):			1	0	1	1	1	2	46
Total Trips (PCE)[2]			47	6	53	7	41	48	376
Warehousing (80%)	286.088	TSF							
Passenger Cars:			34	9	43	10	33	43	318
2-axle Trucks (PCE = 1.5):			1	1	2	1	1	2	44
3-axle Trucks (PCE = 2.0):			1	1	2	2	2	4	72
4+-axle Trucks (PCE = 3.0):			6	5	11	9	8	17	322
Total Truck Trips (PCE):			8	7	15	12	11	23	438
Total Trips (PCE)[2]			42	16	58	22	44	66	756
Passenger Cars			80	15	95	16	73	89	648
Trucks			9	7	16	13	12	25	484
Total Trips (PCE)[2]			**89**	**22**	**111**	**29**	**85**	**114**	**1,132**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck 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 and 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. Exhibit 4-1 illustrates the Project's truck trip distribution patterns while the passenger car trip distribution patterns are reflected on Exhibit 4-2.

4.3 MODAL SPLIT

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

4.4 PROJECT TRIP ASSIGNMENT

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

EXHIBIT 4-1: PROJECT (TRUCK) TRIP DISTRIBUTION

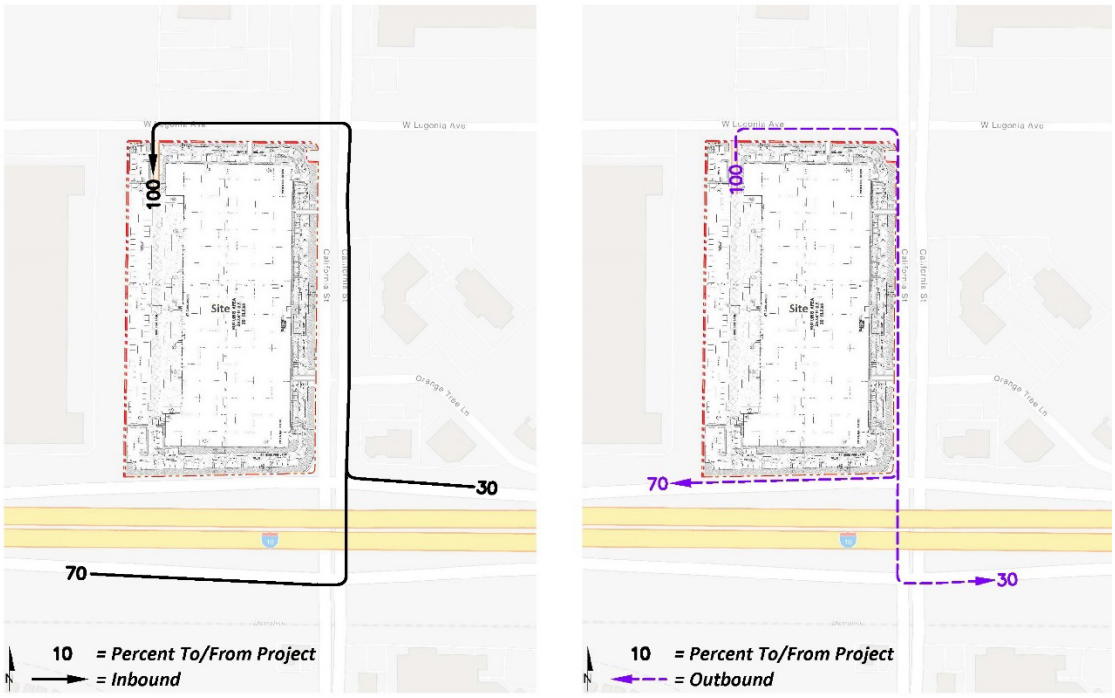


EXHIBIT 4-2: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION

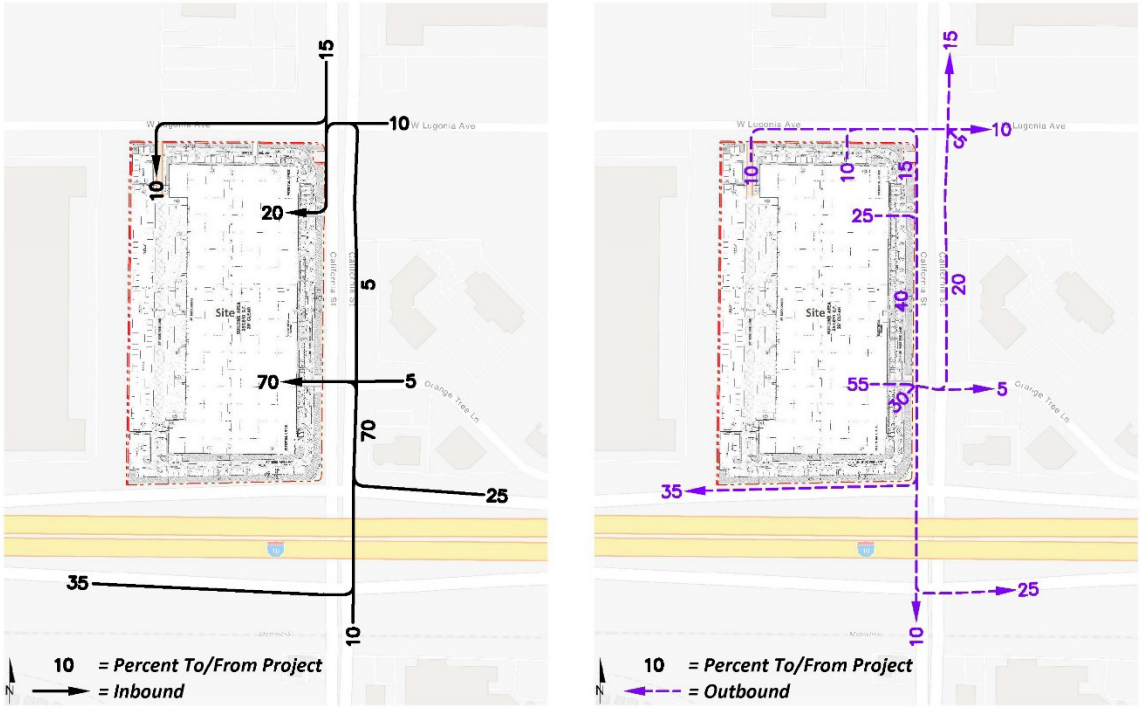
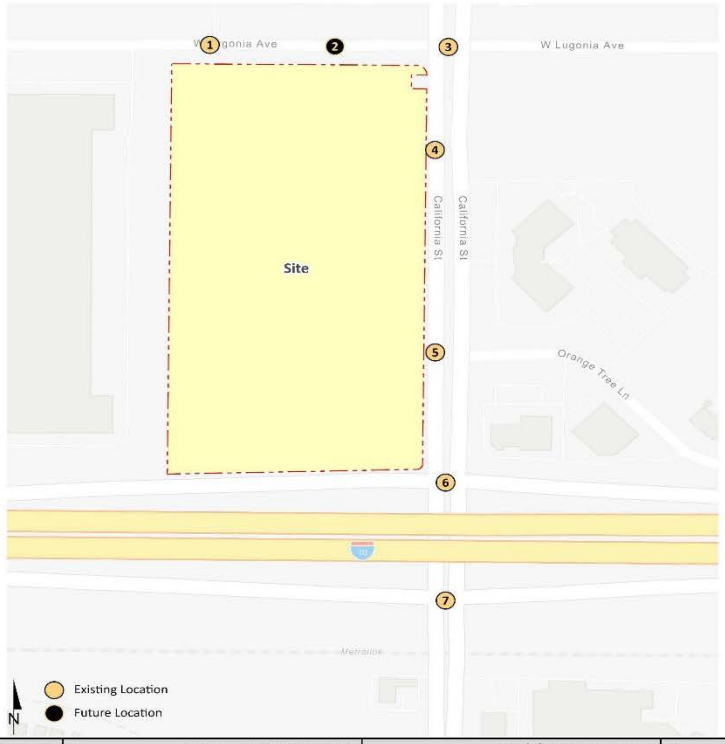


EXHIBIT 4-3: PROJECT ONLY TRAFFIC VOLUMES



1 Driveway 1 & Lugonia Avenue	2 Driveway 2 & Lugonia Avenue	3 California Street & Lugonia Avenue	4 California Street & Driveway 3/Orange Tree
250	300	100 Nominal	400
← 12(7)	← 4(5)	← 12(2) ↰ 10(9)	↲ 16(3) ↓ 5(16)
↱ 5(12)	10(9) → 3(5) → ↱ 2(7)	↓ 5(12) ↲ ↰ 4(5) ↑ 2(11) ↱ 5(4)	4(18) ↲ ↑ 11(20)
250	250 Nominal	300 400	150 400

5 California Street & Driveway 4/Orange Tree	6 California Street & I-10 WB Ramps	7 California Street & I-10 EB Ramps
400 Nominal	650 100	350 100
↓ 9(34) ← 4(1)	↲ 7(29) ↓ 6(27) ← 21(6)	↓ 2(7) ↳ 5(20)
3(15) → 1(4) → 5(22) ↴ ↰ 52(10) ↑ 8(6)	↑ 39(11)	31(9) → ↑ 8(2)
400 650	200 350	200 Nominal

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

Average Daily Trips

5 EXISTING PLUS PROJECT TRAFFIC CONDITIONS

This section discusses the methods used to develop Existing plus Project (E+P) traffic forecasts, and the resulting intersection operations, freeway off-ramp queuing, and traffic signal warrant analyses.

5.1 ROADWAY IMPROVEMENTS

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

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

5.2 E+P TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus Project traffic. The ADT and peak hour intersection turning movement volumes (in actual vehicles), which can be expected for E+P traffic conditions are shown on Exhibit 5-1 (PCE volumes provided in Appendix 3.1).

5.3 INTERSECTION OPERATIONS ANALYSIS

E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 5-1, which indicates that all of the study area intersections are anticipated to continue to operate at an acceptable LOS during the peak hours with the addition of Project traffic. The intersection operations analysis worksheets are included in Appendix 5.1 of this TA.

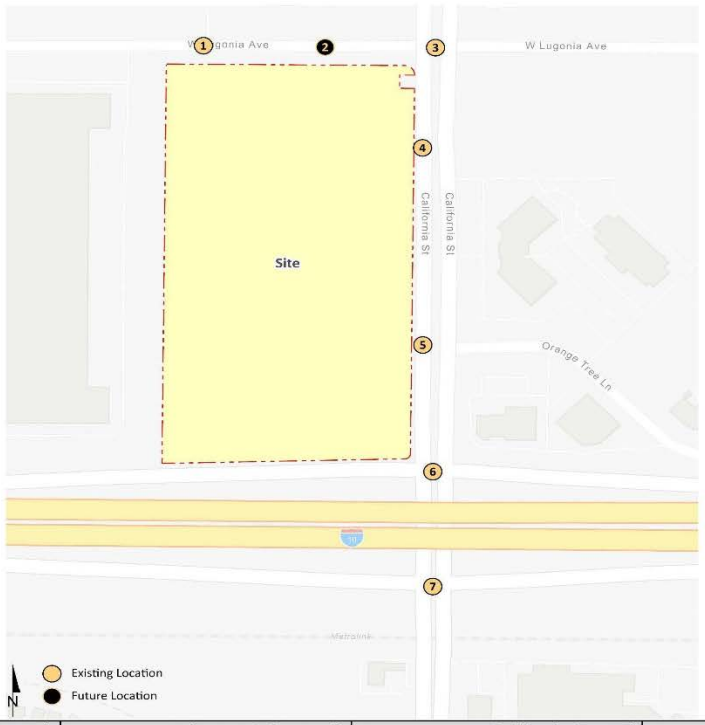
TABLE 5-1: INTERSECTION ANALYSIS FOR E+P CONDITIONS

			Existing (2023)				Existing + Project			
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service	
#	Intersection	Traffic Control[2]	AM	PM	AM	PM	AM	PM	AM	PM
1	Driveway 1 & Lugonia Av.	CSS	10.7	10.5	B	B	11.4	11.1	B	B
2	Driveway 2 & Lugonia Av.	**CSS**	Future Intersection				8.7	9.2	A	A
3	California St. & Lugonia Av.	TS	11.9	11.2	B	B	12.2	11.6	B	B
4	California St. & Driveway 3/Orange Tree Ln.	**CSS**	Future Intersection				11.2	13.1	B	B
5	California St. & Driveway 4/Orange Tree Ln.	TS	8.6	11.4	A	B	10.0	20.1	B	C
6	California St. & I-10 WB Ramps	TS	24.4	27.0	C	C	24.5	27.1	C	C
7	California St. & I-10 EB Ramps	TS	24.7	20.5	C	C	25.5	21.7	C	C

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. HCM delay reported in seconds.

2 TS = Traffic Signal; CSS = Cross-street Stop; **CSS** = Improvement

EXHIBIT 5-1: E+P TRAFFIC VOLUMES



1 Driveway 1 & Lugonia Avenue

1,950 | 5,750
2(6) ↲ | 27(93) ↳
106(40) ↱
156(77) ←
12(7) ↰
2(0) ↳
71(159) →
5(12) ↱
3,400 | 250

2 Driveway 2 & Lugonia Avenue

5,750 | 5,750
4(5) ←
10(9) ↳
3(5) →
2(7) ↱
5,750 | Nominal

3 California Street & Lugonia Avenue

11,950 | 6,200
14(8) ↲
266(446) ←
10(9) ↰
11(20) ↳
76(193) ↲
203(78) ↰
423(289) →
5(4) ↱
5,750 | 19,850

4 California Street & Driveway 3/Orange Tree

19,850
16(3) ↲
438(777) ←
4(18) ↲
718(490) →
150 | 19,900

5 California Street & Driveway 4/Orange Tree

19,900 | 6,000
410(768) ↓
32(27) ↳
14(12) ↱
4(1) ←
87(276) ↰
3(15) ↳
1(4) →
5(22) ↲
76(42) ↰
726(433) ↑
210(110) ↱
850 | 22,800

6 California Street & I-10 WB Ramps

22,800 | 5,450
284(580) ↲
217(486) ↓
376(120) ↱
14(3) ←
373(263) ↰
302(384) ↰
636(466) ↑
13,350 | 22,250

7 California Street & I-10 EB Ramps

22,250 | 8,600
515(530) ↓
76(219) ↳
426(238) ↳
1(3) →
495(382) ↲
512(612) →
252(402) ↱
8,800 | 27,000

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

Average Daily Trips

5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

Driveway 1 on Lugonia Avenue is not anticipated to meet peak hour volume-based traffic signal warrants with the addition of Project traffic under E+P conditions (see Appendix 5.2).

5.5 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for E+P are presented in Table 5-2. As shown in Table 5-2, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under E+P traffic conditions, consistent with Existing (2023) traffic conditions. Worksheets for E+P traffic conditions queuing analysis are provided in Appendix 5.3.

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

				Existing (2023)				Existing + Project			
			Available Stacking	95th Percentile Queue (Feet)		Acceptable? [1]		95th Percentile Queue (Feet)		Acceptable? [1]	
#	Intersection	Movement	Distance (Feet)	AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
6	California Av. & I-10 WB Ramps	WBL/T	590	356	309 [2]	Yes	Yes	356	309 [2]	Yes	Yes
		WBR	1,590	225	49	Yes	Yes	261	51	Yes	Yes
7	California Av. & I-10 EB Ramps	EBL/T	2,320	358	266	Yes	Yes	386	278	Yes	Yes
		EBR	740	315	142	Yes	Yes	311	144	Yes	Yes

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

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

5.6 DEFICIENCIES AND IMPROVEMENTS

Improvements needed to achieve acceptable LOS have been identified at intersections or off-ramps that are currently operating at a deficient LOS under E+P traffic conditions. As shown previously on Table 6-1, there are no intersections that are anticipated to operate at a deficient LOS. Similarly, 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 (see Table 6-2). As such, no improvements have been identified.

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6 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements within the City of Redlands are funded through a combination of the construction of improvements, development impact fee programs or fair share contributions, such as the City of Redlands Development Impact Fee (DIF) program. Identification and timing of needed improvements is generally determined through local jurisdictions based upon a variety of factors.

6.1 CITY OF REDLANDS DEVELOPMENT IMPACT FEE PROGRAM

The City of Redlands adopted the latest update to their DIF program in 2017. Fees from new residential, commercial, and industrial development are collected to fund Measure "I" compliant regional facilities as well as local facilities. Under the City's DIF program, the City may grant to developers a credit against specific components of fees when those developers construct certain facilities and landscaped medians identified in the list of improvements funded by the DIF program.

After the City's DIF fees are collected, they are placed in a separate restricted use account pursuant to the requirements of Government Code sections 66000 *et seq*. The timing to use the DIF fees is established through periodic capital improvement programs which are overseen by the City's Municipal Utilities and Engineering Department. Periodic traffic counts, review of traffic accidents, and a review of traffic trends throughout the City are also periodically performed by City staff and consultants. The City uses this data to determine the timing of the improvements listed in its facilities list. The City also uses this data to ensure that the improvements listed on the facilities list are constructed before the LOS falls below the LOS performance standards adopted by the City. In this way, the improvements are constructed before the LOS falls below the City's LOS performance thresholds. The City's DIF program establishes a timeline to fund, design, and build the improvements.

6.2 MEASURE "I" FUNDS

In 2004, the voters of San Bernardino County approved the 30-year extension of Measure "I", a one-half of one percent sales tax on retail transactions, through the year 2040, for transportation projects including, but not limited to, infrastructure improvements, commuter rail, public transit, and other identified improvements. The Measure "I" extension requires that a regional traffic impact fee be created to ensure development is paying its fair share. A regional Nexus study was prepared by the San Bernardino County Transportation Authority (SBCTA) and concluded that each jurisdiction should include a regional fee component in their local programs in order to meet the Measure "I" requirement. The regional component assigns specific facilities and cost sharing formulas to each jurisdiction and was most recently updated in March 2019. (6) Revenues collected through these programs are used in tandem with the City's DIF funds to deliver projects identified in the Nexus Study. While Measure "I" is a self-executing sales tax administered by SBCTA, it bears discussion here because the funds raised through Measure "I" have funded in the past and will continue to fund new transportation facilities in San Bernardino County**.**

6.3 MEASURE U

As stated by Measure U,

> *The purpose and intent of this initiative measure is to establish comprehensive and inviolable principles of managed development for the City of Redlands that will preserve, enhance, and maintain the special quality of life valued by this community. The principles of managed development established by this initiative measure assure that future development within the City of Redlands occurs in a way that promotes the social and economic well-being of the entire community.*

All of the study area intersections are anticipated to operate at LOS C or better, as such, the Project is in compliance with Measure U and there are no improvements required.

7 REFERENCES

1. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.
2. **San Bernardino Associated Governments.** *Congestion Management Program for County of San Bernardino.* County of San Bernardino : s.n., Updated June 2016.
3. **Transportation Research Board.** *Highway Capacity Manual (HCM).* 6th Edition. s.l. : National Academy of Sciences, 2016.
4. **California Department of Transportation.** California Manual on Uniform Traffic Control Devices (CA MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CA MUTCD).* 2014, Updated March 30, 2021 (Revision 6).

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APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT

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MEMORANDUM

URBAN | CROSSROADS

DATE: June 15, 2023
TO: Don Young, City of Redlands
FROM: Charlene So, Urban Crossroads
JOB NO: 15517-01 TA Scope

1101 CALIFORNIA WAREHOUSE TRAFFIC STUDY SCOPING AGREEMENT

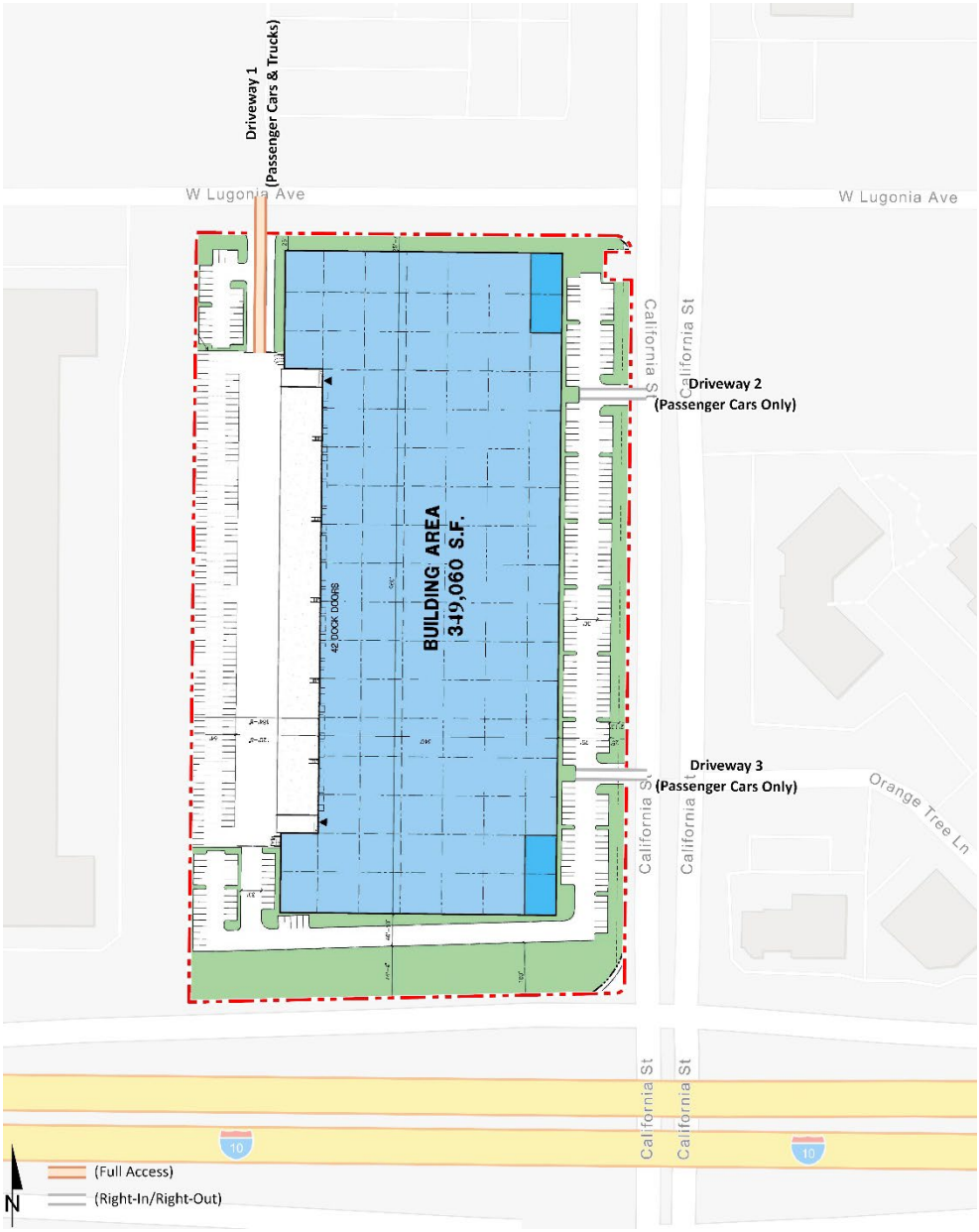
Urban Crossroads, Inc. is pleased to submit the following Traffic Study Scoping Agreement for the proposed 1101 California Warehouse development (referred to as **Project**), which is located on the southwest corner of California Avenue and Lugonia Avenue in the City of Redlands, on the former Splash Kingdom amusement park site (currently non-operational). Our goal is to obtain comments from City of Redlands staff to ensure that the traffic study fully addresses the potential deficiencies of the proposed Project. The remainder of this letter describes the proposed analysis methodology, project trip generation, trip distribution, and project traffic assignment/project trips on the surrounding roadway network, which has been used, along with inputs from City staff to establish the proposed project study area. It should be noted that this scoping agreement has been prepared in accordance with the County of San Bernardino Congestion Management Program (**CMP**) traffic study guidelines (Appendix B) and the City's Traffic Performance Criteria.

PROPOSED PROJECT

The Project consists of the development of a 349,060 square foot warehouse building. For the purposes of this analysis, the trip generation will be calculated assuming 20% general light industrial use (69,810 square feet) and 80% general warehousing use (279,250 square feet). The Project is anticipated to be built out and occupied by the year 2025. The preliminary site plan is illustrated on Exhibit 1. The Project will have access to Lugonia Avenue and California Avenue via the following driveways:

- Driveway 1 on Lugonia Avenue would serve passenger cars and trucks, aligning with the Kaiser Permanente Redlands Medical Offices driveway. Driveway 1 would accommodate full access (e.g., no turn restrictions).
- Driveway 2 on California Avenue would serve passenger cars only. Driveway 2 would be restricted to right-in/right-out access only.
- Driveway 3 on California Avenue would serve passenger cars only. Driveway 3 is proposed to align with the existing Orange Tree Lane on the east and would accommodate full access with the existing traffic signal.

EXHIBIT 1: PRELIMINARY SITE PLAN



VMT ANALYSIS

Consistent with the California Environmental Quality Act (**CEQA**) Guidelines adopted in December 2018, the VMT analysis prepared for this Project will be in accordance with the City's VMT guidelines (adopted June 2020). The VMT analysis will be prepared as a separate document from the LOS-based traffic study. A VMT letter report (separate from the LOS-based traffic study) will be provided to summarize the VMT results.

LEVEL OF SERVICE (LOS) ANALYSIS

A level of service (**LOS**) analysis is required because of Measure U, a voter approved initiative regulating traffic impact due to development projects. An analysis must be done to compare LOS for Existing and Existing plus Project to determine if traffic improvements are necessary as a result of the Project.

TRIP GENERATION

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021) was used to estimate the trip generation. Trip generation rates are summarized on Table 1 for actual vehicles. For purposes of the traffic study, the following ITE land use codes and vehicle mixes are proposed:

- ITE land use code 110 (General Light Industrial) has been used to derive site specific trip generation estimates for up to 69,810 square feet of the proposed Project (20% of the overall building square footage). A light industrial facility is a free-standing facility devoted to a single use that has an emphasis on activities other than manufacturing. Typically, there is minimum office space. The vehicle mix has been obtained from the ITE's Trip Generation Manual. The truck percentages were further broken down by axle type per the following South Coast Air Quality Management District (**SCAQMD**) recommended truck mix: 2-Axle = 16.7%; 3-Axle = 20.7%; 4+-Axle = 62.6%.
- ITE land use code 150 (Warehousing) has been used to derive site specific trip generation estimates for up to 279,250 square feet of the proposed Project (remaining 80% of the overall building square footage). A warehouse is primarily devoted to the storage of materials but may also include office and maintenance areas. The vehicle mix has been obtained from the ITE's Trip Generation Manual. The truck percentages were further broken down by axle type per the following SCAQMD recommended truck mix: 2-Axle = 16.7%; 3-Axle = 20.7%; 4+-Axle = 62.6%.

TABLE 1: TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
General Light Industrial[3]	TSF	110	0.651	0.089	0.740	0.091	0.559	0.650	4.870
Passenger Cars (AM=98.6%, PM=98.5%, Daily=94.9%)			0.645	0.085	0.730	0.086	0.554	0.640	4.620
2-Axle Trucks (AM=0.23%, PM=0.25%, Daily=0.85%)			0.001	0.001	0.002	0.001	0.001	0.002	0.042
3-Axle Trucks (AM=0.29%, PM=0.31%, Daily=1.05%)			0.001	0.001	0.002	0.001	0.001	0.002	0.052
4+-Axle Trucks (AM=0.88%, PM=0.94%, Daily=3.20%)			0.004	0.002	0.006	0.003	0.003	0.006	0.157
Warehousing[3]	TSF	150	0.131	0.039	0.170	0.050	0.130	0.180	1.710
Passenger Cars (AM=88.2%, PM=83.3%, Daily=64.9%)			0.120	0.030	0.150	0.034	0.116	0.150	1.110
2-Axle Trucks (AM=1.97%, PM=2.79%, Daily=5.86%)			0.002	0.001	0.003	0.003	0.002	0.005	0.100
3-Axle Trucks (AM=2.44%, PM=3.46%, Daily=7.27%)			0.002	0.002	0.004	0.003	0.003	0.006	0.124
4+-Axle Trucks (AM=7.39%, PM=10.45%, Daily=21.97%)			0.007	0.006	0.013	0.010	0.009	0.019	0.376

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

[2] TSF = thousand square feet

[3] Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

The trip generation summary illustrating daily, and peak hour trip generation estimates for the proposed Project in actual vehicles and PCE are shown on Table 2. The proposed Project is anticipated to generate 822 two-way vehicle trip-ends per day with 99 AM peak hour trips and 96 PM peak hour (see Table 2).

Passenger car equivalent (PCE) factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). PCEs allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The following PCE factors have been used: 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+-axle trucks. The Project is anticipated to generate 1,108 two-way PCE trip-ends per day with 108 PCE AM peak hour trips and 110 PCE PM peak hour trips (see Table 2).

As noted previously, the Project is located on the former Splash Kingdom amusement park site. However, the site is currently not operational. As such, no credit has been taken for the existing use in order to conduct a conservative analysis although the site was previously evaluated and approved for trips associated with the former use.

TABLE 2: PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
General Light Industrial (20%)	69.810	TSF							
Passenger Cars:			45	6	51	6	39	45	322
2-axle Trucks:			0	0	0	0	0	0	4
3-axle Trucks:			0	0	0	0	0	0	4
4+-axle Trucks:			0	0	0	0	0	0	12
Total Truck Trips (Actual Vehicles):			0	0	0	0	0	0	20
Total Trips (Actual Vehicles)[2]			45	6	51	6	39	45	342
Warehousing (80%)	279.250	TSF							
Passenger Cars:			33	8	41	10	32	42	310
2-axle Trucks:			1	0	1	1	1	2	28
3-axle Trucks:			1	1	2	1	1	2	36
4+-axle Trucks:			2	2	4	3	2	5	106
Total Truck Trips (Actual Vehicles):			4	3	7	5	4	9	170
Total Trips (Actual Vehicles)[2]			37	11	48	15	36	51	480
Passenger Cars			78	14	92	16	71	87	632
Trucks			4	3	7	5	4	9	190
Total Trips (Actual Vehicles)[2]			**82**	**17**	**99**	**21**	**75**	**96**	**822**
Passenger Car Equivalent (PCE):									
General Light Industrial (20%)	69.810	TSF							
Passenger Cars:			45	6	51	6	39	45	324
2-axle Trucks (PCE = 1.5):			0	0	0	0	0	0	4
3-axle Trucks (PCE = 2.0):			0	0	0	0	0	0	8
4+-axle Trucks (PCE = 3.0):			1	0	1	1	1	1	34
Total Truck Trips (PCE):			1	0	1	1	1	2	46
Total Trips (PCE)[2]			46	6	52	7	40	47	370
Warehousing (80%)	279.250	TSF							
Passenger Cars:			33	8	41	10	32	42	310
2-axle Trucks (PCE = 1.5):			1	1	2	1	1	2	42
3-axle Trucks (PCE = 2.0):			1	1	2	2	2	4	70
4+-axle Trucks (PCE = 3.0):			6	5	11	8	7	15	316
Total Truck Trips (PCE):			8	7	15	11	10	21	428
Total Trips (PCE)[2]			41	15	56	21	42	63	738
Passenger Cars			78	14	92	16	71	87	634
Trucks			9	7	16	12	11	23	474
Total Trips (PCE)[2]			**87**	**21**	**108**	**28**	**82**	**110**	**1,108**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

TRIP DISTRIBUTION

The Project trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. In addition, truck routes for neighboring agencies have been taken into consideration in the development of the trip distribution patterns for heavy trucks. Exhibits 2 and 3 show the Project truck and passenger car trip distribution patterns, respectively.

EXHIBIT 2: PROJECT (TRUCK) TRIP DISTRIBUTION

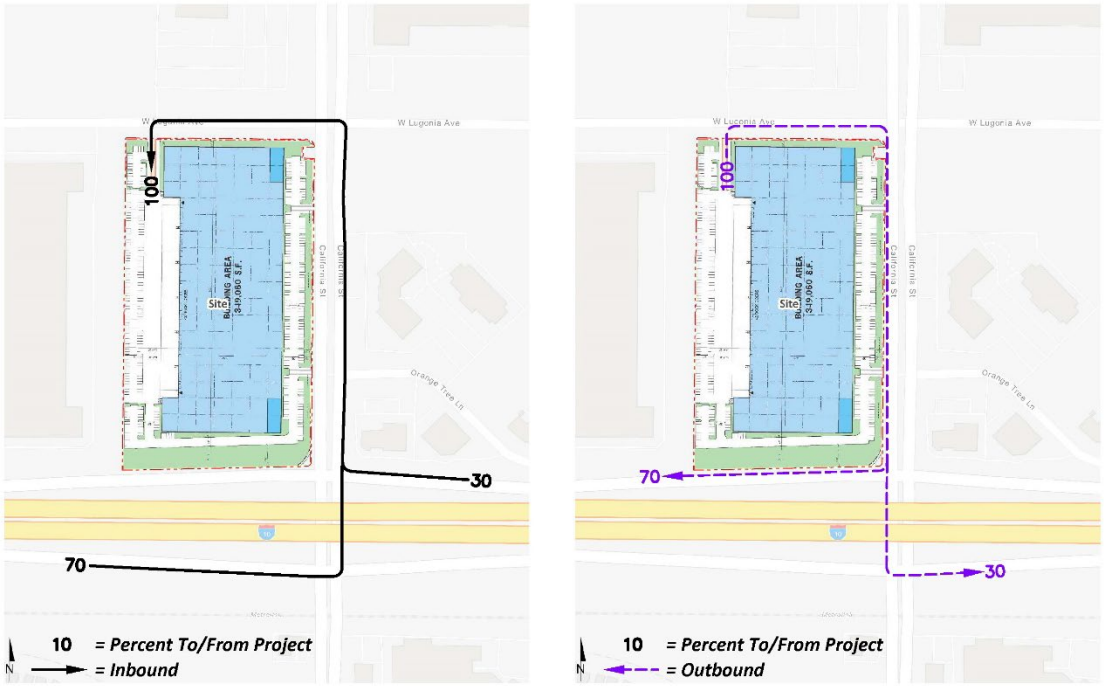
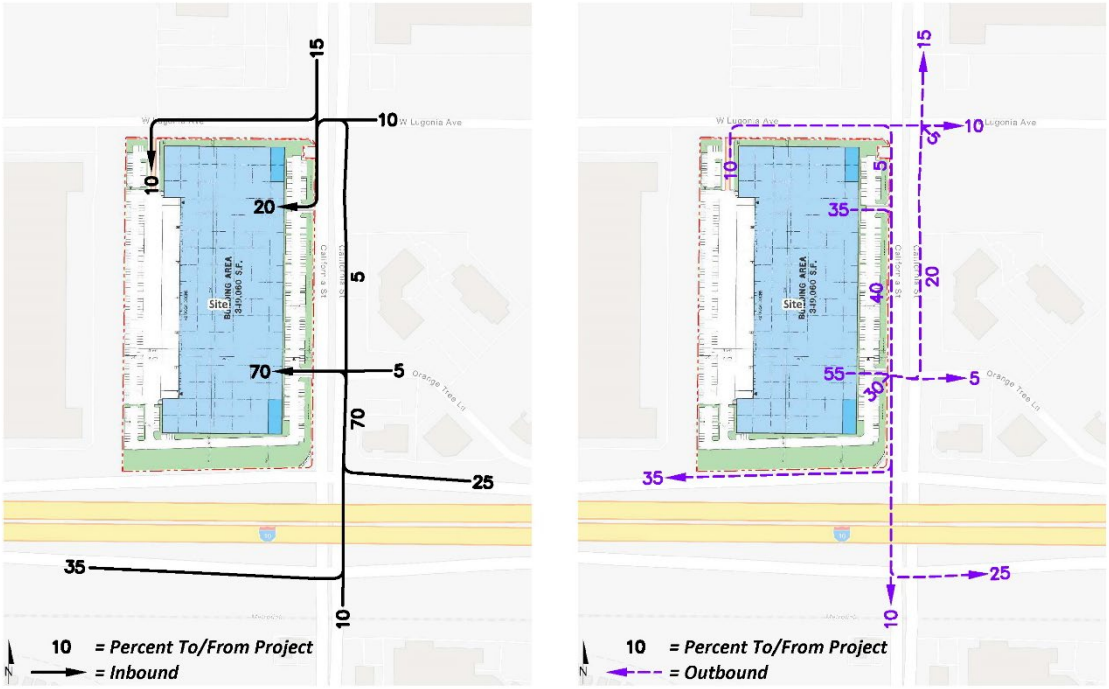


EXHIBIT 3: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION



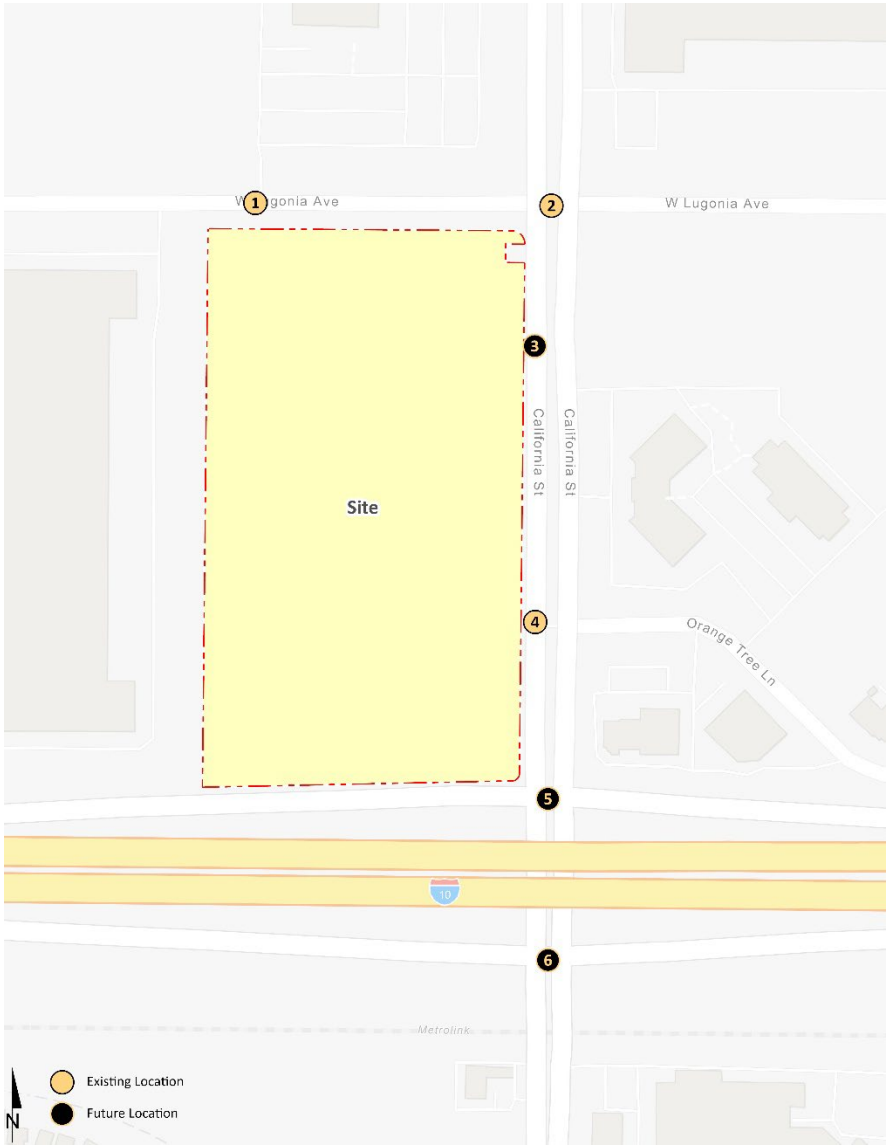
PROPOSED STUDY AREA INTERSECTIONS

The Project may contribute fewer than 50 peak hour trips to some study area intersections, however the following intersections have been identified as study analysis locations (see Table 3 and Exhibit 4).

TABLE 3: STUDY AREA INTERSECTIONS

#	Intersection	Jurisdiction
1	Driveway 1 & Lugonia Avenue	Redlands
2	California Avenue & Lugonia Avenue	Redlands
3	California Avenue & Driveway 2	Redlands
4	California Avenue & Driveway 3/Orange Tree Lane	Redlands
5	California Avenue & I-10 WB Ramps	Caltrans, Redlands
6	California Avenue & I-10 EB Ramps	Caltrans, Redlands

EXHIBIT 4: STUDY AREA



ANALYSIS SCENARIOS

Intersection analysis will be provided for AM and PM peak hours the following analysis scenarios:

1. Existing (2023) Conditions
2. Existing plus Project Conditions

Intersection operations analysis will utilize the Highway Capacity Manual (6th Edition) to evaluate signalized and unsignalized intersections. The California Manual on Uniform Traffic Control Devices (CA MUTCD) will be utilized to evaluate peak hour traffic signal warrants at the unsignalized study area intersections. The study area that is proposed to be evaluated is shown on Exhibit 4.

EXISTING COUNT DATA

New traffic counts will be collected on June 1, 2023 when local schools were open and operating on normal bell schedules (last day of school for the Redlands Unified School District was June 8, 2023. Count data was collected for the following peak hours:

- Weekday AM Peak Hour (7-9 AM)
- Weekday PM Peak Hour (4-6 PM)

LEVEL OF SERVICE CRITERIA

The City of Redlands has established specific performance criteria for intersection operations. These performance criteria include standards related to determining the project deficiencies on the roadway system. The City of Redlands has established LOS C as the minimum level of service for its intersections. Therefore, any intersection operating at LOS D or worse will be considered deficient for the purposes of this analysis. Additionally, General Plan Policy 5.20c from the Redlands General Plan states that: Where the current level of service at a location within the City of Redlands is below the Level of Service (**LOS**) C standard, no development project shall be approved that cannot be mitigated so that it does not reduce the existing level of service at that location (i.e. intersections in Redlands that are deficient to start out with are acceptable as long as they do not further degrade LOS) except as provided in Section 5.20b.

General Plan Policy 5.20b of Measure U states that within the area identified in GP Figure 5-1, including the "donut hole", maintain LOS C or better, however, accept a reduced LOS on a case-by-case basis upon approval by a four-fifths (4/5ths) vote of the total authorized membership of the City Council.

DEFICIENCY THRESHOLDS

The following thresholds will be utilized to determine whether the addition of Project traffic at a study intersection results in a project-related deficiency:

- A project deficiency occurs at a study intersection if the addition of project-generated trips reduces the peak hour level of service of the study intersection to change from acceptable operation (e.g., LOS A, B or C) to deficient operation (e.g., LOS D, E or F) and, if applicable, also causes an unsignalized intersection to satisfy a Caltrans traffic signal warrant; or
- A project deficiency occurs at a study intersection if the addition of project-generated trips worsens the pre-project level of service grade at a deficiently operating (e.g., LOS D, E or F) intersection and, if applicable, also causes an unsignalized intersection to satisfy a Caltrans traffic signal warrant.

Per 5.20c of Measure U, where the current LOS at a location within the City of Redlands is below the LOS C standard, no development project shall be approved that cannot be mitigated so that it does not reduce the existing LOS at that location except as provided in Section 5.20b.

SPECIAL ISSUES

The following special issues will also be addressed as part of the analysis:

- Traffic Signal Warrant Analysis: Traffic signal warrant analysis will be performed for all full-access unsignalized study area intersections utilizing the California MUTCD peak-hour warrants for existing intersections, and the Caltrans daily (Planning level) warrant for new intersections.
- Site Access/Queuing Evaluation: The turn pocket lengths will be determined through peak hour traffic simulations developed using Synchro and SimTraffic software in an effort to determine the 95th percentile peak hour queues and the required storage capacity for turn lanes at applicable Project driveways and the adjacent intersection of California Avenue and Lugonia Avenue.
    - Kaiser Permanente driveway on Lugonia Avenue – we will obtain the future intersection plans for the Kaiser Permanente expansion to evaluate the peak hour operations with the planned improvements.
- Truck Turns: Evaluate truck turns at applicable Project driveways to ensure driveways are designed to accommodate site access.
    - Truck turns will also be evaluated with the future intersection improvements planned for the driveway on Lugonia Avenue (for the future Kaiser Permanente expansion).
- Southeast Corner Dedication: The proposed Project's site plan accounts for a proposed southbound right turn lane for the I-10 Westbound On-Ramp in the southeast corner of the proposed Project site. The same southbound right turn lane at the I-10 Westbound On-Ramp will be evaluated as part of the E+P traffic conditions.
- A VMT Screening Assessment is provided under separate cover.

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

APPENDIX 1.2: SITE ADJACENT QUEUES

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Intersection: 1: Driveway 1/Kaiser Driveway & Lugonia Av.

Movement	EB	WB	WB	NB	SB
Directions Served	L	L	TR	LTR	LTR
Maximum Queue (ft)	6	30	8	35	47
Average Queue (ft)	0	2	1	8	17
95th Queue (ft)	4	12	7	31	43
Link Distance (ft)			242	104	84
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100	100			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: Driveway 2 & Lugonia Av.

Movement	NB
Directions Served	R
Maximum Queue (ft)	15
Average Queue (ft)	1
95th Queue (ft)	11
Link Distance (ft)	43
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: California Av. & Driveway 3

Movement	EB	NB
Directions Served	R	T
Maximum Queue (ft)	29	8
Average Queue (ft)	3	0
95th Queue (ft)	17	5
Link Distance (ft)	61	514
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: California Av. & Driveway 4/Orange Tree Ln.

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LT	R	LT	R	UL	T	TR	L	T	T
Maximum Queue (ft)	29	29	98	28	187	248	225	68	57	160
Average Queue (ft)	4	3	49	9	47	114	67	27	21	53
95th Queue (ft)	19	18	81	30	111	217	153	56	51	117
Link Distance (ft)	50	50	352	352		256	256		514	514
Upstream Blk Time (%)						0	0			
Queuing Penalty (veh)						1	0			
Storage Bay Dist (ft)					100			150		
Storage Blk Time (%)					0	7				
Queuing Penalty (veh)					0	6				

Zone Summary

Zone wide Queuing Penalty: 7

Intersection: 1: Driveway 1/Kaiser Driveway & Lugonia Av.

Movement	WB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	30	35	61
Average Queue (ft)	1	13	37
95th Queue (ft)	12	38	58
Link Distance (ft)		104	84
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)	100		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Driveway 2 & Lugonia Av.

Movement	NB
Directions Served	R
Maximum Queue (ft)	35
Average Queue (ft)	9
95th Queue (ft)	32
Link Distance (ft)	43
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: California Av. & Driveway 3

Movement	EB	SB	SB
Directions Served	R	T	T
Maximum Queue (ft)	46	25	46
Average Queue (ft)	13	1	2
95th Queue (ft)	39	16	32
Link Distance (ft)	61	193	193
Upstream Blk Time (%)	0		0
Queuing Penalty (veh)	0		0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: California Av. & Driveway 4/Orange Tree Ln.

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LT	R	LT	R	UL	T	TR	L	T	T
Maximum Queue (ft)	45	40	217	33	70	162	143	57	306	407
Average Queue (ft)	12	15	106	8	24	74	49	21	87	168
95th Queue (ft)	37	40	178	28	52	138	102	50	237	355
Link Distance (ft)	50	50	352	352		256	256		514	514
Upstream Blk Time (%)	0	0								1
Queuing Penalty (veh)	0	0								2
Storage Bay Dist (ft)					100			150		
Storage Blk Time (%)					0	3			0	
Queuing Penalty (veh)					0	1			0	

Zone Summary

Zone wide Queuing Penalty: 3

APPENDIX 3.1: TRAFFIC COUNTS

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Volume Development - AM Peak Hour

1. Driveway 1 & Lugonia Av.

	PHF:	0.923		7:45					Count Date:		6/1/2023		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing 2023:	0	0	0	27	0	2	2	71	0	0	156	106	364
PCE:	**0**	**0**	**0**	**29**	**0**	**2**	**2**	**120**	**0**	**0**	**197**	**107**	**455**
Project:	0	0	9	0	0	0	0	0	0	17	0	0	26
E+P:	0	0	9	29	0	2	2	120	0	17	197	107	481

2. Driveway 2 & Lugonia Av.

	PHF:	0.920							Count Date:				
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing 2023:								98			262		360
PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**148**	**0**	**0**	**303**	**0**	**451**
Project:	0	0	2	0	0	0	10	7	0	0	9	0	28
E+P:	0	0	2	0	0	0	10	155	0	0	312	0	479

3. California Av. & Lugonia Av.

	PHF:	0.914		7:30					Count Date:		6/1/2023		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing 2023:	199	421	87	18	254	14	11	16	71	108	49	24	1,272
PCE:	**236**	**499**	**87**	**18**	**339**	**15**	**12**	**22**	**115**	**108**	**53**	**28**	**1,530**
Project:	9	2	5	0	12	0	0	0	9	10	0	0	47
E+P:	245	501	92	18	351	15	12	22	124	118	53	28	1,577

4. California Av. & Driveway 3

	PHF:	0.920							Count Date:				
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing 2023:	0	707	0	0	433	0	0	0	0	0	0	0	1,140
PCE:	**0**	**822**	**0**	**0**	**562**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1383**
Project:	0	16	0	0	9	16	0	0	4	0	0	0	45
E+P:	0	838	0	0	571	16	0	0	4	0	0	0	1,428

5. California Av. & Driveway 4/Orange Tree Lane

	PHF:	0.861		7:30					Count Date:		6/1/2023		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing 2023:	24	718	210	32	401	0	0	0	0	87	0	14	1,486
PCE:	**24**	**844**	**235**	**44**	**518**	**0**	**0**	**0**	**0**	**95**	**0**	**14**	**1773**
Project:	52	13	0	0	13	0	3	1	5	0	4	0	91
E+P:	76	857	235	44	531	0	3	1	5	95	4	14	1,864

Volume Development - PM Peak Hour

1. Driveway 1 & Lugonia Av.

	PHF:	0.897		4:15 PM					Count Date:	6/1/2023		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing 2023:	0	0	0	93	0	6	0	**159**	0	0	77	40	375
PCE:	**0**	**0**	**0**	**93**	**0**	**6**	**0**	**175**	**0**	**0**	**91**	**40**	**405**
Project:	0	0	19	0	0	0	0	0	0	15	0	0	34
E+P:	0	0	19	93	0	6	0	175	0	15	91	40	439

2. Driveway 2 & Lugonia Av.

	PHF:	0.920							Count Date:				
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing 2023:								252			117		369
PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**268**	**0**	**0**	**131**	**0**	**399**
Project:	0	0	7	0	0	0	9	12	0	0	13	0	41
E+P:	0	0	7	0	0	0	9	280	0	0	144	0	440

3. California Av. & Lugonia Av.

	PHF:	0.976		4:00					Count Date:	6/1/2023		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing 2023:	73	278	119	62	**444**	8	20	51	**181**	**136**	**36**	32	1,440
PCE:	**84**	**313**	**120**	**64**	**504**	**10**	**21**	**52**	**196**	**139**	**38**	**33**	**1,571**
Project:	13	11	4	0	2	0	0	0	19	9	0	0	58
E+P:	97	324	124	64	506	10	21	52	215	148	38	33	1,629

4. California Av. & Driveway 3

	PHF:	0.920							Count Date:				
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing 2023:	0	470	0	0	761	0	0	0	0	0	0	0	1,231
PCE:	**0**	**516**	**0**	**0**	**838**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,354**
Project:	0	28	0	0	23	3	0	0	18	0	0	0	72
E+P:	0	544	0	0	861	3	0	0	18	0	0	0	1,426

5. California Av. & Driveway 4/Orange Tree Lane

	PHF:	0.870		4:15 PM					Count Date:	6/1/2023		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing 2023:	32	**427**	110	27	**734**	0	0	0	0	**276**	0	12	1,618
PCE:	**32**	**484**	**145**	**34**	**805**	**0**	**0**	**0**	**0**	**280**	**0**	**12**	**1,791**
Project:	10	14	0	0	41	0	15	4	22	0	1	0	107
E+P:	42	498	145	34	846	0	15	4	22	280	1	12	1,898

6. California Av. & I-10 WB Ramps

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

City of Redlands
N/S: Driveway
E/W: Lugonia Avenue
Weather: Clear

File Name : 01_RED_DW_Lug AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

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

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	24	10	34	1	23	24	58
07:15 AM	3	0	3	24	16	40	0	14	14	57
07:30 AM	0	1	1	40	23	63	1	20	21	85
07:45 AM	9	0	9	54	14	68	1	14	15	92
Total	12	1	13	142	63	205	3	71	74	292
08:00 AM	5	0	5	39	23	62	0	16	16	83
08:15 AM	7	1	8	28	40	68	1	20	21	97
08:30 AM	6	1	7	31	29	60	0	19	19	86
08:45 AM	12	0	12	20	19	39	0	17	17	68
Total	30	2	32	118	111	229	1	72	73	334
Grand Total	42	3	45	260	174	434	4	143	147	626
Apprch %	93.3	6.7		59.9	40.1		2.7	97.3		
Total %	6.7	0.5	7.2	41.5	27.8	69.3	0.6	22.8	23.5	
Passenger Vehicles	39	3	42	216	173	389	4	82	86	517
% Passenger Vehicles	92.9	100	93.3	83.1	99.4	89.6	100	57.3	58.5	82.6
Large 2 Axle Vehicles	3	0	3	11	1	12	0	18	18	33
% Large 2 Axle Vehicles	7.1	0	6.7	4.2	0.6	2.8	0	12.6	12.2	5.3
3 Axle Vehicles	0	0	0	15	0	15	0	6	6	21
% 3 Axle Vehicles	0	0	0	5.8	0	3.5	0	4.2	4.1	3.4
4+ Axle Trucks	0	0	0	18	0	18	0	37	37	55
% 4+ Axle Trucks	0	0	0	6.9	0	4.1	0	25.9	25.2	8.8

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue 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 07:45 AM										
07:45 AM	**9**	0	**9**	**54**	14	**68**	**1**	14	15	92
08:00 AM	5	0	5	39	23	62	0	16	16	83
08:15 AM	7	**1**	8	28	**40**	68	1	**20**	**21**	**97**
08:30 AM	6	1	7	31	29	60	0	19	19	86
Total Volume	27	2	29	152	106	258	2	69	71	358
% App. Total	93.1	6.9		58.9	41.1		2.8	97.2		
PHF	.750	.500	.806	.704	.663	.949	.500	.863	.845	.923

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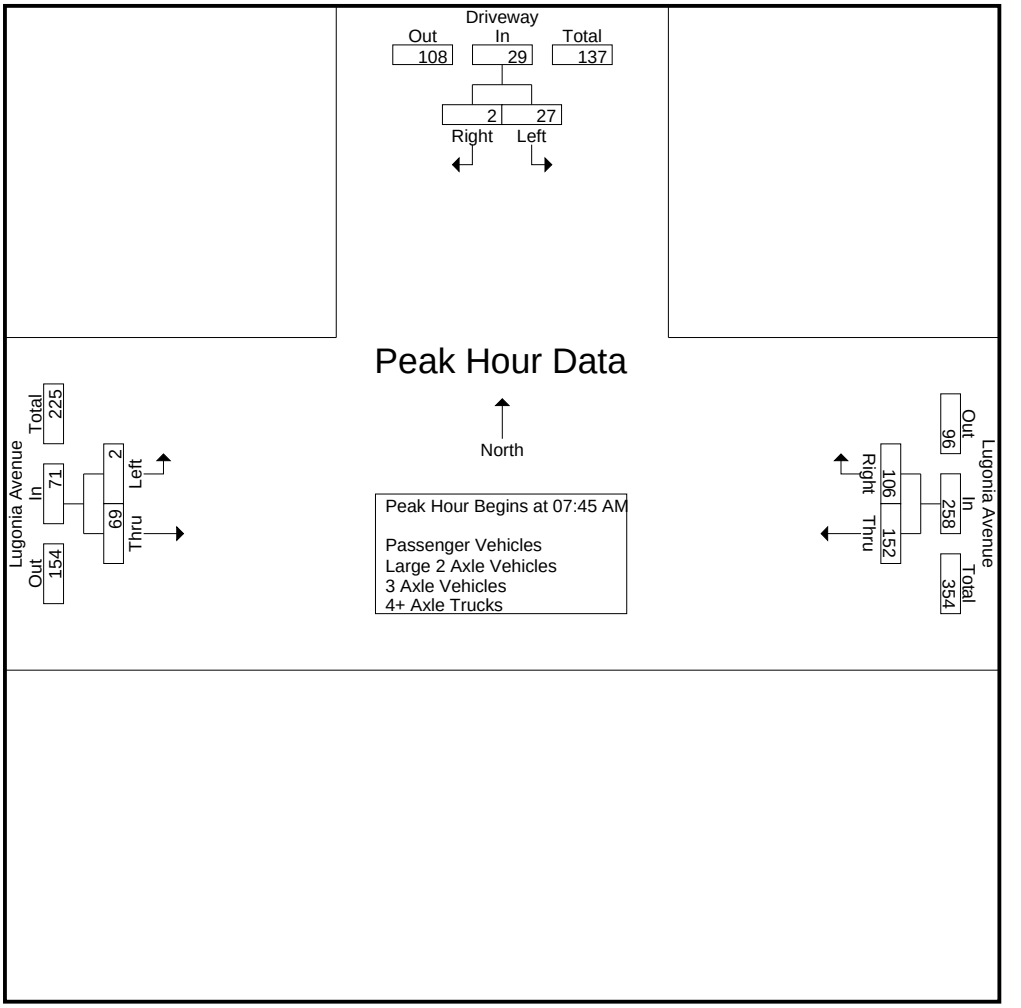

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			07:30 AM			07:00 AM		
+0 mins.	5	0	5	40	23	63	**1**	**23**	**24**
+15 mins.	7	**1**	8	**54**	14	**68**	0	14	14
+30 mins.	6	1	7	39	23	62	1	20	21
+45 mins.	**12**	0	**12**	28	**40**	68	1	14	15
Total Volume	30	2	32	161	100	261	3	71	74
% App. Total	93.8	6.2		61.7	38.3		4.1	95.9	
PHF	.625	.500	.667	.745	.625	.960	.750	.772	.771

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Groups Printed- Large 2 Axle Vehicles

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue 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	4	4	5
07:15 AM	0	0	0	3	0	3	0	2	2	5
07:30 AM	0	0	0	0	0	0	0	1	1	1
07:45 AM	0	0	0	0	1	1	0	3	3	4
Total	0	0	0	4	1	5	0	10	10	15
08:00 AM	1	0	1	4	0	4	0	2	2	7
08:15 AM	2	0	2	2	0	2	0	3	3	7
08:30 AM	0	0	0	1	0	1	0	3	3	4
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	3	0	3	7	0	7	0	8	8	18
Grand Total	3	0	3	11	1	12	0	18	18	33
Apprch %	100	0		91.7	8.3		0	100		
Total %	9.1	0	9.1	33.3	3	36.4	0	54.5	54.5	

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	0	**1**	1	0	**3**	**3**	4
08:00 AM	1	0	1	**4**	0	**4**	0	2	2	**7**
08:15 AM	**2**	0	**2**	2	0	2	0	3	3	7
08:30 AM	0	0	0	1	0	1	0	3	3	4
Total Volume	3	0	3	7	1	8	0	11	11	22
% App. Total	100	0		87.5	12.5		0	100		
PHF	.375	.000	.375	.438	.250	.500	.000	.917	.917	.786

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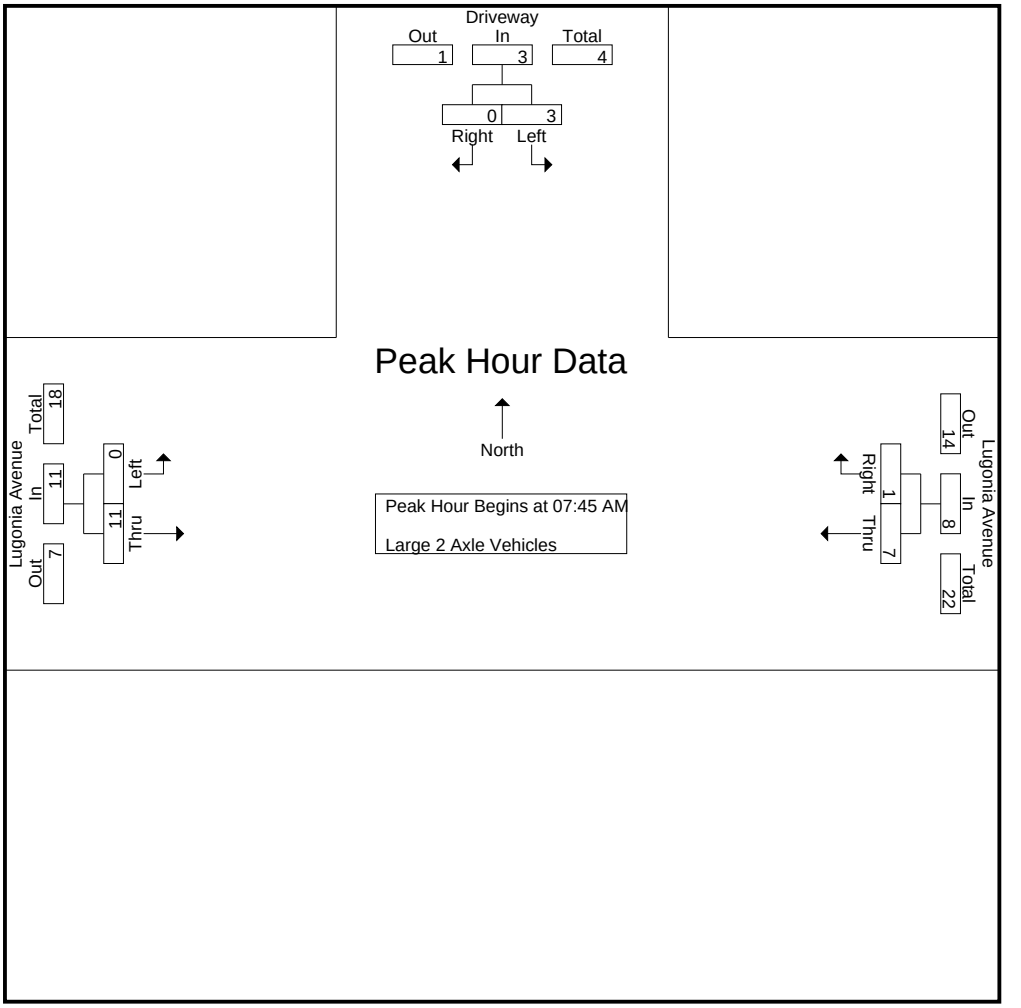

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	0	0	0	**1**	1	0	**3**	**3**
+15 mins.	1	0	1	**4**	0	**4**	0	2	2
+30 mins.	**2**	0	**2**	2	0	2	0	3	3
+45 mins.	0	0	0	1	0	1	0	3	3
Total Volume	3	0	3	7	1	8	0	11	11
% App. Total	100	0		87.5	12.5		0	100	
PHF	.375	.000	.375	.438	.250	.500	.000	.917	.917

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Groups Printed- 3 Axle Vehicles

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue 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	1	1	1
07:30 AM	0	0	0	3	0	3	0	0	0	3
07:45 AM	0	0	0	3	0	3	0	0	0	3
Total	0	0	0	6	0	6	0	1	1	7
08:00 AM	0	0	0	4	0	4	0	1	1	5
08:15 AM	0	0	0	3	0	3	0	1	1	4
08:30 AM	0	0	0	1	0	1	0	1	1	2
08:45 AM	0	0	0	1	0	1	0	2	2	3
Total	0	0	0	9	0	9	0	5	5	14
Grand Total	0	0	0	15	0	15	0	6	6	21
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	71.4	0	71.4	0	28.6	28.6	

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	3	0	3	0	0	0	3
08:00 AM	0	0	0	**4**	0	**4**	0	**1**	**1**	**5**
08:15 AM	0	0	0	3	0	3	0	1	1	4
08:30 AM	0	0	0	1	0	1	0	1	1	2
Total Volume	0	0	0	11	0	11	0	3	3	14
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.688	.000	.688	.000	.750	.750	.700

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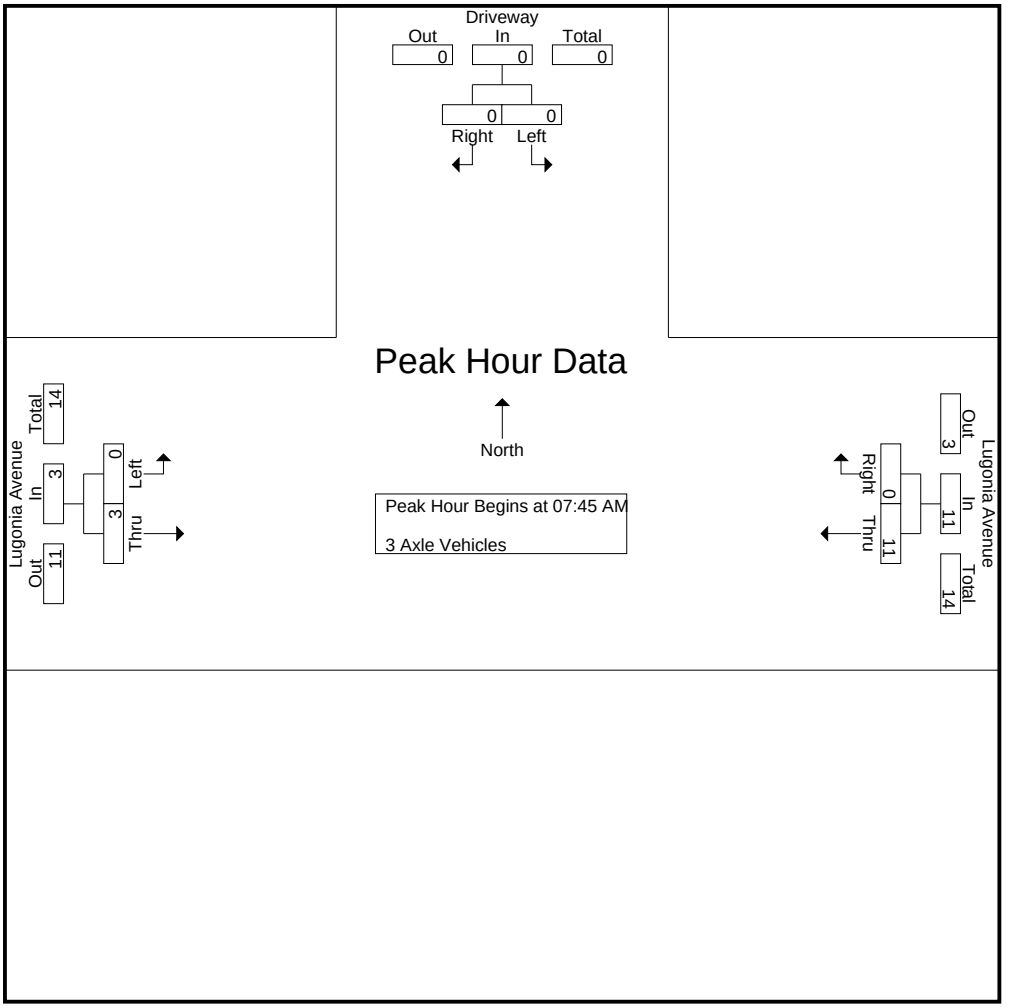

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	0	0	3	0	3	0	0	0
+15 mins.	0	0	0	**4**	0	**4**	0	**1**	**1**
+30 mins.	0	0	0	3	0	3	0	1	1
+45 mins.	0	0	0	1	0	1	0	1	1
Total Volume	0	0	0	11	0	11	0	3	3
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.688	.000	.688	.000	.750	.750

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Groups Printed- 4+ Axle Trucks

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue 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	3	3	4
07:15 AM	0	0	0	1	0	1	0	6	6	7
07:30 AM	0	0	0	4	0	4	0	6	6	10
07:45 AM	0	0	0	2	0	2	0	3	3	5
Total	0	0	0	8	0	8	0	18	18	26
08:00 AM	0	0	0	5	0	5	0	5	5	10
08:15 AM	0	0	0	0	0	0	0	5	5	5
08:30 AM	0	0	0	4	0	4	0	7	7	11
08:45 AM	0	0	0	1	0	1	0	2	2	3
Total	0	0	0	10	0	10	0	19	19	29
Grand Total	0	0	0	18	0	18	0	37	37	55
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	32.7	0	32.7	0	67.3	67.3	

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	2	0	2	0	3	3	5
08:00 AM	0	0	0	**5**	0	**5**	0	5	5	10
08:15 AM	0	0	0	0	0	0	0	5	5	5
08:30 AM	0	0	0	4	0	4	0	**7**	**7**	**11**
Total Volume	0	0	0	11	0	11	0	20	20	31
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.550	.000	.550	.000	.714	.714	.705

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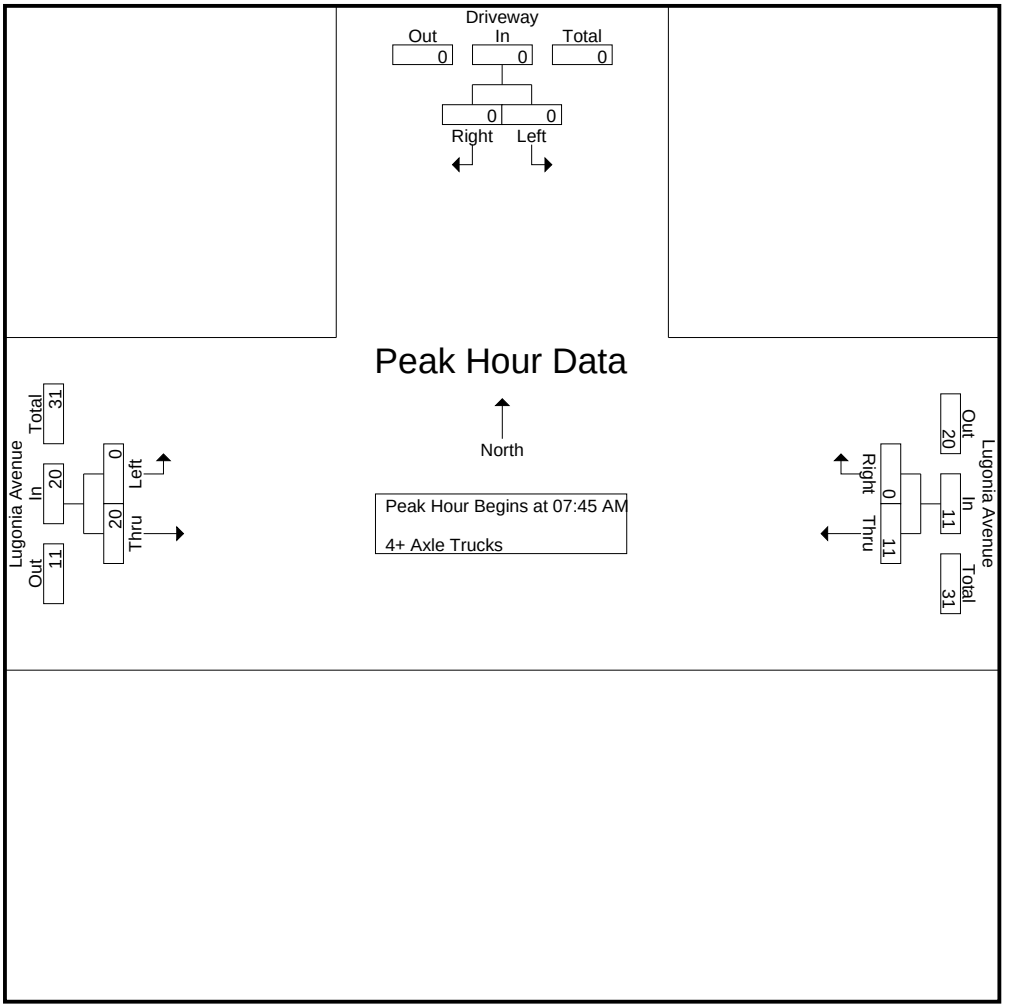

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	0	0	2	0	2	0	3	3
+15 mins.	0	0	0	**5**	0	**5**	0	5	5
+30 mins.	0	0	0	0	0	0	0	5	5
+45 mins.	0	0	0	4	0	4	0	**7**	**7**
Total Volume	0	0	0	11	0	11	0	20	20
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.550	.000	.550	.000	.714	.714

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

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	15	2	17	13	12	25	1	40	41	83
04:15 PM	23	1	24	21	13	34	0	37	37	95
04:30 PM	19	2	21	15	10	25	0	49	49	95
04:45 PM	17	0	17	21	9	30	0	27	27	74
Total	74	5	79	70	44	114	1	153	154	347
05:00 PM	34	3	37	20	8	28	0	37	37	102
05:15 PM	22	2	24	20	4	24	1	16	17	65
05:30 PM	11	0	11	22	5	27	2	30	32	70
05:45 PM	8	1	9	17	6	23	0	19	19	51
Total	75	6	81	79	23	102	3	102	105	288
Grand Total	149	11	160	149	67	216	4	255	259	635
Apprch %	93.1	6.9		69	31		1.5	98.5		
Total %	23.5	1.7	25.2	23.5	10.6	34	0.6	40.2	40.8	
Passenger Vehicles	149	11	160	120	67	187	4	234	238	585
% Passenger Vehicles	100	100	100	80.5	100	86.6	100	91.8	91.9	92.1
Large 2 Axle Vehicles	0	0	0	8	0	8	0	4	4	12
% Large 2 Axle Vehicles	0	0	0	5.4	0	3.7	0	1.6	1.5	1.9
3 Axle Vehicles	0	0	0	7	0	7	0	7	7	14
% 3 Axle Vehicles	0	0	0	4.7	0	3.2	0	2.7	2.7	2.2
4+ Axle Trucks	0	0	0	14	0	14	0	10	10	24
% 4+ Axle Trucks	0	0	0	9.4	0	6.5	0	3.9	3.9	3.8

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	23	1	24	**21**	**13**	**34**	0	37	37	95
04:30 PM	19	2	21	15	10	25	0	**49**	**49**	95
04:45 PM	17	0	17	21	9	30	0	27	27	74
05:00 PM	**34**	**3**	**37**	20	8	28	0	37	37	**102**
Total Volume	93	6	99	77	40	117	0	150	150	366
% App. Total	93.9	6.1		65.8	34.2		0	100		
PHF	.684	.500	.669	.917	.769	.860	.000	.765	.765	.897

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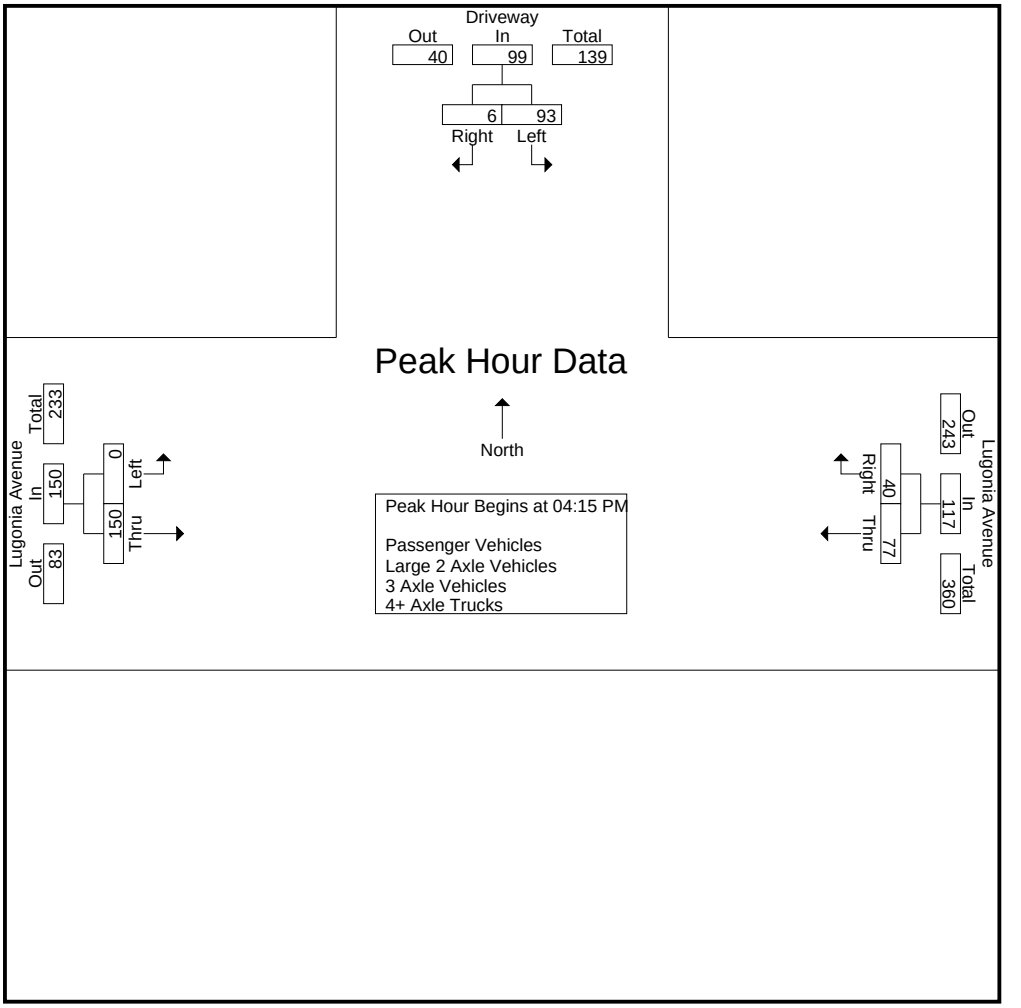

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:15 PM			04:00 PM		
+0 mins.	23	1	24	**21**	**13**	**34**	**1**	40	41
+15 mins.	19	2	21	15	10	25	0	37	37
+30 mins.	17	0	17	21	9	30	0	**49**	**49**
+45 mins.	**34**	**3**	**37**	20	8	28	0	27	27
Total Volume	93	6	99	77	40	117	1	153	154
% App. Total	93.9	6.1		65.8	34.2		0.6	99.4	
PHF	.684	.500	.669	.917	.769	.860	.250	.781	.786

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Groups Printed- Large 2 Axle Vehicles

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	1	0	1	0	0	0	1
04:15 PM	0	0	0	2	0	2	0	1	1	3
04:30 PM	0	0	0	1	0	1	0	1	1	2
04:45 PM	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	4	0	4	0	3	3	7
05:00 PM	0	0	0	1	0	1	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	1	1	1
05:30 PM	0	0	0	1	0	1	0	0	0	1
05:45 PM	0	0	0	2	0	2	0	0	0	2
Total	0	0	0	4	0	4	0	1	1	5
Grand Total	0	0	0	8	0	8	0	4	4	12
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	66.7	0	66.7	0	33.3	33.3	

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	0	0	**2**	0	**2**	0	**1**	**1**	**3**
04:30 PM	0	0	0	1	0	1	0	1	1	2
04:45 PM	0	0	0	0	0	0	0	1	1	1
05:00 PM	0	0	0	1	0	1	0	0	0	1
Total Volume	0	0	0	4	0	4	0	3	3	7
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.500	.000	.500	.000	.750	.750	.583

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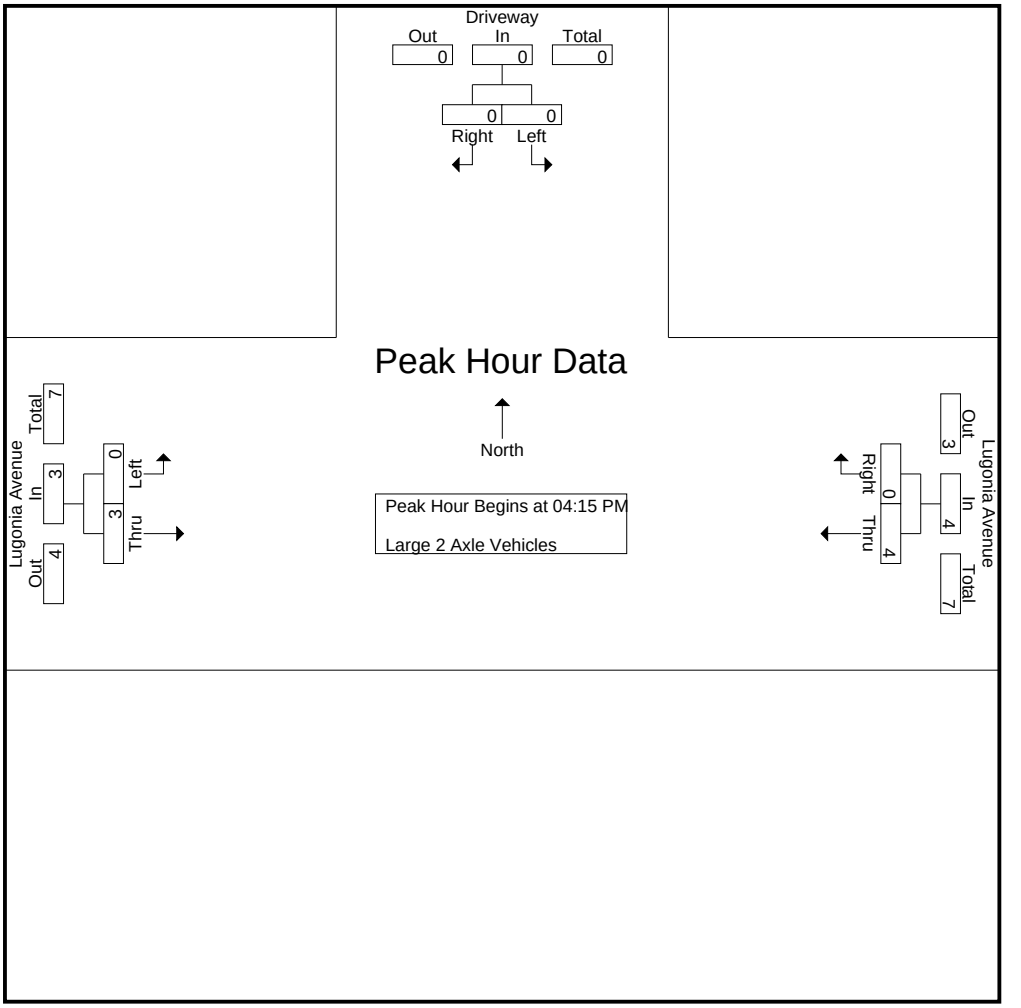

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	0	0	0	**2**	0	**2**	0	**1**	**1**
+15 mins.	0	0	0	1	0	1	0	1	1
+30 mins.	0	0	0	0	0	0	0	1	1
+45 mins.	0	0	0	1	0	1	0	0	0
Total Volume	0	0	0	4	0	4	0	3	3
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.500	.000	.500	.000	.750	.750

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Groups Printed- 3 Axle Vehicles

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue 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	1	1	1
04:15 PM	0	0	0	2	0	2	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	2	2	2
04:45 PM	0	0	0	1	0	1	0	0	0	1
Total	0	0	0	3	0	3	0	3	3	6
05:00 PM	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	2	0	2	0	1	1	3
05:45 PM	0	0	0	2	0	2	0	2	2	4
Total	0	0	0	4	0	4	0	4	4	8
Grand Total	0	0	0	7	0	7	0	7	7	14
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	50	0	50	0	50	50	

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	0	0	**2**	0	**2**	0	0	0	**2**
04:30 PM	0	0	0	0	0	0	0	**2**	**2**	2
04:45 PM	0	0	0	1	0	1	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	3	0	3	0	3	3	6
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.375	.000	.375	.000	.375	.375	.750

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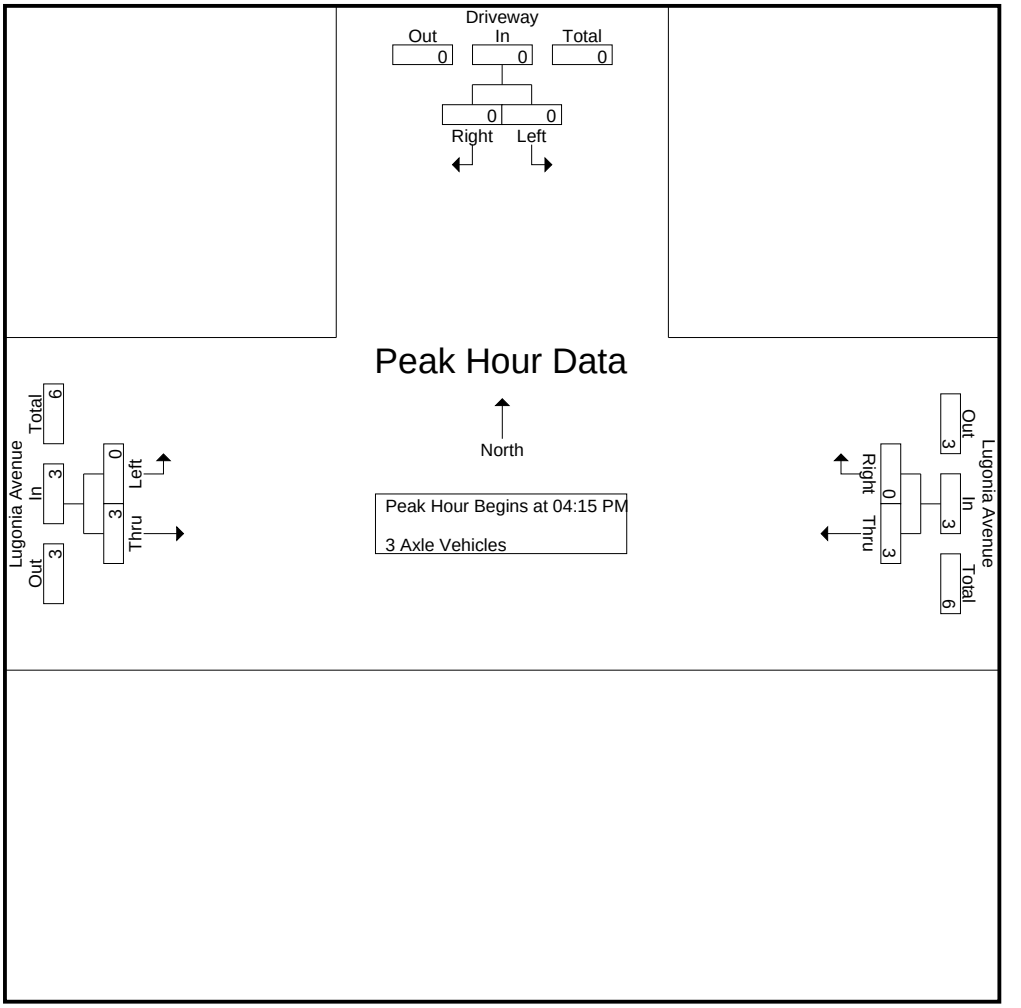
City of Redlands
N/S: Driveway
E/W: Lugonia Avenue
Weather: Clear

File Name : 01_RED_DW_Lug PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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

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

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City of Redlands
N/S: Driveway
E/W: Lugonia Avenue
Weather: Clear

File Name : 01_RED_DW_Lug PM
Site Code : 05123579
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Groups Printed- 4+ Axle Trucks

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue 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	2	2	2
04:15 PM	0	0	0	3	0	3	0	1	1	4
04:30 PM	0	0	0	0	0	0	0	2	2	2
04:45 PM	0	0	0	1	0	1	0	1	1	2
Total	0	0	0	4	0	4	0	6	6	10
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	6	0	6	0	1	1	7
05:30 PM	0	0	0	2	0	2	0	2	2	4
05:45 PM	0	0	0	2	0	2	0	1	1	3
Total	0	0	0	10	0	10	0	4	4	14
Grand Total	0	0	0	14	0	14	0	10	10	24
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	58.3	0	58.3	0	41.7	41.7	

	Driveway Southbound			Lugonia Avenue Westbound			Lugonia Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	0	0	**3**	0	**3**	0	1	1	**4**
04:30 PM	0	0	0	0	0	0	0	**2**	**2**	2
04:45 PM	0	0	0	1	0	1	0	1	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	4	0	4	0	4	4	8
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.333	.000	.333	.000	.500	.500	.500

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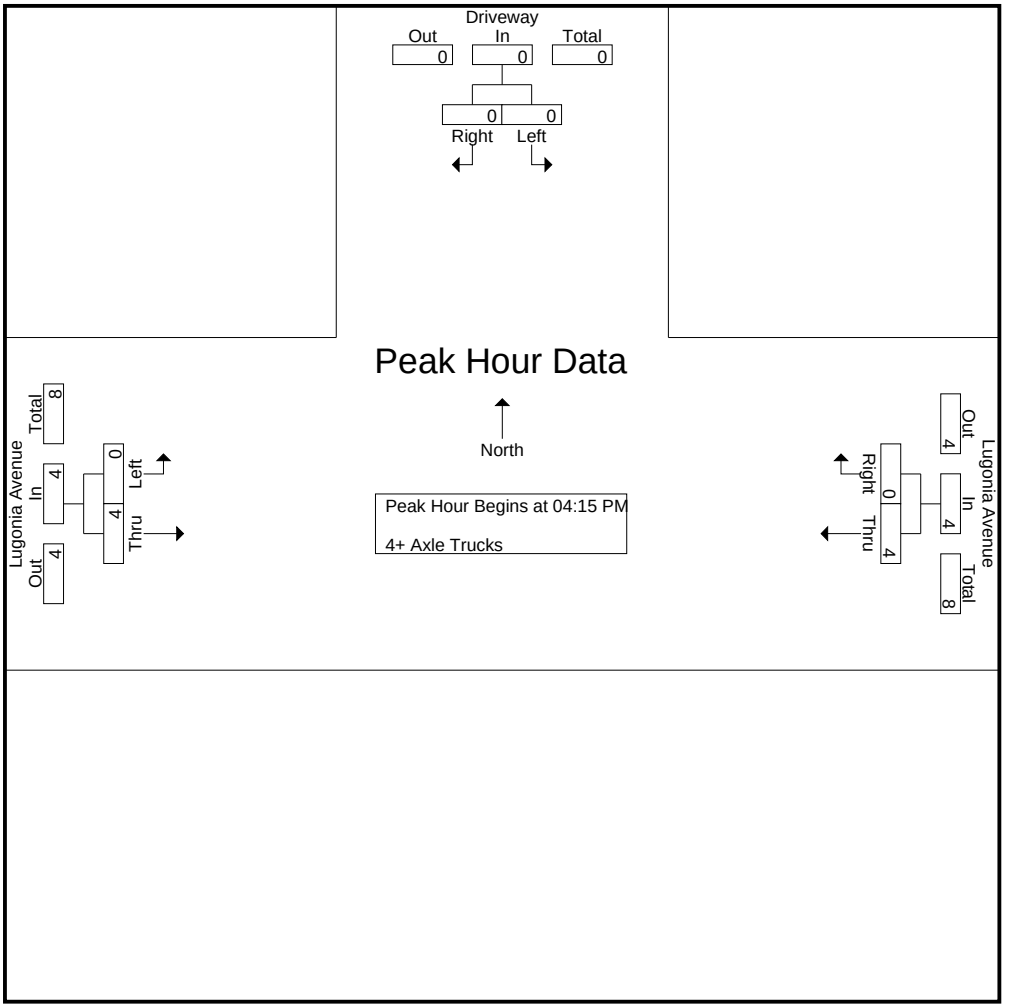

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	0	0	0	**3**	0	**3**	0	1	1
+15 mins.	0	0	0	0	0	0	0	**2**	**2**
+30 mins.	0	0	0	1	0	1	0	1	1
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	4	0	4	0	4	4
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.333	.000	.333	.000	.500	.500

Location: Redlands
N/S: Driveway
E/W: Lugonia Avenue

Date: 6/1/2023
Day: Thursday

PEDESTRIANS

	North Leg Driveway	East Leg Lugonia Avenue	South Leg Dead End	West Leg Lugonia Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	1	0	0	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	1	0	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	1	0	0	2

	North Leg Driveway	East Leg Lugonia Avenue	South Leg Dead End	West Leg Lugonia Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

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Location: Redlands
N/S: Driveway
E/W: Lugonia Avenue

Date: 6/1/2023
Day: Thursday

BICYCLES

	Southbound Driveway			Westbound Lugonia Avenue			Northbound Dead End			Eastbound Lugonia Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	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 Driveway			Westbound Lugonia Avenue			Northbound Dead End			Eastbound Lugonia Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	0	0	2

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City of Redlands
N/S: California Street
E/W: Lugonia Avenue
Weather: Clear

File Name : 02_RED_Cali_Lug AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

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

	California Street Southbound					Lugonia Avenue Westbound					California Street Northbound					Lugonia Avenue 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	2	51	1	0	54	24	7	5	4	36	26	105	12	5	143	1	4	14	8	19	17	252	269
07:15 AM	1	49	1	0	51	24	6	8	7	38	34	105	15	7	154	5	2	14	9	21	23	264	287
07:30 AM	3	64	4	0	71	27	15	3	3	45	40	128	21	9	189	1	4	18	12	23	24	328	352
07:45 AM	6	77	5	0	88	32	14	7	6	53	48	118	19	10	185	5	5	12	4	22	20	348	368
Total	12	241	11	0	264	107	42	23	20	172	148	456	67	31	671	12	15	58	33	85	84	1192	1276
08:00 AM	5	53	4	0	62	25	5	5	2	35	48	91	23	9	162	1	2	18	12	21	23	280	303
08:15 AM	4	60	1	0	65	24	15	9	6	48	63	84	24	13	171	4	5	23	11	32	30	316	346
08:30 AM	7	70	1	1	78	14	13	7	4	34	42	84	15	8	141	1	3	20	10	24	23	277	300
08:45 AM	5	76	0	0	81	22	10	11	6	43	41	76	17	9	134	5	3	20	8	28	23	286	309
Total	21	259	6	1	286	85	43	32	18	160	194	335	79	39	608	11	13	81	41	105	99	1159	1258
Grand Total	33	500	17	1	550	192	85	55	38	332	342	791	146	70	1279	23	28	139	74	190	183	2351	2534
Apprch %	6	90.9	3.1			57.8	25.6	16.6			26.7	61.8	11.4			12.1	14.7	73.2					
Total %	1.4	21.3	0.7		23.4	8.2	3.6	2.3		14.1	14.5	33.6	6.2		54.4	1	1.2	5.9		8.1	7.2	92.8	
Passenger Vehicles	32	363	16		412	186	78	52		353	302	667	145		1184	20	25	85		180	0	0	2129
% Passenger Vehicles	97	72.6	94.1	100	74.8	96.9	91.8	94.5	97.4	95.4	88.3	84.3	99.3	100	87.8	87	89.3	61.2	67.6	68.2	0	0	84
Large 2 Axle Vehicles	1	40	1		42	3	4	1		8	5	22	1		28	2	2	13		25	0	0	103
% Large 2 Axle Vehicles	3	8	5.9	0	7.6	1.6	4.7	1.8	0	2.2	1.5	2.8	0.7	0	2.1	8.7	7.1	9.4	10.8	9.5	0	0	4.1
3 Axle Vehicles	0	31	0		31	0	2	0		2	15	40	0		55	0	0	5		6	0	0	94
% 3 Axle Vehicles	0	6.2	0	0	5.6	0	2.4	0	0	0.5	4.4	5.1	0	0	4.1	0	0	3.6	1.4	2.3	0	0	3.7
4+ Axle Trucks	0	66	0		66	3	1	2		7	20	62	0		82	1	1	36		53	0	0	208
% 4+ Axle Trucks	0	13.2	0	0	12	1.6	1.2	3.6	2.6	1.9	5.8	7.8	0	0	6.1	4.3	3.6	25.9	20.3	20.1	0	0	8.2

	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	3	64	4	71	27	**15**	3	45	40	**128**	21	**189**	1	4	18	23	328
07:45 AM	**6**	**77**	**5**	**88**	**32**	14	7	**53**	48	118	19	185	**5**	**5**	12	22	**348**
08:00 AM	5	53	4	62	25	5	5	35	48	91	23	162	1	2	18	21	280
08:15 AM	4	60	1	65	24	15	**9**	48	**63**	84	**24**	171	4	5	**23**	**32**	316
Total Volume	18	254	14	286	108	49	24	181	199	421	87	707	11	16	71	98	1272
% App. Total	6.3	88.8	4.9		59.7	27.1	13.3		28.1	59.5	12.3		11.2	16.3	72.4		
PHF	.750	.825	.700	.813	.844	.817	.667	.854	.790	.822	.906	.935	.550	.800	.772	.766	.914

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City of Redlands
N/S: California Street
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File Name : 02_RED_Cali_Lug AM
Site Code : 05123579
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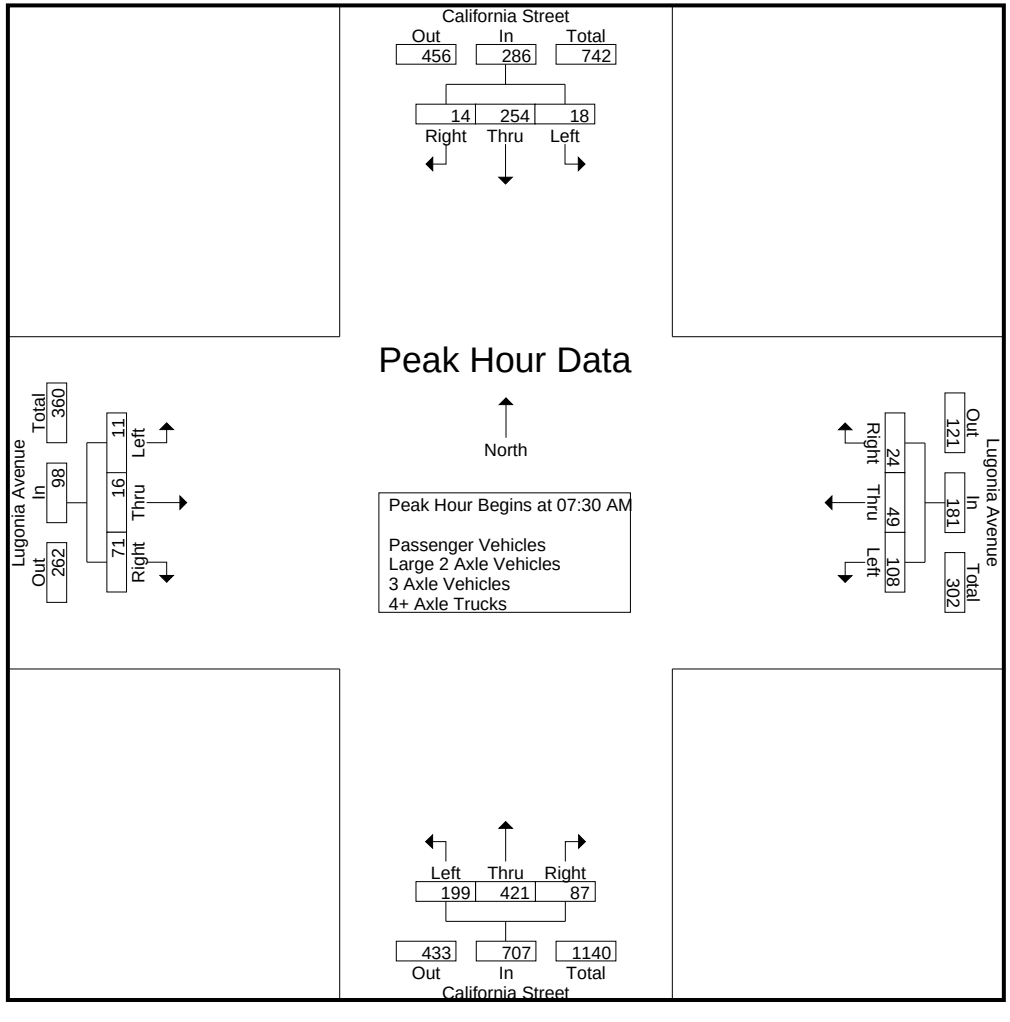

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	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:30 AM				07:30 AM				08:00 AM				
+0 mins.	6	**77**	**5**	**88**	27	**15**	3	45	40	**128**	21	**189**	1	2	18	21	
+15 mins.	5	53	4	62	**32**	14	7	**53**	48	118	19	185	4	**5**	**23**	**32**	
+30 mins.	4	60	1	65	25	5	5	35	48	91	23	162	1	3	20	24	
+45 mins.	**7**	70	1	78	24	15	**9**	48	**63**	84	**24**	171	**5**	3	20	28	
Total Volume	22	260	11	293	108	49	24	181	199	421	87	707	11	13	81	105	
% App. Total	7.5	88.7	3.8		59.7	27.1	13.3		28.1	59.5	12.3		10.5	12.4	77.1		
PHF	.786	.844	.550	.832	.844	.817	.667	.854	.790	.822	.906	.935	.550	.650	.880	.820	

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Groups Printed- Large 2 Axle Vehicles

	California Street Southbound					Lugonia Avenue Westbound					California Street Northbound					Lugonia Avenue 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	13	0	0	13	0	0	0	0	0	0	7	1	0	8	0	0	4	1	4	1	25	26
07:15 AM	0	8	0	0	8	2	0	0	0	2	1	2	0	0	3	1	0	1	1	2	1	15	16
07:30 AM	0	10	0	0	10	0	1	0	0	1	1	2	0	0	3	0	1	0	0	1	0	15	15
07:45 AM	0	4	0	0	4	0	0	0	0	0	1	3	0	0	4	1	0	0	0	1	0	9	9
Total	0	35	0	0	35	2	1	0	0	3	3	14	1	0	18	2	1	5	2	8	2	64	66
08:00 AM	0	0	0	0	0	0	0	0	0	0	2	3	0	0	5	0	0	3	2	3	2	8	10
08:15 AM	0	2	1	0	3	0	1	0	0	1	0	1	0	0	1	0	1	2	2	3	2	8	10
08:30 AM	1	3	0	0	4	0	1	1	0	2	0	2	0	0	2	0	0	2	2	2	2	10	12
08:45 AM	0	0	0	0	0	1	1	0	0	2	0	2	0	0	2	0	0	1	0	1	0	5	5
Total	1	5	1	0	7	1	3	1	0	5	2	8	0	0	10	0	1	8	6	9	6	31	37
Grand Total	1	40	1	0	42	3	4	1	0	8	5	22	1	0	28	2	2	13	8	17	8	95	103
Apprch %	2.4	95.2	2.4			37.5	50	12.5			17.9	78.6	3.6			11.8	11.8	76.5					
Total %	1.1	42.1	1.1		44.2	3.2	4.2	1.1		8.4	5.3	23.2	1.1		29.5	2.1	2.1	13.7		17.9	7.8	92.2	

	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**10**	0	**10**	0	**1**	0	**1**	1	2	0	3	0	**1**	0	1	**15**
07:45 AM	0	4	0	4	0	0	0	0	1	**3**	0	4	**1**	0	0	1	9
08:00 AM	0	0	0	0	0	0	0	0	**2**	3	0	**5**	0	0	**3**	**3**	8
08:15 AM	0	2	**1**	3	0	1	0	1	0	1	0	1	0	1	2	3	8
Total Volume	0	16	1	17	0	2	0	2	4	9	0	13	1	2	5	8	40
% App. Total	0	94.1	5.9		0	100	0		30.8	69.2	0		12.5	25	62.5		
PHF	.000	.400	.250	.425	.000	.500	.000	.500	.500	.750	.000	.650	.250	.500	.417	.667	.667

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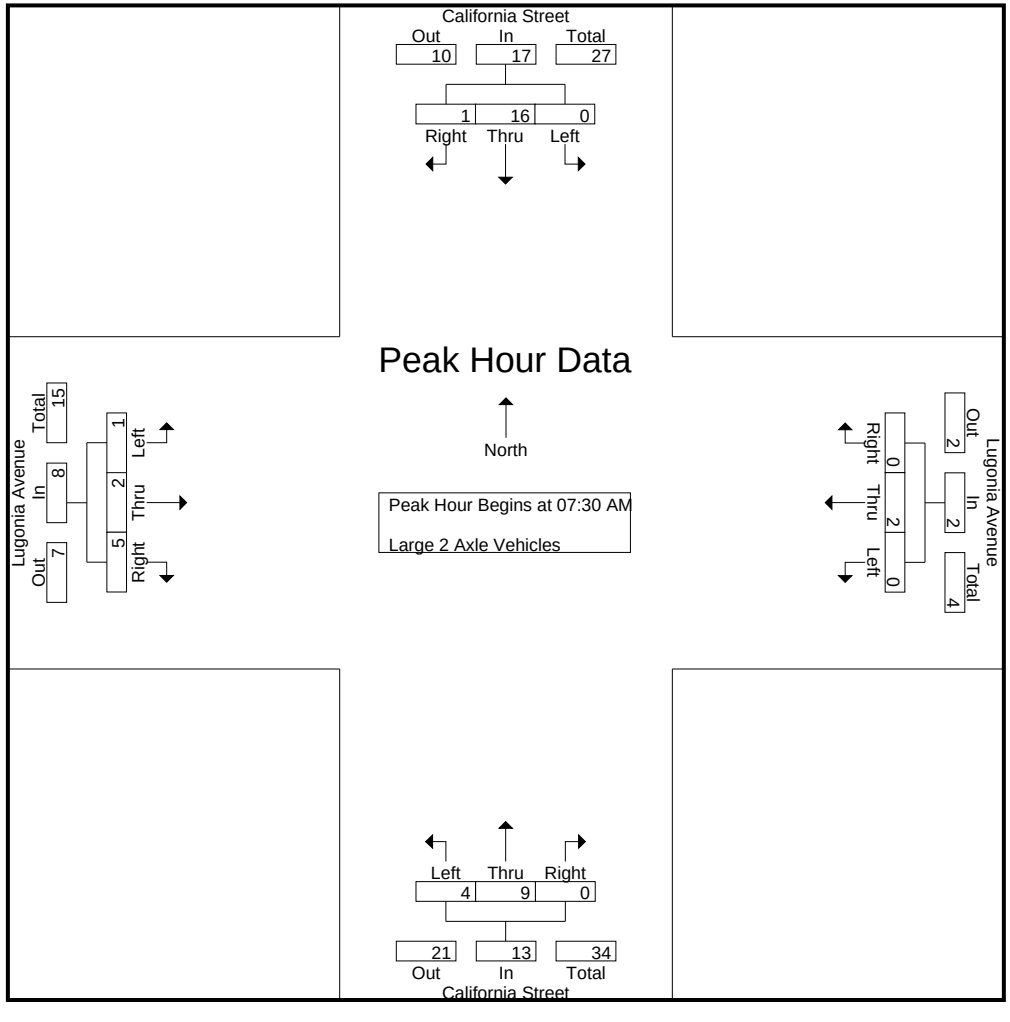

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Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	**10**	0	**10**	0	**1**	0	**1**	1	2	0	3	0	**1**	0	1	
+15 mins.	0	4	0	4	0	0	0	0	1	**3**	0	4	**1**	0	0	1	
+30 mins.	0	0	0	0	0	0	0	0	**2**	3	0	**5**	0	0	**3**	**3**	
+45 mins.	0	2	**1**	3	0	1	0	1	0	1	0	1	0	1	2	3	
Total Volume	0	16	1	17	0	2	0	2	4	9	0	13	1	2	5	8	
% App. Total	0	94.1	5.9		0	100	0		30.8	69.2	0		12.5	25	62.5		
PHF	.000	.400	.250	.425	.000	.500	.000	.500	.500	.750	.000	.650	.250	.500	.417	.667	

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City of Redlands
N/S: California Street
E/W: Lugonia Avenue
Weather: Clear

File Name : 02_RED_Cali_Lug AM
Site Code : 05123579
Start Date : 6/1/2023
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Groups Printed- 3 Axle Vehicles

	California Street Southbound					Lugonia Avenue Westbound					California Street Northbound					Lugonia Avenue 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	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	6	6
07:15 AM	0	1	0	0	1	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	4	4
07:30 AM	0	7	0	0	7	0	0	0	0	0	2	11	0	0	13	0	0	1	0	1	0	21	21
07:45 AM	0	10	0	0	10	0	1	0	0	1	1	2	0	0	3	0	0	0	0	0	0	14	14
Total	0	21	0	0	21	0	1	0	0	1	4	18	0	0	22	0	0	1	0	1	0	45	45
08:00 AM	0	1	0	0	1	0	0	0	0	0	5	3	0	0	8	0	0	0	0	0	0	9	9
08:15 AM	0	1	0	0	1	0	1	0	0	1	3	7	0	0	10	0	0	2	1	2	1	14	15
08:30 AM	0	2	0	0	2	0	0	0	0	0	2	7	0	0	9	0	0	1	0	1	0	12	12
08:45 AM	0	6	0	0	6	0	0	0	0	0	1	5	0	0	6	0	0	1	0	1	0	13	13
Total	0	10	0	0	10	0	1	0	0	1	11	22	0	0	33	0	0	4	1	4	1	48	49
Grand Total	0	31	0	0	31	0	2	0	0	2	15	40	0	0	55	0	0	5	1	5	1	93	94
Apprch %	0	100	0			0	100	0			27.3	72.7	0			0	0	100					
Total %	0	33.3	0		33.3	0	2.2	0		2.2	16.1	43	0		59.1	0	0	5.4		5.4	1.1	98.9	

	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	7	0	7	0	0	0	0	2	**11**	0	**13**	0	0	1	1	**21**
07:45 AM	0	**10**	0	**10**	0	**1**	0	**1**	1	2	0	3	0	0	0	0	14
08:00 AM	0	1	0	1	0	0	0	0	**5**	3	0	8	0	0	0	0	9
08:15 AM	0	1	0	1	0	1	0	1	3	7	0	10	0	0	**2**	**2**	14
Total Volume	0	19	0	19	0	2	0	2	11	23	0	34	0	0	3	3	58
% App. Total	0	100	0		0	100	0		32.4	67.6	0		0	0	100		
PHF	.000	.475	.000	.475	.000	.500	.000	.500	.550	.523	.000	.654	.000	.000	.375	.375	.690

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Site Code : 05123579
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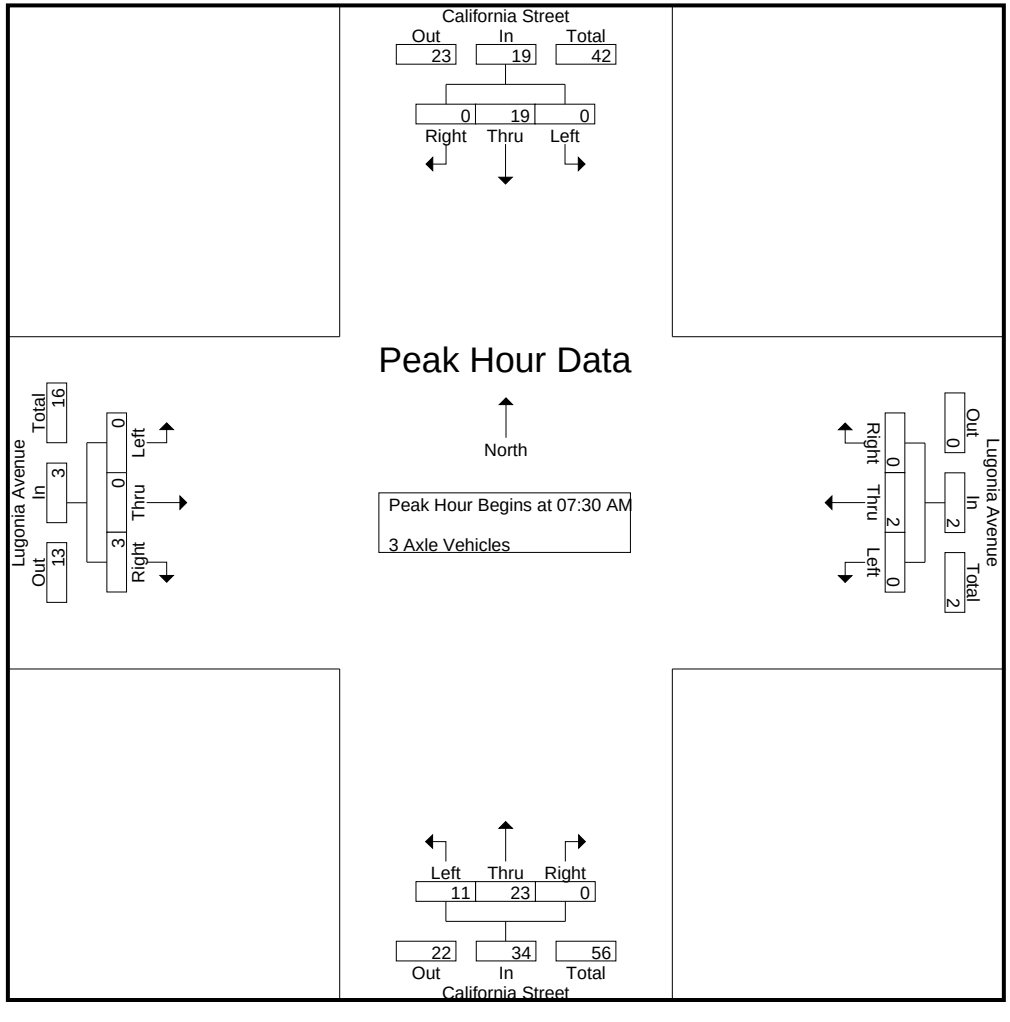

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City of Redlands
N/S: California Street
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Weather: Clear

File Name : 02_RED_Cali_Lug AM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	7	0	7	0	0	0	0	2	**11**	0	**13**	0	0	1	1	
+15 mins.	0	**10**	0	**10**	0	**1**	0	**1**	1	2	0	3	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	**5**	3	0	8	0	0	0	0	
+45 mins.	0	1	0	1	0	1	0	1	3	7	0	10	0	0	**2**	**2**	
Total Volume	0	19	0	19	0	2	0	2	11	23	0	34	0	0	3	3	
% App. Total	0	100	0		0	100	0		32.4	67.6	0		0	0	100		
PHF	.000	.475	.000	.475	.000	.500	.000	.500	.550	.523	.000	.654	.000	.000	.375	.375	

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Site Code : 05123579
Start Date : 6/1/2023
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Groups Printed- 4+ Axle Trucks

	California Street Southbound					Lugonia Avenue Westbound					California Street Northbound					Lugonia Avenue 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	6	0	0	6	1	0	0	0	1	3	8	0	0	11	0	1	1	0	2	0	20	20
07:15 AM	0	6	0	0	6	0	0	0	0	0	1	7	0	0	8	1	0	7	2	8	2	22	24
07:30 AM	0	6	0	0	6	0	0	0	0	0	4	6	0	0	10	0	0	4	3	4	3	20	23
07:45 AM	0	9	0	0	9	0	0	1	1	1	1	8	0	0	9	0	0	4	0	4	1	23	24
Total	0	27	0	0	27	1	0	1	1	2	9	29	0	0	38	1	1	16	5	18	6	85	91
08:00 AM	0	2	0	0	2	0	0	1	0	1	4	8	0	0	12	0	0	5	3	5	3	20	23
08:15 AM	0	11	0	0	11	0	0	0	0	0	3	3	0	0	6	0	0	6	2	6	2	23	25
08:30 AM	0	15	0	0	15	0	1	0	0	1	2	11	0	0	13	0	0	7	4	7	4	36	40
08:45 AM	0	11	0	0	11	2	0	0	0	2	2	11	0	0	13	0	0	2	1	2	1	28	29
Total	0	39	0	0	39	2	1	1	0	4	11	33	0	0	44	0	0	20	10	20	10	107	117
Grand Total	0	66	0	0	66	3	1	2	1	6	20	62	0	0	82	1	1	36	15	38	16	192	208
Apprch %	0	100	0			50	16.7	33.3			24.4	75.6	0			2.6	2.6	94.7					
Total %	0	34.4	0		34.4	1.6	0.5	1		3.1	10.4	32.3	0		42.7	0.5	0.5	18.8		19.8	7.7	92.3	

	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	6	0	6	0	0	0	0	**4**	6	0	10	0	0	4	4	20
07:45 AM	0	9	0	9	0	0	**1**	**1**	1	**8**	0	9	0	0	4	4	**23**
08:00 AM	0	2	0	2	0	0	1	1	4	8	0	**12**	0	0	5	5	20
08:15 AM	0	**11**	0	**11**	0	0	0	0	3	3	0	6	0	0	**6**	**6**	23
Total Volume	0	28	0	28	0	0	2	2	12	25	0	37	0	0	19	19	86
% App. Total	0	100	0		0	0	100		32.4	67.6	0		0	0	100		
PHF	.000	.636	.000	.636	.000	.000	.500	.500	.750	.781	.000	.771	.000	.000	.792	.792	.935

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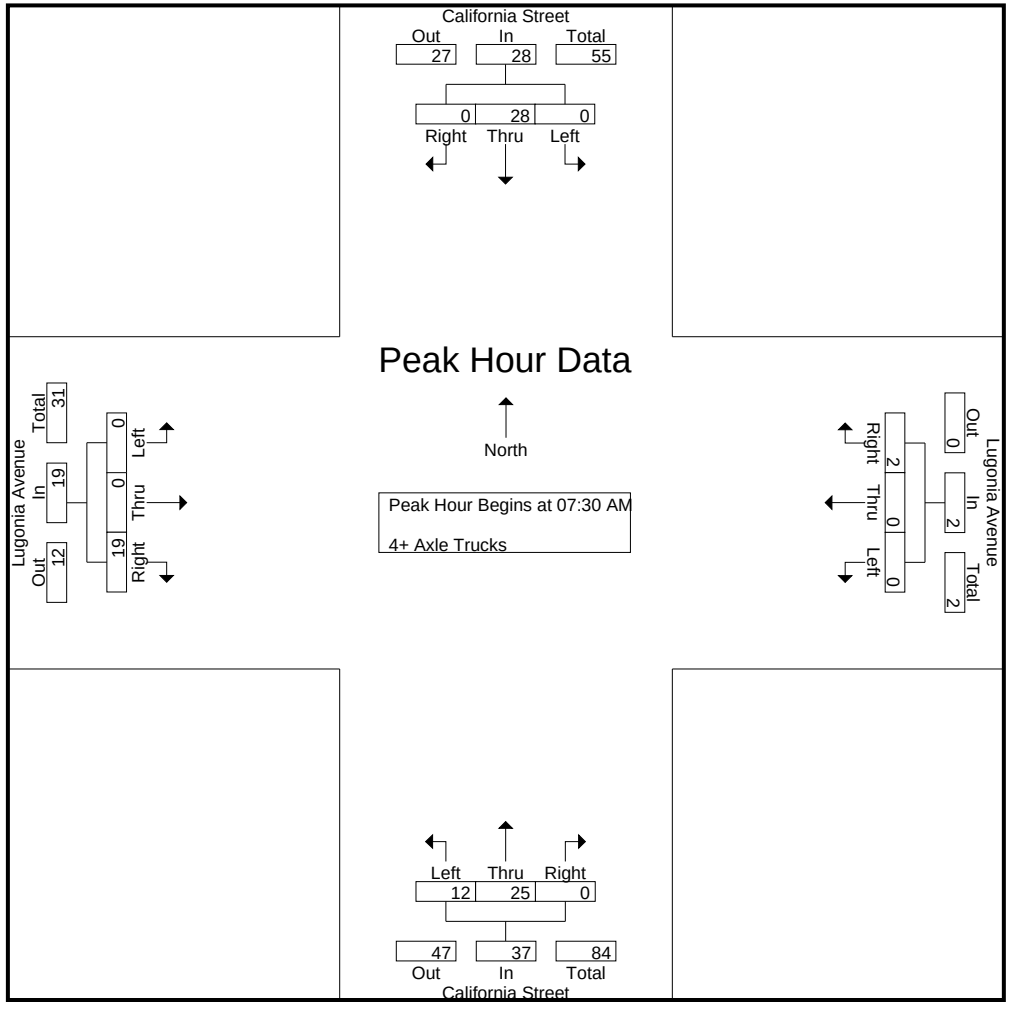

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	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	6	0	6	0	0	0	0	**4**	6	0	10	0	0	4	4	
+15 mins.	0	9	0	9	0	0	**1**	**1**	1	**8**	0	9	0	0	4	4	
+30 mins.	0	2	0	2	0	0	1	1	4	8	0	**12**	0	0	5	5	
+45 mins.	0	**11**	0	**11**	0	0	0	0	3	3	0	6	0	0	**6**	**6**	
Total Volume	0	28	0	28	0	0	2	2	12	25	0	37	0	0	19	19	
% App. Total	0	100	0		0	0	100		32.4	67.6	0		0	0	100		
PHF	.000	.636	.000	.636	.000	.000	.500	.500	.750	.781	.000	.771	.000	.000	.792	.792	

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

	California Street Southbound					Lugonia Avenue Westbound					California Street Northbound					Lugonia Avenue 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	15	105	1	0	121	27	4	7	3	38	21	75	31	0	127	8	11	42	21	61	24	347	371
04:15 PM	21	100	3	0	124	34	10	10	4	54	20	59	28	0	107	8	19	39	13	66	17	351	368
04:30 PM	15	119	3	1	137	40	7	10	5	57	10	69	21	9	100	2	11	54	11	67	26	361	387
04:45 PM	11	106	1	0	118	30	10	5	3	45	22	75	39	11	136	2	10	40	18	52	32	351	383
Total	62	430	8	1	500	131	31	32	15	194	73	278	119	20	470	20	51	175	63	246	99	1410	1509
05:00 PM	15	95	1	0	111	30	11	4	3	45	21	59	28	12	108	5	16	54	25	75	40	339	379
05:15 PM	13	96	4	0	113	43	7	6	5	56	16	59	26	10	101	2	9	18	8	29	23	299	322
05:30 PM	13	88	1	0	102	42	11	7	4	60	12	68	26	6	106	0	16	29	10	45	20	313	333
05:45 PM	13	81	1	0	95	26	5	11	6	42	17	54	28	12	99	2	7	18	4	27	22	263	285
Total	54	360	7	0	421	141	34	28	18	203	66	240	108	40	414	9	48	119	47	176	105	1214	1319
Grand Total	116	790	15	1	921	272	65	60	33	397	139	518	227	60	884	29	99	294	110	422	204	2624	2828
Apprch %	12.6	85.8	1.6			68.5	16.4	15.1			15.7	58.6	25.7			6.9	23.5	69.7					
Total %	4.4	30.1	0.6		35.1	10.4	2.5	2.3		15.1	5.3	19.7	8.7		33.7	1.1	3.8	11.2		16.1	7.2	92.8	
Passenger Vehicles	115	720	11		847	267	62	58		420	114	465	226		864	27	98	275		500	0	0	2631
% Passenger Vehicles	99.1	91.1	73.3	100	91.9	98.2	95.4	96.7	100	97.7	82	89.8	99.6	98.3	91.5	93.1	99	93.5	90.9	94	0	0	93
Large 2 Axle Vehicles	0	10	0		10	4	3	1		8	8	7	1		17	2	1	2		6	0	0	41
% Large 2 Axle Vehicles	0	1.3	0	0	1.1	1.5	4.6	1.7	0	1.9	5.8	1.4	0.4	1.7	1.8	6.9	1	0.7	0.9	1.1	0	0	1.4
3 Axle Vehicles	0	18	0		18	1	0	1		2	7	12	0		19	0	0	8		11	0	0	50
% 3 Axle Vehicles	0	2.3	0	0	2	0.4	0	1.7	0	0.5	5	2.3	0	0	2	0	0	2.7	2.7	2.1	0	0	1.8
4+ Axle Trucks	1	42	4		47	0	0	0		0	10	34	0		44	0	0	9		15	0	0	106
% 4+ Axle Trucks	0.9	5.3	26.7	0	5.1	0	0	0	0	0	7.2	6.6	0	0	4.7	0	0	3.1	5.5	2.8	0	0	3.7

	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	15	105	1	121	27	4	7	38	21	**75**	31	127	**8**	11	42	61	347
04:15 PM	**21**	100	**3**	124	34	**10**	**10**	54	20	59	28	107	8	**19**	39	66	351
04:30 PM	15	**119**	3	**137**	**40**	7	10	**57**	10	69	21	100	2	11	**54**	**67**	**361**
04:45 PM	11	106	1	118	30	10	5	45	**22**	75	**39**	**136**	2	10	40	52	351
Total Volume	62	430	8	500	131	31	32	194	73	278	119	470	20	51	175	246	1410
% App. Total	12.4	86	1.6		67.5	16	16.5		15.5	59.1	25.3		8.1	20.7	71.1		
PHF	.738	.903	.667	.912	.819	.775	.800	.851	.830	.927	.763	.864	.625	.671	.810	.918	.976

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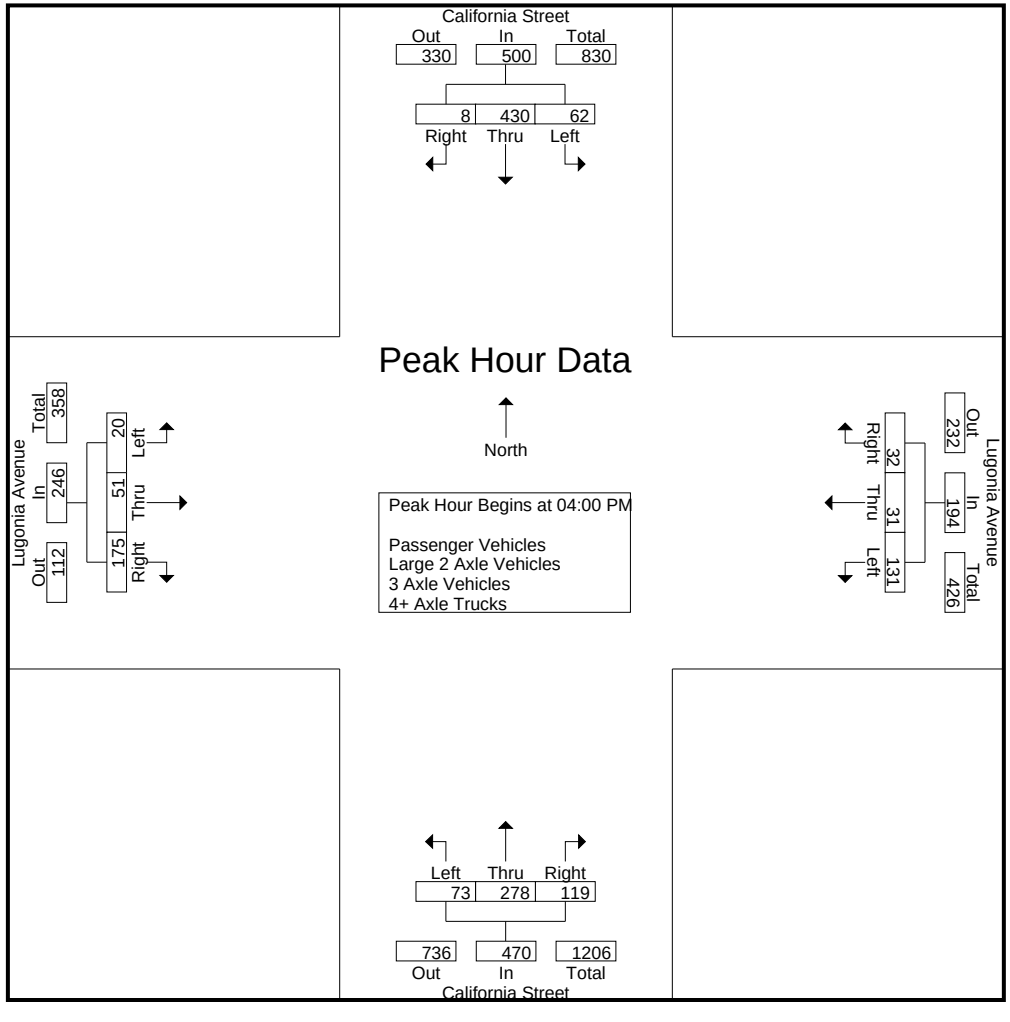

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	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:45 PM				04:00 PM				04:15 PM				
+0 mins.	15	105	1	121	30	10	5	45	21	**75**	31	127	**8**	**19**	39	66	
+15 mins.	**21**	100	**3**	124	30	**11**	4	45	20	59	28	107	2	11	**54**	67	
+30 mins.	15	**119**	3	**137**	**43**	7	6	56	10	69	21	100	2	10	40	52	
+45 mins.	11	106	1	118	42	11	**7**	**60**	**22**	75	**39**	**136**	5	16	54	**75**	
Total Volume	62	430	8	500	145	39	22	206	73	278	119	470	17	56	187	260	
% App. Total	12.4	86	1.6		70.4	18.9	10.7		15.5	59.1	25.3		6.5	21.5	71.9		
PHF	.738	.903	.667	.912	.843	.886	.786	.858	.830	.927	.763	.864	.531	.737	.866	.867	

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Groups Printed- Large 2 Axle Vehicles

	California Street Southbound					Lugonia Avenue Westbound					California Street Northbound					Lugonia Avenue 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	1	0	0	1	1	1	0	0	2	1	0	0	0	1	0	0	0	0	0	0	4	4
04:15 PM	0	2	0	0	2	1	0	0	0	1	1	1	0	0	2	1	0	0	0	1	0	6	6
04:30 PM	0	2	0	0	2	2	2	1	0	5	1	0	0	0	1	1	0	1	0	2	0	10	10
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	0	1	0	0	1	1	3	4
Total	0	5	0	0	5	4	3	1	0	8	3	2	1	1	6	2	1	1	0	4	1	23	24
05:00 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	3
05:15 PM	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3	3
05:30 PM	0	1	0	0	1	0	0	0	0	0	1	3	0	0	4	0	0	1	1	1	1	6	7
05:45 PM	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	0	4	4
Total	0	5	0	0	5	0	0	0	0	0	5	5	0	0	10	0	0	1	1	1	1	16	17
Grand Total	0	10	0	0	10	4	3	1	0	8	8	7	1	1	16	2	1	2	1	5	2	39	41
Apprch %	0	100	0			50	37.5	12.5			50	43.8	6.2			40	20	40					
Total %	0	25.6	0		25.6	10.3	7.7	2.6		20.5	20.5	17.9	2.6		41	5.1	2.6	5.1		12.8	4.9	95.1	

	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	1	0	1	1	1	0	2	**1**	0	0	1	0	0	0	0	4
04:15 PM	0	**2**	0	**2**	1	0	0	1	1	**1**	0	**2**	**1**	0	0	1	6
04:30 PM	0	2	0	2	**2**	**2**	**1**	**5**	1	0	0	1	1	0	**1**	**2**	**10**
04:45 PM	0	0	0	0	0	0	0	0	0	1	**1**	2	0	**1**	0	1	3
Total Volume	0	5	0	5	4	3	1	8	3	2	1	6	2	1	1	4	23
% App. Total	0	100	0		50	37.5	12.5		50	33.3	16.7		50	25	25		
PHF	.000	.625	.000	.625	.500	.375	.250	.400	.750	.500	.250	.750	.500	.250	.250	.500	.575

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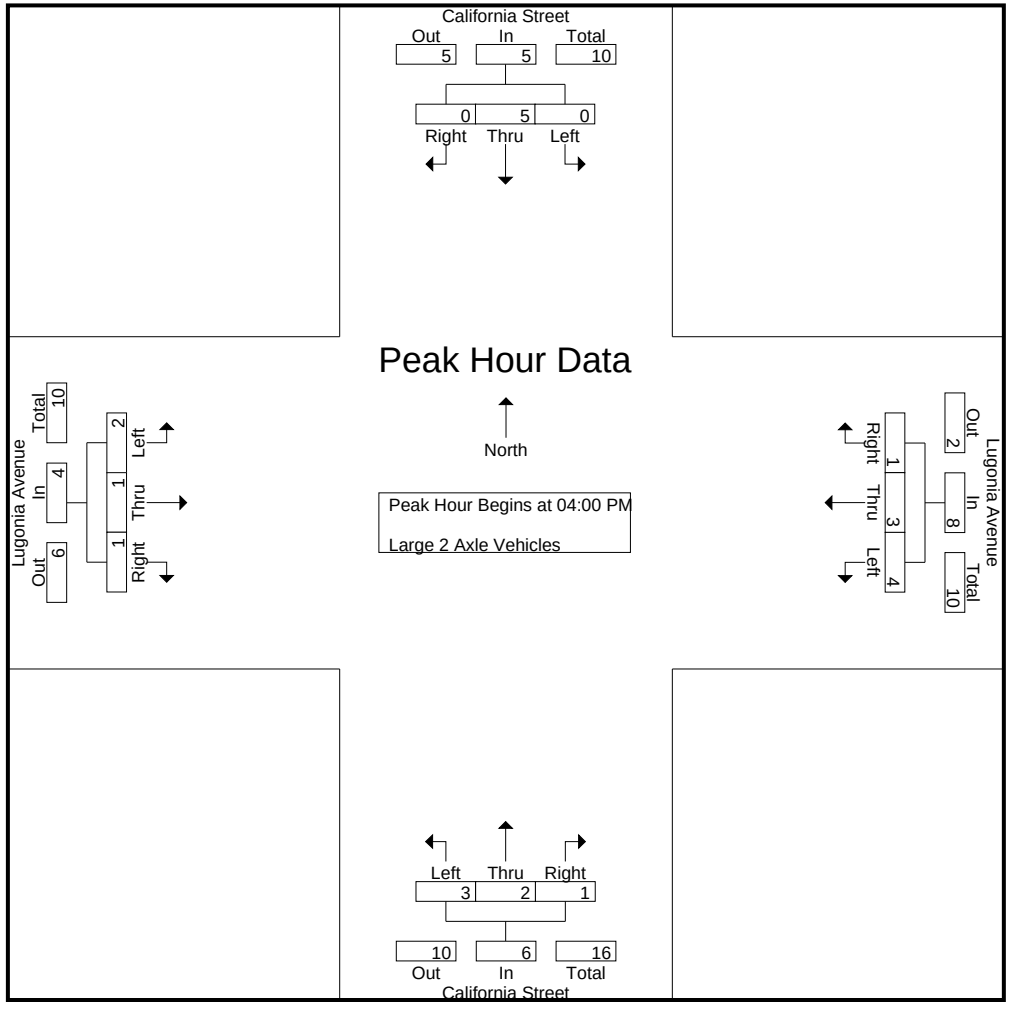
City of Redlands
N/S: California Street
E/W: Lugonia Avenue
Weather: Clear

File Name : 02_RED_Cali_Lug PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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City of Redlands
N/S: California Street
E/W: Lugonia Avenue
Weather: Clear

File Name : 02_RED_Cali_Lug PM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	1	0	1	1	1	0	2	**1**	0	0	1	0	0	0	0	
+15 mins.	0	**2**	0	**2**	1	0	0	1	1	**1**	0	**2**	**1**	0	0	1	
+30 mins.	0	2	0	2	**2**	**2**	**1**	**5**	1	0	0	1	1	0	**1**	**2**	
+45 mins.	0	0	0	0	0	0	0	0	0	1	**1**	2	0	**1**	0	1	
Total Volume	0	5	0	5	4	3	1	8	3	2	1	6	2	1	1	4	
% App. Total	0	100	0		50	37.5	12.5		50	33.3	16.7		50	25	25		
PHF	.000	.625	.000	.625	.500	.375	.250	.400	.750	.500	.250	.750	.500	.250	.250	.500	

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City of Redlands
N/S: California Street
E/W: Lugonia Avenue
Weather: Clear

File Name : 02_RED_Cali_Lug PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

	California Street Southbound					Lugonia Avenue Westbound					California Street Northbound					Lugonia Avenue 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	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	2	2	2	2	5	7
04:15 PM	0	2	0	0	2	0	0	0	0	0	2	3	0	0	5	0	0	0	0	0	0	7	7
04:30 PM	0	3	0	0	3	1	0	0	0	1	0	2	0	0	2	0	0	2	0	2	0	8	8
04:45 PM	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3	3
Total	0	9	0	0	9	1	0	0	0	1	3	6	0	0	9	0	0	4	2	4	2	23	25
05:00 PM	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	6	6
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4	4
05:30 PM	0	3	0	0	3	0	0	0	0	0	1	1	0	0	2	0	0	1	1	1	1	6	7
05:45 PM	0	1	0	0	1	0	0	1	0	1	3	1	0	0	4	0	0	2	0	2	0	8	8
Total	0	9	0	0	9	0	0	1	0	1	4	6	0	0	10	0	0	4	1	4	1	24	25
Grand Total	0	18	0	0	18	1	0	1	0	2	7	12	0	0	19	0	0	8	3	8	3	47	50
Apprch %	0	100	0			50	0	50			36.8	63.2	0			0	0	100					
Total %	0	38.3	0		38.3	2.1	0	2.1		4.3	14.9	25.5	0		40.4	0	0	17		17	6	94	

	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	**2**	**2**	5
04:15 PM	0	2	0	2	0	0	0	0	**2**	**3**	0	**5**	0	0	0	0	7
04:30 PM	0	**3**	0	**3**	**1**	0	0	**1**	0	2	0	2	0	0	2	2	**8**
04:45 PM	0	2	0	2	0	0	0	0	1	0	0	1	0	0	0	0	3
Total Volume	0	9	0	9	1	0	0	1	3	6	0	9	0	0	4	4	23
% App. Total	0	100	0		100	0	0		33.3	66.7	0		0	0	100		
PHF	.000	.750	.000	.750	.250	.000	.000	.250	.375	.500	.000	.450	.000	.000	.500	.500	.719

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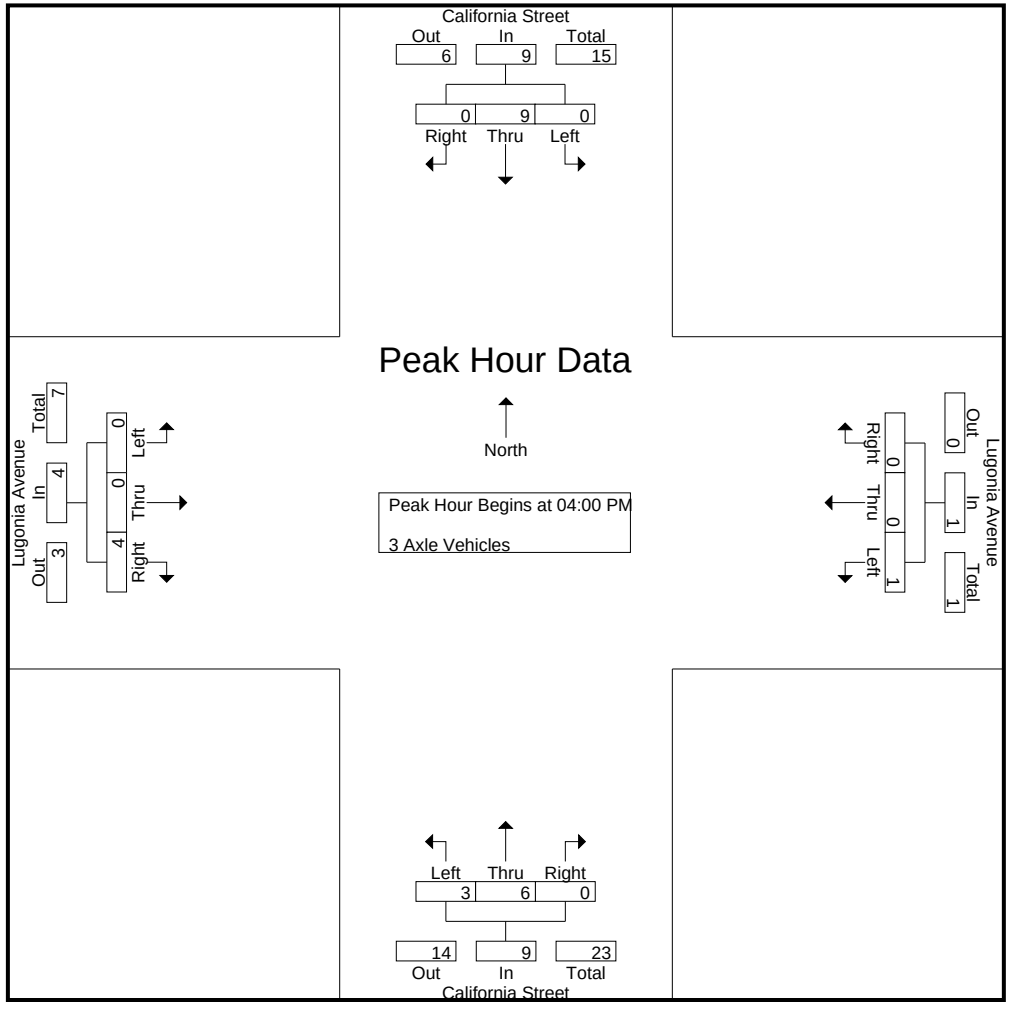
City of Redlands
N/S: California Street
E/W: Lugonia Avenue
Weather: Clear

File Name : 02_RED_Cali_Lug PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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City of Redlands
N/S: California Street
E/W: Lugonia Avenue
Weather: Clear

File Name : 02_RED_Cali_Lug PM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	2	0	2	0	0	0	0	0	1	0	1	0	0	**2**	**2**	
+15 mins.	0	2	0	2	0	0	0	0	**2**	**3**	0	**5**	0	0	0	0	
+30 mins.	0	**3**	0	**3**	**1**	0	0	**1**	0	2	0	2	0	0	2	2	
+45 mins.	0	2	0	2	0	0	0	0	1	0	0	1	0	0	0	0	
Total Volume	0	9	0	9	1	0	0	1	3	6	0	9	0	0	4	4	
% App. Total	0	100	0		100	0	0		33.3	66.7	0		0	0	100		
PHF	.000	.750	.000	.750	.250	.000	.000	.250	.375	.500	.000	.450	.000	.000	.500	.500	

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City of Redlands
N/S: California Street
E/W: Lugonia Avenue
Weather: Clear

File Name : 02_RED_Cali_Lug PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

	California Street Southbound					Lugonia Avenue Westbound					California Street Northbound					Lugonia Avenue 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	9	0	0	9	0	0	0	0	0	1	3	0	0	4	0	0	2	1	2	1	15	16
04:15 PM	1	6	1	0	8	0	0	0	0	0	2	3	0	0	5	0	0	1	1	1	1	14	15
04:30 PM	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	7	7
04:45 PM	0	4	0	0	4	0	0	0	0	0	0	6	0	0	6	0	0	2	1	2	1	12	13
Total	1	24	1	0	26	0	0	0	0	0	3	14	0	0	17	0	0	5	3	5	3	48	51
05:00 PM	0	4	0	0	4	0	0	0	0	0	1	5	0	0	6	0	0	1	1	1	1	11	12
05:15 PM	0	4	2	0	6	0	0	0	0	0	3	7	0	0	10	0	0	1	1	1	1	17	18
05:30 PM	0	5	0	0	5	0	0	0	0	0	3	5	0	0	8	0	0	0	0	0	0	13	13
05:45 PM	0	5	1	0	6	0	0	0	0	0	0	3	0	0	3	0	0	2	1	2	1	11	12
Total	0	18	3	0	21	0	0	0	0	0	7	20	0	0	27	0	0	4	3	4	3	52	55
Grand Total	1	42	4	0	47	0	0	0	0	0	10	34	0	0	44	0	0	9	6	9	6	100	106
Apprch %	2.1	89.4	8.5			0	0	0			22.7	77.3	0			0	0	100					
Total %	1	42	4		47	0	0	0		0	10	34	0		44	0	0	9		9	5.7	94.3	

	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**9**	0	**9**	0	0	0	0	1	3	0	4	0	0	**2**	**2**	**15**
04:15 PM	**1**	6	**1**	8	0	0	0	0	**2**	3	0	5	0	0	1	1	14
04:30 PM	0	5	0	5	0	0	0	0	0	2	0	2	0	0	0	0	7
04:45 PM	0	4	0	4	0	0	0	0	0	**6**	0	**6**	0	0	2	2	12
Total Volume	1	24	1	26	0	0	0	0	3	14	0	17	0	0	5	5	48
% App. Total	3.8	92.3	3.8		0	0	0		17.6	82.4	0		0	0	100		
PHF	.250	.667	.250	.722	.000	.000	.000	.000	.375	.583	.000	.708	.000	.000	.625	.625	.800

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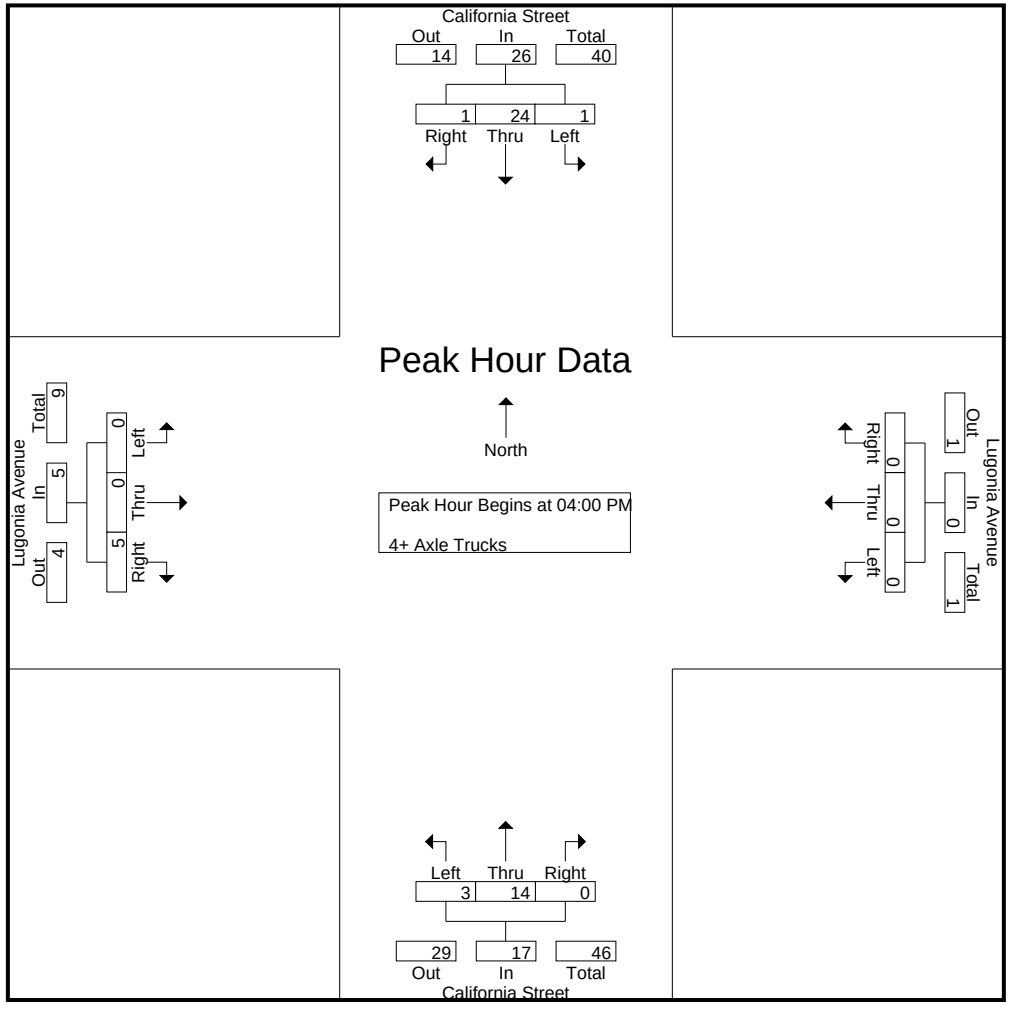
City of Redlands
N/S: California Street
E/W: Lugonia Avenue
Weather: Clear

File Name : 02_RED_Cali_Lug PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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City of Redlands
N/S: California Street
E/W: Lugonia Avenue
Weather: Clear

File Name : 02_RED_Cali_Lug PM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				Lugonia Avenue Westbound				California Street Northbound				Lugonia Avenue 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 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	**9**	0	**9**	0	0	0	0	1	3	0	4	0	0	**2**	**2**	
+15 mins.	**1**	6	**1**	8	0	0	0	0	**2**	3	0	5	0	0	1	1	
+30 mins.	0	5	0	5	0	0	0	0	0	2	0	2	0	0	0	0	
+45 mins.	0	4	0	4	0	0	0	0	0	**6**	0	**6**	0	0	2	2	
Total Volume	1	24	1	26	0	0	0	0	3	14	0	17	0	0	5	5	
% App. Total	3.8	92.3	3.8		0	0	0		17.6	82.4	0		0	0	100		
PHF	.250	.667	.250	.722	.000	.000	.000	.000	.375	.583	.000	.708	.000	.000	.625	.625	

Location: Redlands
N/S: California Street
E/W: Lugonia Avenue

Date: 6/1/2023
Day: Thursday

PEDESTRIANS

	North Leg California Street	East Leg Lugonia Avenue	South Leg California Street	West Leg Lugonia Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg California Street	East Leg Lugonia Avenue	South Leg California Street	West Leg Lugonia Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	1	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1

Location: Redlands
N/S: California Street
E/W: Lugonia Avenue

Date: 6/1/2023
Day: Thursday

BICYCLES

	Southbound California Street			Westbound Lugonia Avenue			Northbound California Street			Eastbound Lugonia Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	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	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound California Street			Westbound Lugonia Avenue			Northbound California Street			Eastbound Lugonia Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	2	1	0	0	0	0	3

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City of Redlands
N/S: California Street
E/W: Orange Tree Lane
Weather: Clear

File Name : 04_RED_Cali_OT AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

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

	California Street Southbound					Orange Tree Lane Westbound					California Street Northbound					Orange Tree Lane 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	90	0	0	90	13	0	2	1	15	0	135	32	1	167	0	0	0	0	0	2	272	274
07:15 AM	3	100	0	0	103	12	0	1	1	13	1	156	35	7	192	0	0	0	0	0	8	308	316
07:30 AM	3	94	0	0	97	15	0	5	4	20	5	179	47	10	231	0	0	0	0	0	14	348	362
07:45 AM	11	114	0	0	125	23	0	5	5	28	10	177	66	15	253	0	0	0	0	0	20	406	426
Total	17	398	0	0	415	63	0	13	11	76	16	647	180	33	843	0	0	0	0	0	44	1334	1378
08:00 AM	6	89	0	0	95	18	0	3	1	21	8	166	46	15	220	0	0	0	0	0	16	336	352
08:15 AM	12	96	0	0	108	21	0	1	1	22	1	166	43	12	210	0	0	1	1	1	14	341	355
08:30 AM	6	105	0	0	111	24	0	2	1	26	3	134	50	13	187	0	0	0	0	0	14	324	338
08:45 AM	5	120	0	0	125	29	1	2	2	32	4	138	59	23	201	0	0	0	0	0	25	358	383
Total	29	410	0	0	439	92	1	8	5	101	16	604	198	63	818	0	0	1	1	1	69	1359	1428
Grand Total	46	808	0	0	854	155	1	21	16	177	32	1251	378	96	1661	0	0	1	1	1	113	2693	2806
Apprch %	5.4	94.6	0			87.6	0.6	11.9			1.9	75.3	22.8			0	0	100					
Total %	1.7	30	0		31.7	5.8	0	0.8		6.6	1.2	46.5	14		61.7	0	0	0		0	4	96	
Passenger Vehicles	43	621	0		664	143	1	20		179	32	1078	356		1559	0	0	1		2	0	0	2404
% Passenger Vehicles	93.5	76.9	0	0	77.8	92.3	100	95.2	93.8	92.7	100	86.2	94.2	96.9	88.7	0	0	100	100	100	0	0	85.7
Large 2 Axle Vehicles	0	44	0		44	8	0	1		10	0	29	6		36	0	0	0		0	0	0	90
% Large 2 Axle Vehicles	0	5.4	0	0	5.2	5.2	0	4.8	6.2	5.2	0	2.3	1.6	1	2	0	0	0	0	0	0	0	3.2
3 Axle Vehicles	2	34	0		36	1	0	0		1	0	51	1		52	0	0	0		0	0	0	89
% 3 Axle Vehicles	4.3	4.2	0	0	4.2	0.6	0	0	0	0.5	0	4.1	0.3	0	3	0	0	0	0	0	0	0	3.2
4+ Axle Trucks	1	109	0		110	3	0	0		3	0	93	15		110	0	0	0		0	0	0	223
% 4+ Axle Trucks	2.2	13.5	0	0	12.9	1.9	0	0	0	1.6	0	7.4	4	2.1	6.3	0	0	0	0	0	0	0	7.9

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	3	94	0	97	15	0	**5**	20	5	**179**	47	231	0	0	0	0	348
07:45 AM	11	**114**	0	**125**	**23**	0	5	**28**	**10**	177	**66**	**253**	0	0	0	0	**406**
08:00 AM	6	89	0	95	18	0	3	21	8	166	46	220	0	0	0	0	336
08:15 AM	**12**	96	0	108	21	0	1	22	1	166	43	210	0	0	**1**	**1**	341
Total Volume	32	393	0	425	77	0	14	91	24	688	202	914	0	0	1	1	1431
% App. Total	7.5	92.5	0		84.6	0	15.4		2.6	75.3	22.1		0	0	100		
PHF	.667	.862	.000	.850	.837	.000	.700	.813	.600	.961	.765	.903	.000	.000	.250	.250	.881

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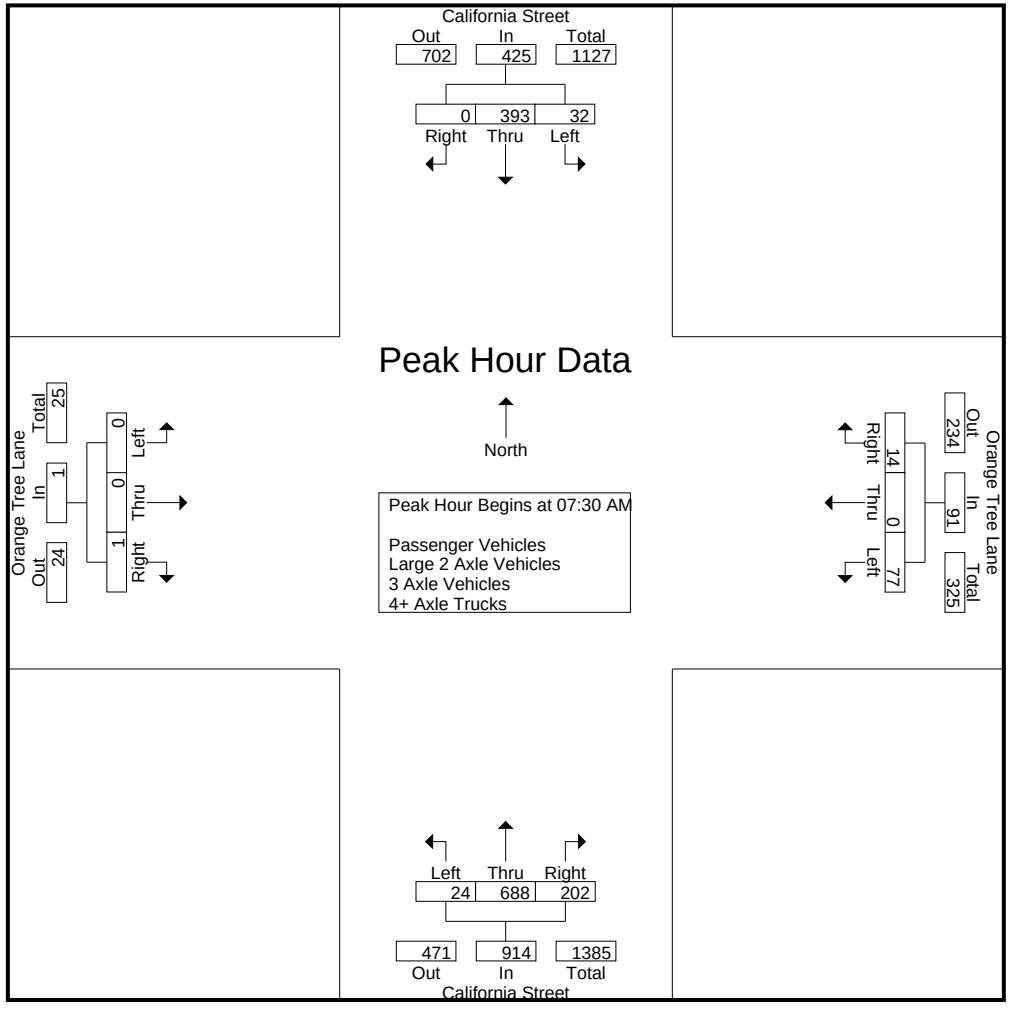
City of Redlands
N/S: California Street
E/W: Orange Tree Lane
Weather: Clear

File Name : 04_RED_Cali_OT AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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City of Redlands
N/S: California Street
E/W: Orange Tree Lane
Weather: Clear

File Name : 04_RED_Cali_OT AM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane 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:																	
	07:45 AM				08:00 AM				07:30 AM				07:30 AM				
+0 mins.	11	**114**	0	**125**	18	0	**3**	21	5	**179**	47	231	0	0	0	0	
+15 mins.	6	89	0	95	21	0	1	22	**10**	177	**66**	**253**	0	0	0	0	
+30 mins.	**12**	96	0	108	24	0	2	26	8	166	46	220	0	0	0	0	
+45 mins.	6	105	0	111	**29**	**1**	2	**32**	1	166	43	210	0	0	**1**	**1**	
Total Volume	35	404	0	439	92	1	8	101	24	688	202	914	0	0	1	1	
% App. Total	8	92	0		91.1	1	7.9		2.6	75.3	22.1		0	0	100		
PHF	.729	.886	.000	.878	.793	.250	.667	.789	.600	.961	.765	.903	.000	.000	.250	.250	

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File Name : 04_RED_Cali_OT AM
Site Code : 05123579
Start Date : 6/1/2023
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Groups Printed- Large 2 Axle Vehicles

	California Street Southbound					Orange Tree Lane Westbound					California Street Northbound					Orange Tree Lane 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	12	0	0	12	0	0	0	0	0	0	8	2	0	10	0	0	0	0	0	0	22	22
07:15 AM	0	15	0	0	15	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	19	19
07:30 AM	0	5	0	0	5	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	9	9
07:45 AM	0	4	0	0	4	0	0	0	0	0	0	2	2	1	4	0	0	0	0	0	1	8	9
Total	0	36	0	0	36	2	0	0	0	2	0	16	4	1	20	0	0	0	0	0	1	58	59
08:00 AM	0	3	0	0	3	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	10	10
08:15 AM	0	2	0	0	2	3	0	0	0	3	0	1	1	0	2	0	0	0	0	0	0	7	7
08:30 AM	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	6	6
08:45 AM	0	1	0	0	1	3	0	1	1	4	0	1	1	0	2	0	0	0	0	0	1	7	8
Total	0	8	0	0	8	6	0	1	1	7	0	13	2	0	15	0	0	0	0	0	1	30	31
Grand Total	0	44	0	0	44	8	0	1	1	9	0	29	6	1	35	0	0	0	0	0	2	88	90
Apprch %	0	100	0			88.9	0	11.1			0	82.9	17.1			0	0	0					
Total %	0	50	0		50	9.1	0	1.1		10.2	0	33	6.8		39.8	0	0	0		0	2.2	97.8	

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**5**	0	**5**	2	0	0	2	0	2	0	2	0	0	0	0	9
07:45 AM	0	4	0	4	0	0	0	0	0	2	**2**	4	0	0	0	0	8
08:00 AM	0	3	0	3	0	0	0	0	0	**7**	0	**7**	0	0	0	0	**10**
08:15 AM	0	2	0	2	**3**	0	0	**3**	0	1	1	2	0	0	0	0	7
Total Volume	0	14	0	14	5	0	0	5	0	12	3	15	0	0	0	0	34
% App. Total	0	100	0		100	0	0		0	80	20		0	0	0		
PHF	.000	.700	.000	.700	.417	.000	.000	.417	.000	.429	.375	.536	.000	.000	.000	.000	.850

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City of Redlands
N/S: California Street
E/W: Orange Tree Lane
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Site Code : 05123579
Start Date : 6/1/2023
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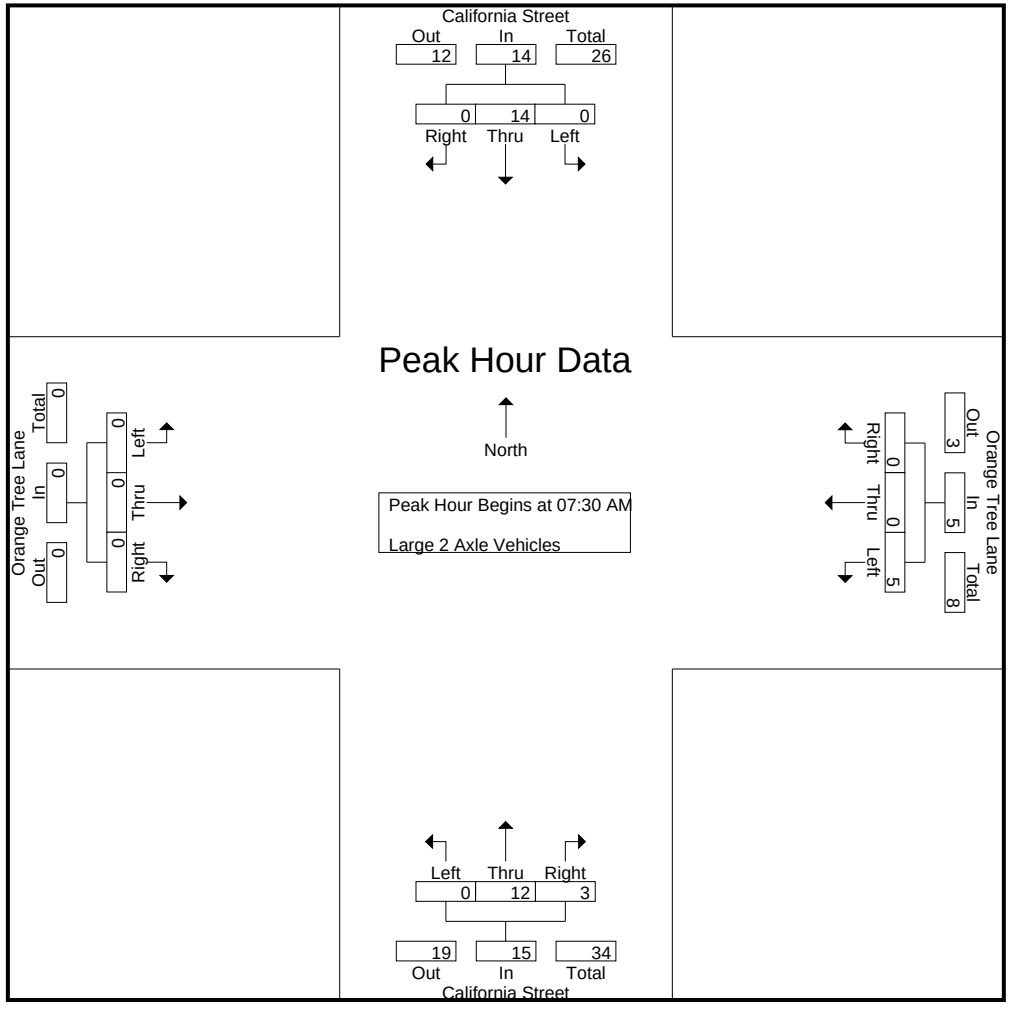

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City of Redlands
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Start Date : 6/1/2023

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	**5**	0	**5**	2	0	0	2	0	2	0	2	0	0	0	0	
+15 mins.	0	4	0	4	0	0	0	0	0	2	**2**	4	0	0	0	0	
+30 mins.	0	3	0	3	0	0	0	0	0	**7**	0	**7**	0	0	0	0	
+45 mins.	0	2	0	2	**3**	0	0	**3**	0	1	1	2	0	0	0	0	
Total Volume	0	14	0	14	5	0	0	5	0	12	3	15	0	0	0	0	
% App. Total	0	100	0		100	0	0		0	80	20		0	0	0		
PHF	.000	.700	.000	.700	.417	.000	.000	.417	.000	.429	.375	.536	.000	.000	.000	.000	

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File Name : 04_RED_Cali_OT AM
Site Code : 05123579
Start Date : 6/1/2023

Groups Printed- 3 Axle Vehicles

	California Street Southbound					Orange Tree Lane Westbound					California Street Northbound					Orange Tree Lane 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	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	5
07:15 AM	0	5	0	0	5	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	11	11
07:30 AM	1	2	0	0	3	1	0	0	0	1	0	9	0	0	9	0	0	0	0	0	0	13	13
07:45 AM	0	11	0	0	11	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	15	15
Total	1	20	0	0	21	1	0	0	0	1	0	22	0	0	22	0	0	0	0	0	0	44	44
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	9	1	0	10	0	0	0	0	0	0	10	10
08:15 AM	0	3	0	0	3	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	11	11
08:30 AM	0	3	0	0	3	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	12	12
08:45 AM	1	8	0	0	9	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	12	12
Total	1	14	0	0	15	0	0	0	0	0	0	29	1	0	30	0	0	0	0	0	0	45	45
Grand Total	2	34	0	0	36	1	0	0	0	1	0	51	1	0	52	0	0	0	0	0	0	89	89
Apprch %	5.6	94.4	0			100	0	0			0	98.1	1.9			0	0	0					
Total %	2.2	38.2	0		40.4	1.1	0	0		1.1	0	57.3	1.1		58.4	0	0	0		0	0	100	

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**1**	2	0	3	**1**	0	0	**1**	0	**9**	0	9	0	0	0	0	13
07:45 AM	0	**11**	0	**11**	0	0	0	0	0	4	0	4	0	0	0	0	**15**
08:00 AM	0	0	0	0	0	0	0	0	0	9	**1**	**10**	0	0	0	0	10
08:15 AM	0	3	0	3	0	0	0	0	0	8	0	8	0	0	0	0	11
Total Volume	1	16	0	17	1	0	0	1	0	30	1	31	0	0	0	0	49
% App. Total	5.9	94.1	0		100	0	0		0	96.8	3.2		0	0	0		
PHF	.250	.364	.000	.386	.250	.000	.000	.250	.000	.833	.250	.775	.000	.000	.000	.000	.817

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City of Redlands
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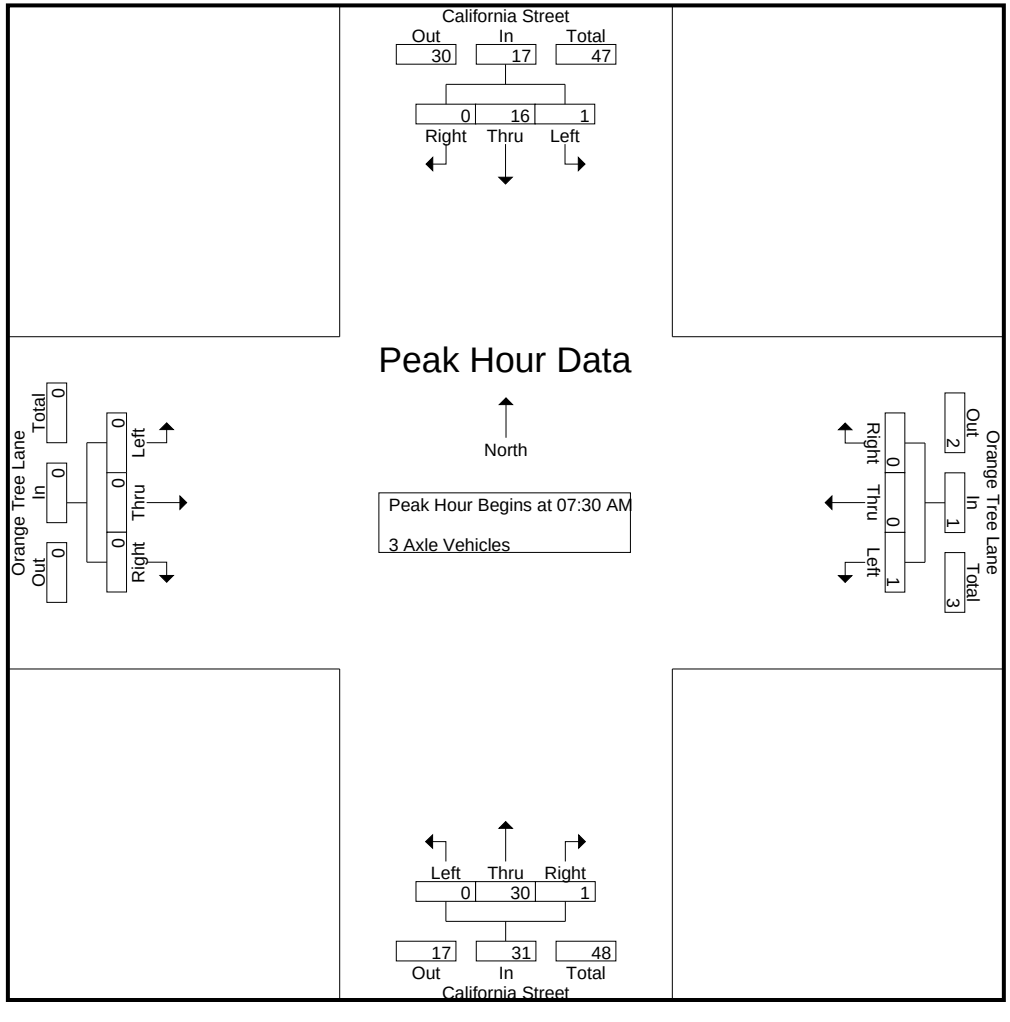

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City of Redlands
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Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	**1**	2	0	3	**1**	0	0	**1**	0	**9**	0	9	0	0	0	0	
+15 mins.	0	**11**	0	**11**	0	0	0	0	0	4	0	4	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	9	**1**	**10**	0	0	0	0	
+45 mins.	0	3	0	3	0	0	0	0	0	8	0	8	0	0	0	0	
Total Volume	1	16	0	17	1	0	0	1	0	30	1	31	0	0	0	0	
% App. Total	5.9	94.1	0		100	0	0		0	96.8	3.2		0	0	0		
PHF	.250	.364	.000	.386	.250	.000	.000	.250	.000	.833	.250	.775	.000	.000	.000	.000	

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Site Code : 05123579
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Groups Printed- 4+ Axle Trucks

	California Street Southbound					Orange Tree Lane Westbound					California Street Northbound					Orange Tree Lane 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	7	0	0	7	0	0	0	0	0	0	12	1	0	13	0	0	0	0	0	0	20	20
07:15 AM	0	17	0	0	17	0	0	0	0	0	0	7	3	0	10	0	0	0	0	0	0	27	27
07:30 AM	0	12	0	0	12	0	0	0	0	0	0	11	4	1	15	0	0	0	0	0	1	27	28
07:45 AM	0	9	0	0	9	0	0	0	0	0	0	12	3	1	15	0	0	0	0	0	1	24	25
Total	0	45	0	0	45	0	0	0	0	0	0	42	11	2	53	0	0	0	0	0	2	98	100
08:00 AM	0	10	0	0	10	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	24	24
08:15 AM	1	16	0	0	17	1	0	0	0	1	0	8	3	0	11	0	0	0	0	0	0	29	29
08:30 AM	0	24	0	0	24	1	0	0	0	1	0	15	1	0	16	0	0	0	0	0	0	41	41
08:45 AM	0	14	0	0	14	1	0	0	0	1	0	14	0	0	14	0	0	0	0	0	0	29	29
Total	1	64	0	0	65	3	0	0	0	3	0	51	4	0	55	0	0	0	0	0	0	123	123
Grand Total	1	109	0	0	110	3	0	0	0	3	0	93	15	2	108	0	0	0	0	0	2	221	223
Apprch %	0.9	99.1	0			100	0	0			0	86.1	13.9			0	0	0					
Total %	0.5	49.3	0		49.8	1.4	0	0		1.4	0	42.1	6.8		48.9	0	0	0		0	0.9	99.1	

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	12	0	12	0	0	0	0	0	11	**4**	**15**	0	0	0	0	27
07:45 AM	0	9	0	9	0	0	0	0	0	12	3	15	0	0	0	0	24
08:00 AM	0	10	0	10	0	0	0	0	0	**14**	0	14	0	0	0	0	24
08:15 AM	**1**	**16**	0	**17**	**1**	0	0	**1**	0	8	3	11	0	0	0	0	**29**
Total Volume	1	47	0	48	1	0	0	1	0	45	10	55	0	0	0	0	104
% App. Total	2.1	97.9	0		100	0	0		0	81.8	18.2		0	0	0		
PHF	.250	.734	.000	.706	.250	.000	.000	.250	.000	.804	.625	.917	.000	.000	.000	.000	.897

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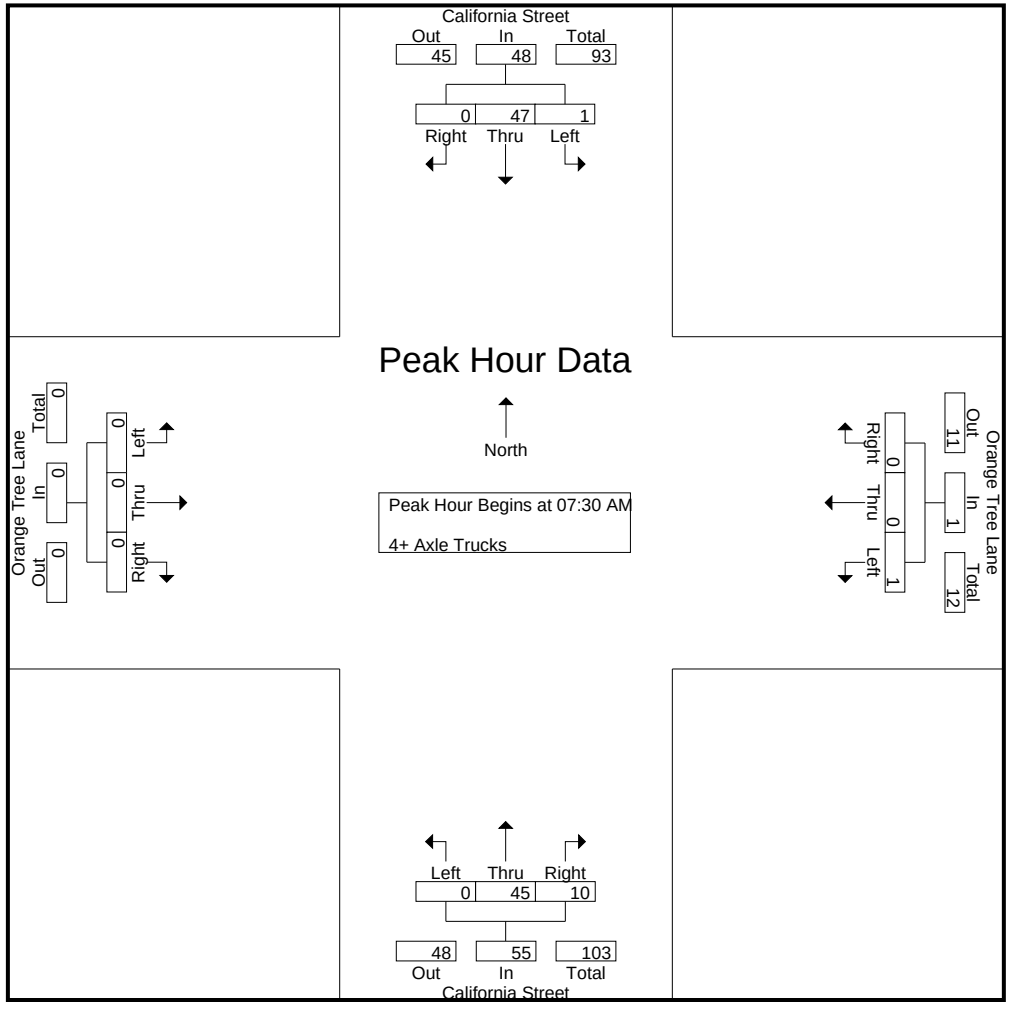

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	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	12	0	12	0	0	0	0	0	11	**4**	**15**	0	0	0	0	
+15 mins.	0	9	0	9	0	0	0	0	0	12	3	15	0	0	0	0	
+30 mins.	0	10	0	10	0	0	0	0	0	**14**	0	14	0	0	0	0	
+45 mins.	**1**	**16**	0	**17**	**1**	0	0	**1**	0	8	3	11	0	0	0	0	
Total Volume	1	47	0	48	1	0	0	1	0	45	10	55	0	0	0	0	
% App. Total	2.1	97.9	0		100	0	0		0	81.8	18.2		0	0	0		
PHF	.250	.734	.000	.706	.250	.000	.000	.250	.000	.804	.625	.917	.000	.000	.000	.000	

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

	California Street Southbound					Orange Tree Lane Westbound					California Street Northbound					Orange Tree Lane 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	8	169	0	0	177	71	1	4	3	76	2	119	26	8	147	0	0	0	0	0	11	400	411
04:15 PM	9	171	1	0	181	38	0	4	2	42	7	105	23	7	135	0	0	2	0	2	9	360	369
04:30 PM	7	229	1	1	237	72	0	2	1	74	5	106	31	6	142	0	0	0	0	0	8	453	461
04:45 PM	3	153	0	0	156	45	0	5	4	50	6	110	29	9	145	0	0	0	0	0	13	351	364
Total	27	722	2	1	751	226	1	15	10	242	20	440	109	30	569	0	0	2	0	2	41	1564	1605
05:00 PM	8	158	0	0	166	112	0	1	1	113	14	92	27	19	133	0	0	1	1	1	21	413	434
05:15 PM	6	156	0	0	162	45	0	2	1	47	11	108	18	3	137	0	0	0	0	0	4	346	350
05:30 PM	3	163	0	0	166	57	0	2	1	59	5	104	18	2	127	0	0	4	0	4	3	356	359
05:45 PM	2	132	0	0	134	29	0	1	0	30	1	104	24	1	129	0	0	0	0	0	1	293	294
Total	19	609	0	0	628	243	0	6	3	249	31	408	87	25	526	0	0	5	1	5	29	1408	1437
Grand Total	46	1331	2	1	1379	469	1	21	13	491	51	848	196	55	1095	0	0	7	1	7	70	2972	3042
Apprch %	3.3	96.5	0.1			95.5	0.2	4.3			4.7	77.4	17.9			0	0	100					
Total %	1.5	44.8	0.1		46.4	15.8	0	0.7		16.5	1.7	28.5	6.6		36.8	0	0	0.2		0.2	2.3	97.7	
Passenger Vehicles	44	1241	2		1288	460	1	19		492	51	764	168		1033	0	0	7		8	0	0	2821
% Passenger Vehicles	95.7	93.2	100	100	93.3	98.1	100	90.5	92.3	97.6	100	90.1	85.7	90.9	89.8	0	0	100	100	100	0	0	92.7
Large 2 Axle Vehicles	0	11	0		11	7	0	1		8	0	18	6		24	0	0	0		0	0	0	43
% Large 2 Axle Vehicles	0	0.8	0	0	0.8	1.5	0	4.8	0	1.6	0	2.1	3.1	0	2.1	0	0	0	0	0	0	0	1.4
3 Axle Vehicles	1	25	0		26	0	0	0		0	0	19	1		20	0	0	0		0	0	0	46
% 3 Axle Vehicles	2.2	1.9	0	0	1.9	0	0	0	0	0	0	2.2	0.5	0	1.7	0	0	0	0	0	0	0	1.5
4+ Axle Trucks	1	54	0		55	2	0	1		4	0	47	21		73	0	0	0		0	0	0	132
% 4+ Axle Trucks	2.2	4.1	0	0	4	0.4	0	4.8	7.7	0.8	0	5.5	10.7	9.1	6.3	0	0	0	0	0	0	0	4.3

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**9**	171	**1**	181	38	0	4	42	7	105	23	135	0	0	**2**	**2**	360
04:30 PM	7	**229**	1	**237**	72	0	2	74	5	106	**31**	142	0	0	0	0	**453**
04:45 PM	3	153	0	156	45	0	**5**	50	6	**110**	29	**145**	0	0	0	0	351
05:00 PM	8	158	0	166	**112**	0	1	**113**	**14**	92	27	133	0	0	1	1	413
Total Volume	27	711	2	740	267	0	12	279	32	413	110	555	0	0	3	3	1577
% App. Total	3.6	96.1	0.3		95.7	0	4.3		5.8	74.4	19.8		0	0	100		
PHF	.750	.776	.500	.781	.596	.000	.600	.617	.571	.939	.887	.957	.000	.000	.375	.375	.870

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City of Redlands
N/S: California Street
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File Name : 04_RED_Cali_OT PM
Site Code : 05123579
Start Date : 6/1/2023
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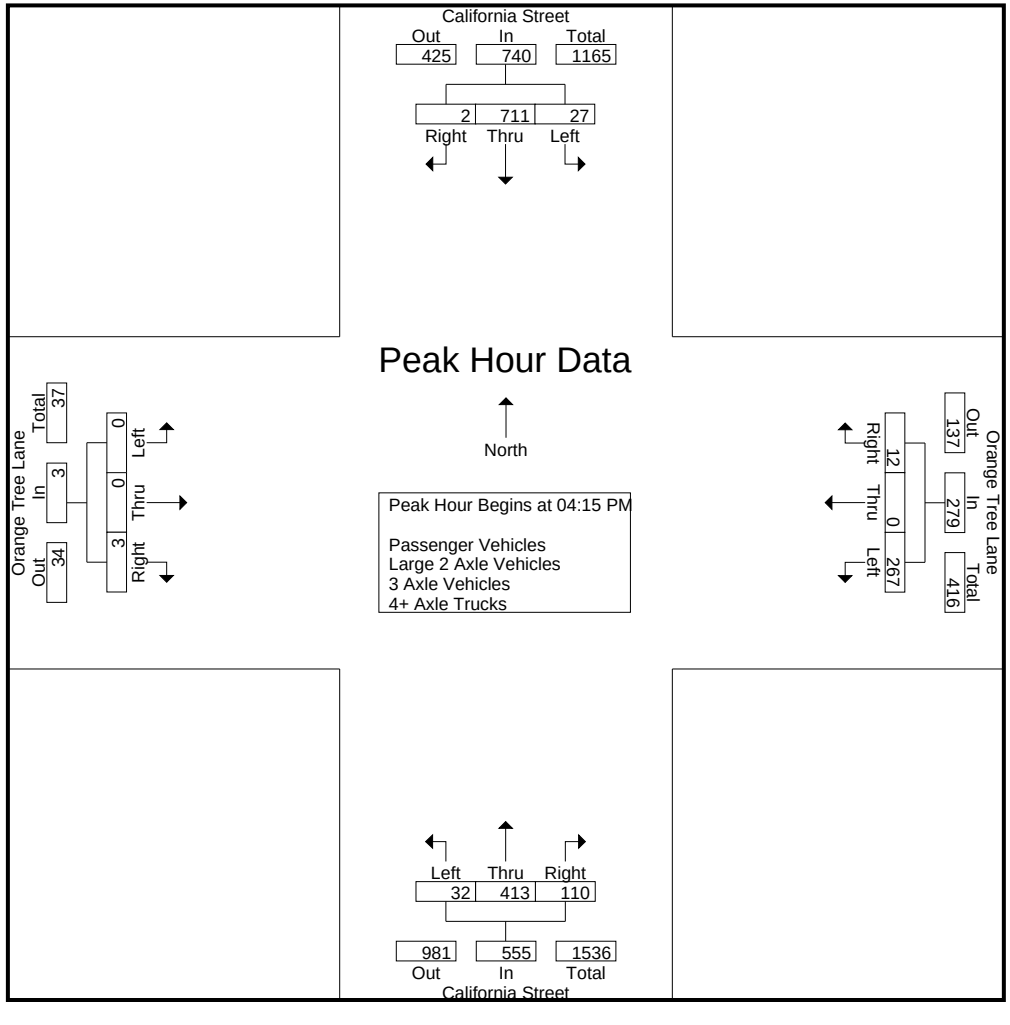

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City of Redlands
N/S: California Street
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File Name : 04_RED_Cali_OT PM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:30 PM				04:00 PM				04:45 PM				
+0 mins.	8	169	0	177	72	0	2	74	2	**119**	26	**147**	0	0	0	0	
+15 mins.	**9**	171	**1**	181	45	0	**5**	50	**7**	105	23	135	0	0	1	1	
+30 mins.	7	**229**	1	**237**	**112**	0	1	**113**	5	106	**31**	142	0	0	0	0	
+45 mins.	3	153	0	156	45	0	2	47	6	110	29	145	0	0	**4**	**4**	
Total Volume	27	722	2	751	274	0	10	284	20	440	109	569	0	0	5	5	
% App. Total	3.6	96.1	0.3		96.5	0	3.5		3.5	77.3	19.2		0	0	100		
PHF	.750	.788	.500	.792	.612	.000	.500	.628	.714	.924	.879	.968	.000	.000	.313	.313	

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File Name : 04_RED_Cali_OT PM
Site Code : 05123579
Start Date : 6/1/2023
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Groups Printed- Large 2 Axle Vehicles

	California Street Southbound					Orange Tree Lane Westbound					California Street Northbound					Orange Tree Lane 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	1	0	0	1	1	0	0	0	1	0	2	1	0	3	0	0	0	0	0	0	5	5
04:15 PM	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	6	6
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	3	3
04:45 PM	0	0	0	0	0	1	0	0	0	1	0	3	3	0	6	0	0	0	0	0	0	7	7
Total	0	6	0	0	6	2	0	0	0	2	0	8	5	0	13	0	0	0	0	0	0	21	21
05:00 PM	0	2	0	0	2	2	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	5	5
05:15 PM	0	2	0	0	2	2	0	0	0	2	0	1	1	0	2	0	0	0	0	0	0	6	6
05:30 PM	0	1	0	0	1	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	6	6
05:45 PM	0	0	0	0	0	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	5	5
Total	0	5	0	0	5	5	0	1	0	6	0	10	1	0	11	0	0	0	0	0	0	22	22
Grand Total	0	11	0	0	11	7	0	1	0	8	0	18	6	0	24	0	0	0	0	0	0	43	43
Apprch %	0	100	0			87.5	0	12.5			0	75	25			0	0	0					
Total %	0	25.6	0		25.6	16.3	0	2.3		18.6	0	41.9	14		55.8	0	0	0		0	0	100	

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	**4**	0	**4**	0	0	0	0	0	2	0	2	0	0	0	0	6
04:30 PM	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	3
04:45 PM	0	0	0	0	1	0	0	1	0	**3**	**3**	**6**	0	0	0	0	**7**
05:00 PM	0	2	0	2	**2**	0	0	**2**	0	1	0	1	0	0	0	0	5
Total Volume	0	7	0	7	3	0	0	3	0	7	4	11	0	0	0	0	21
% App. Total	0	100	0		100	0	0		0	63.6	36.4		0	0	0		
PHF	.000	.438	.000	.438	.375	.000	.000	.375	.000	.583	.333	.458	.000	.000	.000	.000	.750

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E/W: Orange Tree Lane
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Site Code : 05123579
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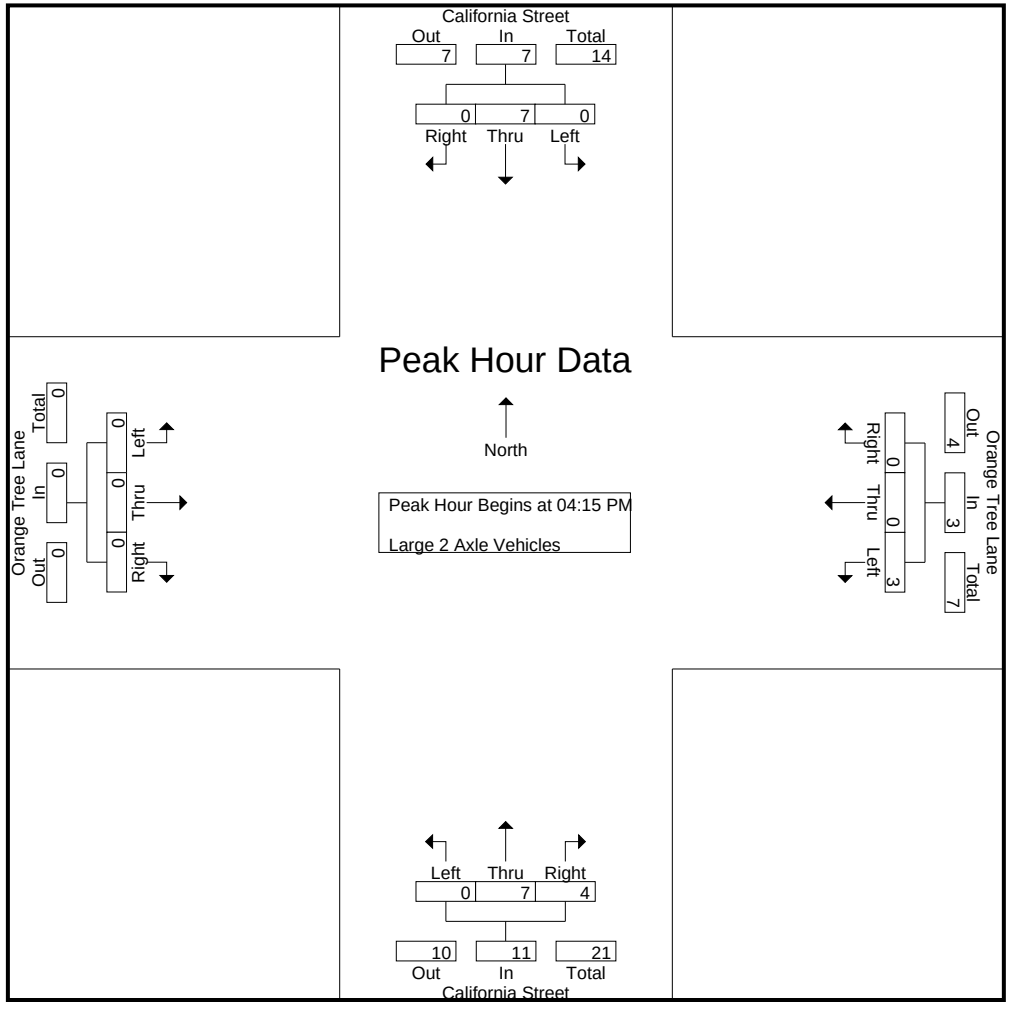

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Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	**4**	0	**4**	0	0	0	0	0	2	0	2	0	0	0	0	
+15 mins.	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	
+30 mins.	0	0	0	0	1	0	0	1	0	**3**	**3**	**6**	0	0	0	0	
+45 mins.	0	2	0	2	**2**	0	0	**2**	0	1	0	1	0	0	0	0	
Total Volume	0	7	0	7	3	0	0	3	0	7	4	11	0	0	0	0	
% App. Total	0	100	0		100	0	0		0	63.6	36.4		0	0	0		
PHF	.000	.438	.000	.438	.375	.000	.000	.375	.000	.583	.333	.458	.000	.000	.000	.000	

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Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

	California Street Southbound					Orange Tree Lane Westbound					California Street Northbound					Orange Tree Lane 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	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
04:15 PM	0	2	0	0	2	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	8	8
04:30 PM	0	6	0	0	6	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	8	8
04:45 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	3
Total	0	14	0	0	14	0	0	0	0	0	0	8	1	0	9	0	0	0	0	0	0	23	23
05:00 PM	1	3	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	5	5
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	4
05:30 PM	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	6	6
05:45 PM	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	8	8
Total	1	11	0	0	12	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	23	23
Grand Total	1	25	0	0	26	0	0	0	0	0	0	19	1	0	20	0	0	0	0	0	0	46	46
Apprch %	3.8	96.2	0			0	0	0			0	95	5			0	0	0					
Total %	2.2	54.3	0		56.5	0	0	0		0	0	41.3	2.2		43.5	0	0	0		0	0	100	

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	2	0	2	0	0	0	0	0	**6**	0	**6**	0	0	0	0	**8**
04:30 PM	0	**6**	0	**6**	0	0	0	0	0	1	**1**	2	0	0	0	0	8
04:45 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:00 PM	**1**	3	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
Total Volume	1	13	0	14	0	0	0	0	0	9	1	10	0	0	0	0	24
% App. Total	7.1	92.9	0		0	0	0		0	90	10		0	0	0		
PHF	.250	.542	.000	.583	.000	.000	.000	.000	.000	.375	.250	.417	.000	.000	.000	.000	.750

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City of Redlands
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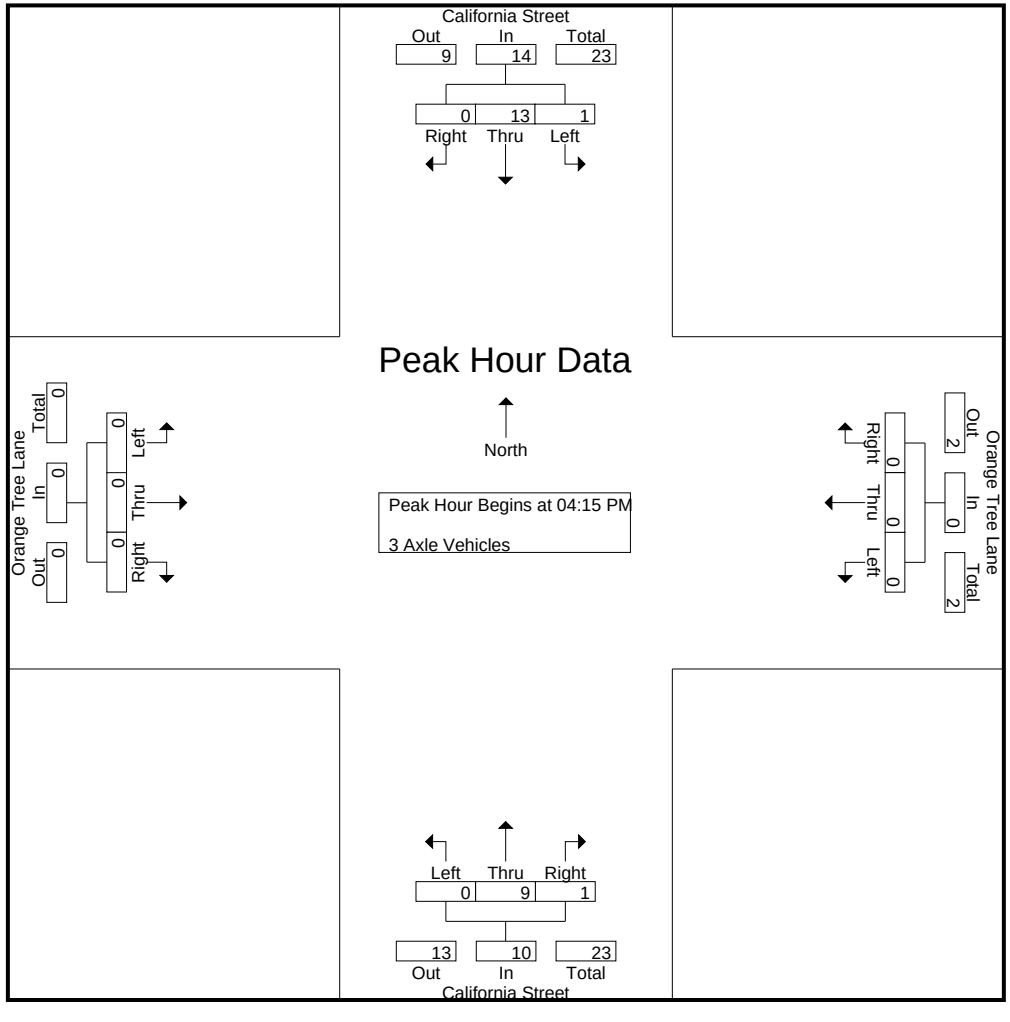

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Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	2	0	2	0	0	0	0	0	**6**	0	**6**	0	0	0	0	
+15 mins.	0	**6**	0	**6**	0	0	0	0	0	1	**1**	2	0	0	0	0	
+30 mins.	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	
+45 mins.	**1**	3	0	4	0	0	0	0	0	1	0	1	0	0	0	0	
Total Volume	1	13	0	14	0	0	0	0	0	9	1	10	0	0	0	0	
% App. Total	7.1	92.9	0		0	0	0		0	90	10		0	0	0		
PHF	.250	.542	.000	.583	.000	.000	.000	.000	.000	.375	.250	.417	.000	.000	.000	.000	

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Groups Printed- 4+ Axle Trucks

	California Street Southbound					Orange Tree Lane Westbound					California Street Northbound					Orange Tree Lane 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	9	0	0	9	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	15	15
04:15 PM	0	8	0	0	8	0	0	0	0	0	0	6	3	0	9	0	0	0	0	0	0	17	17
04:30 PM	1	8	0	0	9	1	0	0	0	1	0	4	5	2	9	0	0	0	0	0	2	19	21
04:45 PM	0	6	0	0	6	0	0	0	0	0	0	4	4	2	8	0	0	0	0	0	2	14	16
Total	1	31	0	0	32	1	0	0	0	1	0	19	13	4	32	0	0	0	0	0	4	65	69
05:00 PM	0	5	0	0	5	0	0	0	0	0	0	8	2	0	10	0	0	0	0	0	0	15	15
05:15 PM	0	4	0	0	4	0	0	1	1	1	0	9	3	1	12	0	0	0	0	0	2	17	19
05:30 PM	0	7	0	0	7	0	0	0	0	0	0	7	2	0	9	0	0	0	0	0	0	16	16
05:45 PM	0	7	0	0	7	1	0	0	0	1	0	4	1	0	5	0	0	0	0	0	0	13	13
Total	0	23	0	0	23	1	0	1	1	2	0	28	8	1	36	0	0	0	0	0	2	61	63
Grand Total	1	54	0	0	55	2	0	1	1	3	0	47	21	5	68	0	0	0	0	0	6	126	132
Apprch %	1.8	98.2	0			66.7	0	33.3			0	69.1	30.9			0	0	0					
Total %	0.8	42.9	0		43.7	1.6	0	0.8		2.4	0	37.3	16.7		54	0	0	0		0	4.5	95.5	

	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	**8**	0	8	0	0	0	0	0	6	3	9	0	0	0	0	17
04:30 PM	**1**	8	0	**9**	**1**	0	0	**1**	0	4	**5**	9	0	0	0	0	**19**
04:45 PM	0	6	0	6	0	0	0	0	0	4	4	8	0	0	0	0	14
05:00 PM	0	5	0	5	0	0	0	0	0	**8**	2	**10**	0	0	0	0	15
Total Volume	1	27	0	28	1	0	0	1	0	22	14	36	0	0	0	0	65
% App. Total	3.6	96.4	0		100	0	0		0	61.1	38.9		0	0	0		
PHF	.250	.844	.000	.778	.250	.000	.000	.250	.000	.688	.700	.900	.000	.000	.000	.000	.855

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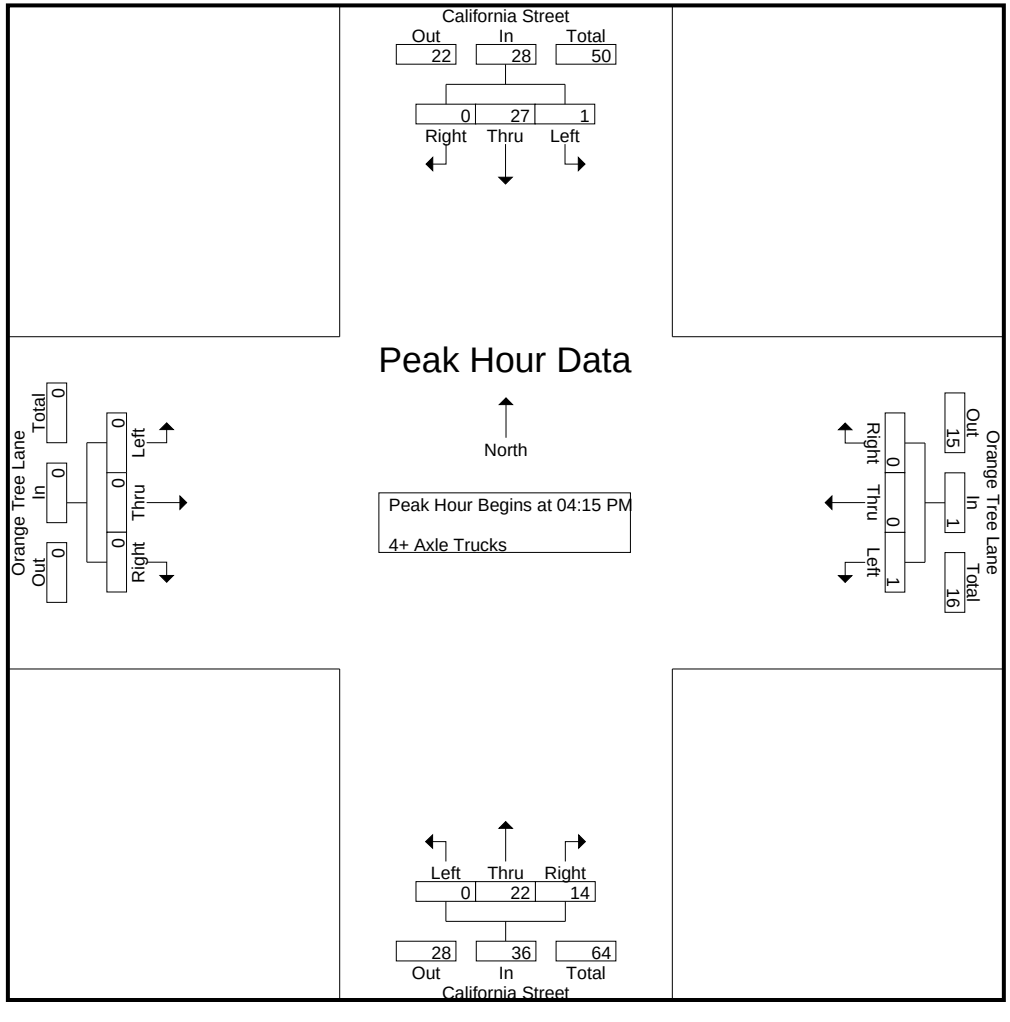

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	California Street Southbound				Orange Tree Lane Westbound				California Street Northbound				Orange Tree Lane Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	**8**	0	8	0	0	0	0	0	6	3	9	0	0	0	0	
+15 mins.	**1**	8	0	**9**	**1**	0	0	**1**	0	4	**5**	9	0	0	0	0	
+30 mins.	0	6	0	6	0	0	0	0	0	4	4	8	0	0	0	0	
+45 mins.	0	5	0	5	0	0	0	0	0	**8**	2	**10**	0	0	0	0	
Total Volume	1	27	0	28	1	0	0	1	0	22	14	36	0	0	0	0	
% App. Total	3.6	96.4	0		100	0	0		0	61.1	38.9		0	0	0		
PHF	.250	.844	.000	.778	.250	.000	.000	.250	.000	.688	.700	.900	.000	.000	.000	.000	

Location: Redlands
N/S: California Street
E/W: Orange Tree Lane

Date: 6/1/2023
Day: Thursday

PEDESTRIANS

	North Leg California Street	East Leg Orange Tree Lane	South Leg California Street	West Leg Orange Tree Lane	
	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	1	0	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1

	North Leg California Street	East Leg Orange Tree Lane	South Leg California Street	West Leg Orange Tree Lane	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	1	0	0	1
4:45 PM	0	1	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	2

Location: Redlands
N/S: California Street
E/W: Orange Tree Lane

Date: 6/1/2023
Day: Thursday

BICYCLES

	Southbound California Street			Westbound Orange Tree Lane			Northbound California Street			Eastbound Orange Tree Lane			
	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 California Street			Westbound Orange Tree Lane			Northbound California Street			Eastbound Orange Tree Lane			
	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	1	0	0	0	0	1	0	0	0	2
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	1	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	1	0	0	0	1	1	0	0	0	3

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City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 05_RED_Cali_10W AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

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

	California Street Southbound					I-10 Westbound Off Ramp Westbound					California Street Northbound					I-10 Westbound On Ramp 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	55	43	23	98	84	1	54	31	139	72	111	0	0	183	0	0	0	0	0	54	420	474
07:15 AM	0	43	60	33	103	103	6	63	33	172	73	124	0	0	197	0	0	0	0	0	66	472	538
07:30 AM	0	49	57	38	106	91	7	90	50	188	80	150	0	0	230	0	0	0	0	0	88	524	612
07:45 AM	0	59	71	53	130	98	3	105	56	206	72	161	0	0	233	0	0	0	0	0	109	569	678
Total	0	206	231	147	437	376	17	312	170	705	297	546	0	0	843	0	0	0	0	0	317	1985	2302
08:00 AM	0	49	70	49	119	92	3	80	43	175	80	147	0	0	227	0	0	0	0	0	92	521	613
08:15 AM	0	45	79	40	124	65	1	80	48	146	70	139	0	0	209	0	0	0	0	0	88	479	567
08:30 AM	0	49	74	45	123	73	1	73	41	147	84	126	0	0	210	0	0	0	0	0	86	480	566
08:45 AM	0	87	66	42	153	82	3	67	49	152	56	116	0	0	172	0	0	0	0	0	91	477	568
Total	0	230	289	176	519	312	8	300	181	620	290	528	0	0	818	0	0	0	0	0	357	1957	2314
Grand Total	0	436	520	323	956	688	25	612	351	1325	587	1074	0	0	1661	0	0	0	0	0	674	3942	4616
Apprch %	0	45.6	54.4			51.9	1.9	46.2			35.3	64.7	0			0	0	0					
Total %	0	11.1	13.2		24.3	17.5	0.6	15.5		33.6	14.9	27.2	0		42.1	0	0	0		0	14.6	85.4	
Passenger Vehicles	0	377	384		1017	673	23	593		1630	535	898	0		1433	0	0	0		0	0	0	4080
% Passenger Vehicles	0	86.5	73.8	79.3	79.5	97.8	92	96.9	97.2	97.3	91.1	83.6	0	0	86.3	0	0	0	0	0	0	0	88.4
Large 2 Axle Vehicles	0	33	17		60	6	2	10		25	22	22	0		44	0	0	0		0	0	0	129
% Large 2 Axle Vehicles	0	7.6	3.3	3.1	4.7	0.9	8	1.6	2	1.5	3.7	2	0	0	2.6	0	0	0	0	0	0	0	2.8
3 Axle Vehicles	0	15	20		41	4	0	1		6	5	56	0		61	0	0	0		0	0	0	108
% 3 Axle Vehicles	0	3.4	3.8	1.9	3.2	0.6	0	0.2	0.3	0.4	0.9	5.2	0	0	3.7	0	0	0	0	0	0	0	2.3
4+ Axle Trucks	0	11	99		161	5	0	8		15	25	98	0		123	0	0	0		0	0	0	299
% 4+ Axle Trucks	0	2.5	19	15.8	12.6	0.7	0	1.3	0.6	0.9	4.3	9.1	0	0	7.4	0	0	0	0	0	0	0	6.5

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 07:30 AM																	
07:30 AM	0	49	57	106	91	**7**	90	188	**80**	150	0	230	0	0	0	0	524
07:45 AM	0	**59**	71	**130**	**98**	3	**105**	**206**	72	**161**	0	**233**	0	0	0	0	**569**
08:00 AM	0	49	70	119	92	3	80	175	80	147	0	227	0	0	0	0	521
08:15 AM	0	45	**79**	124	65	1	80	146	70	139	0	209	0	0	0	0	479
Total Volume	0	202	277	479	346	14	355	715	302	597	0	899	0	0	0	0	2093
% App. Total	0	42.2	57.8		48.4	2	49.7		33.6	66.4	0		0	0	0		
PHF	.000	.856	.877	.921	.883	.500	.845	.868	.944	.927	.000	.965	.000	.000	.000	.000	.920

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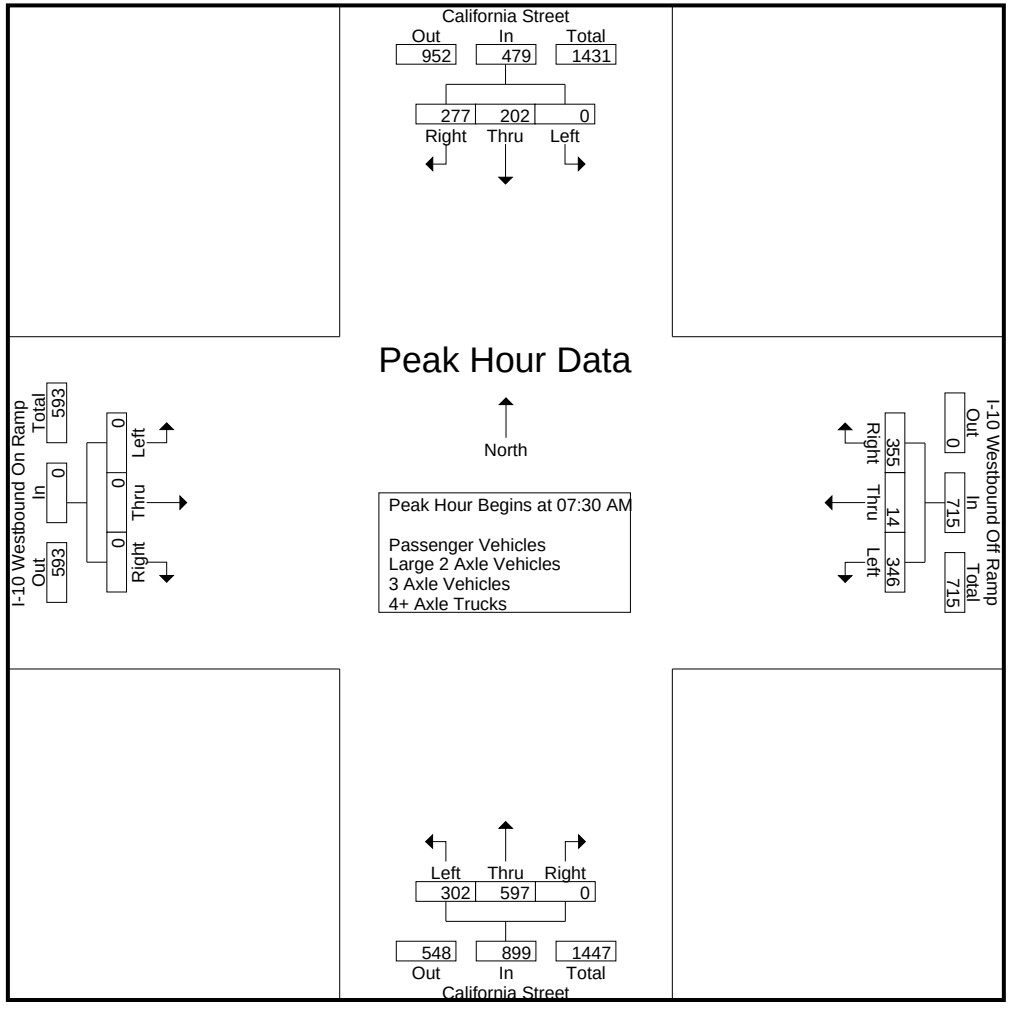
City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 05_RED_Cali_10W AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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City of Redlands
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File Name : 05_RED_Cali_10W AM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 Each Approach Begins at:																	
	08:00 AM				07:15 AM				07:30 AM				07:00 AM				
+0 mins.	0	49	70	119	**103**	6	63	172	**80**	150	0	230	0	0	0	0	
+15 mins.	0	45	**79**	124	91	**7**	90	188	72	**161**	0	**233**	0	0	0	0	
+30 mins.	0	49	74	123	98	3	**105**	**206**	80	147	0	227	0	0	0	0	
+45 mins.	0	**87**	66	**153**	92	3	80	175	70	139	0	209	0	0	0	0	
Total Volume	0	230	289	519	384	19	338	741	302	597	0	899	0	0	0	0	
% App. Total	0	44.3	55.7		51.8	2.6	45.6		33.6	66.4	0		0	0	0		
PHF	.000	.661	.915	.848	.932	.679	.805	.899	.944	.927	.000	.965	.000	.000	.000	.000	

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File Name : 05_RED_Cali_10W AM
Site Code : 05123579
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Page No : 1

Groups Printed- Large 2 Axle Vehicles

	California Street Southbound					I-10 Westbound Off Ramp Westbound					California Street Northbound					I-10 Westbound On Ramp 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	13	1	0	14	1	0	1	1	2	1	7	0	0	8	0	0	0	0	0	1	24	25
07:15 AM	0	10	4	2	14	0	0	0	0	0	5	4	0	0	9	0	0	0	0	0	2	23	25
07:30 AM	0	3	2	0	5	1	1	1	1	3	3	1	0	0	4	0	0	0	0	0	1	12	13
07:45 AM	0	1	2	2	3	1	0	2	1	3	3	1	0	0	4	0	0	0	0	0	3	10	13
Total	0	27	9	4	36	3	1	4	3	8	12	13	0	0	25	0	0	0	0	0	7	69	76
08:00 AM	0	1	2	1	3	2	0	1	1	3	3	5	0	0	8	0	0	0	0	0	2	14	16
08:15 AM	0	3	5	4	8	1	1	1	1	3	3	1	0	0	4	0	0	0	0	0	5	15	20
08:30 AM	0	1	0	0	1	0	0	2	1	2	1	1	0	0	2	0	0	0	0	0	1	5	6
08:45 AM	0	1	1	1	2	0	0	2	1	2	3	2	0	0	5	0	0	0	0	0	2	9	11
Total	0	6	8	6	14	3	1	6	4	10	10	9	0	0	19	0	0	0	0	0	10	43	53
Grand Total	0	33	17	10	50	6	2	10	7	18	22	22	0	0	44	0	0	0	0	0	17	112	129
Apprch %	0	66	34			33.3	11.1	55.6			50	50	0			0	0	0					
Total %	0	29.5	15.2		44.6	5.4	1.8	8.9		16.1	19.6	19.6	0		39.3	0	0	0		0	13.2	86.8	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**3**	2	5	1	**1**	1	**3**	**3**	1	0	4	0	0	0	0	12
07:45 AM	0	1	2	3	1	0	**2**	3	3	1	0	4	0	0	0	0	10
08:00 AM	0	1	2	3	**2**	0	1	3	3	**5**	0	**8**	0	0	0	0	14
08:15 AM	0	3	**5**	**8**	1	1	1	3	3	1	0	4	0	0	0	0	**15**
Total Volume	0	8	11	19	5	2	5	12	12	8	0	20	0	0	0	0	51
% App. Total	0	42.1	57.9		41.7	16.7	41.7		60	40	0		0	0	0		
PHF	.000	.667	.550	.594	.625	.500	.625	1.00	1.00	.400	.000	.625	.000	.000	.000	.000	.850

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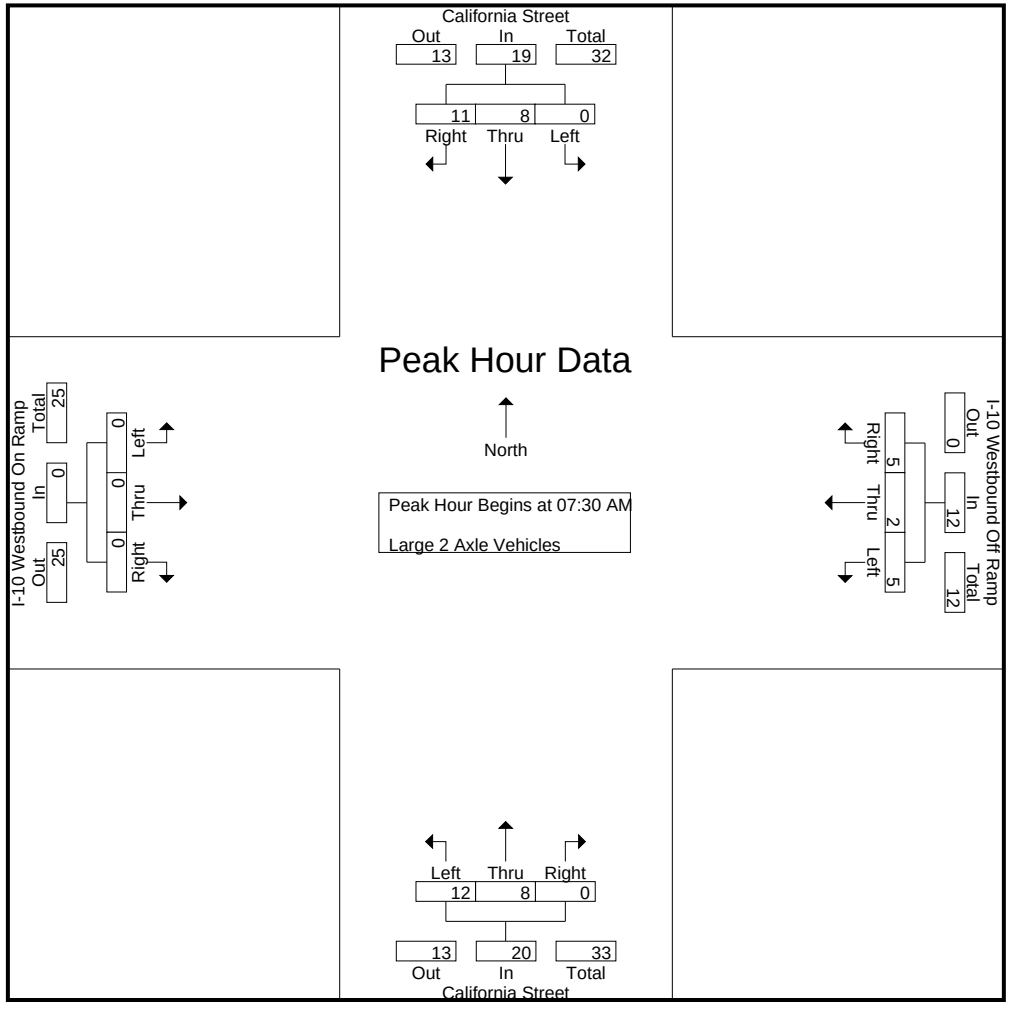
City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 05_RED_Cali_10W AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 05_RED_Cali_10W AM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	**3**	2	5	1	**1**	1	**3**	**3**	1	0	4	0	0	0	0	
+15 mins.	0	1	2	3	1	0	**2**	3	3	1	0	4	0	0	0	0	
+30 mins.	0	1	2	3	**2**	0	1	3	3	**5**	0	**8**	0	0	0	0	
+45 mins.	0	3	**5**	**8**	1	1	1	3	3	1	0	4	0	0	0	0	
Total Volume	0	8	11	19	5	2	5	12	12	8	0	20	0	0	0	0	
% App. Total	0	42.1	57.9		41.7	16.7	41.7		60	40	0		0	0	0		
PHF	.000	.667	.550	.594	.625	.500	.625	1.000	1.000	.400	.000	.625	.000	.000	.000	.000	

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City of Redlands
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File Name : 05_RED_Cali_10W AM
Site Code : 05123579
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Page No : 1

Groups Printed- 3 Axle Vehicles

	California Street Southbound					I-10 Westbound Off Ramp Westbound					California Street Northbound					I-10 Westbound On Ramp 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	2	1	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	1	6	7
07:15 AM	0	0	5	2	5	0	0	0	0	0	1	6	0	0	7	0	0	0	0	0	2	12	14
07:30 AM	0	0	3	2	3	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	2	13	15
07:45 AM	0	5	3	0	8	3	0	0	0	3	2	4	0	0	6	0	0	0	0	0	0	17	17
Total	0	5	13	5	18	3	0	0	0	3	3	24	0	0	27	0	0	0	0	0	5	48	53
08:00 AM	0	3	0	0	3	0	0	0	0	0	1	11	0	0	12	0	0	0	0	0	0	15	15
08:15 AM	0	0	2	0	2	0	0	1	1	1	1	7	0	0	8	0	0	0	0	0	1	11	12
08:30 AM	0	1	3	1	4	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	1	16	17
08:45 AM	0	6	2	0	8	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	11	11
Total	0	10	7	1	17	1	0	1	1	2	2	32	0	0	34	0	0	0	0	0	2	53	55
Grand Total	0	15	20	6	35	4	0	1	1	5	5	56	0	0	61	0	0	0	0	0	7	101	108
Apprch %	0	42.9	57.1			80	0	20			8.2	91.8	0			0	0	0					
Total %	0	14.9	19.8		34.7	4	0	1		5	5	55.4	0		60.4	0	0	0		0	6.5	93.5	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	**3**	3	0	0	0	0	0	10	0	10	0	0	0	0	13
07:45 AM	0	**5**	3	**8**	**3**	0	0	**3**	**2**	4	0	6	0	0	0	0	**17**
08:00 AM	0	3	0	3	0	0	0	0	1	**11**	0	**12**	0	0	0	0	15
08:15 AM	0	0	2	2	0	0	**1**	1	1	7	0	8	0	0	0	0	11
Total Volume	0	8	8	16	3	0	1	4	4	32	0	36	0	0	0	0	56
% App. Total	0	50	50		75	0	25		11.1	88.9	0		0	0	0		
PHF	.000	.400	.667	.500	.250	.000	.250	.333	.500	.727	.000	.750	.000	.000	.000	.000	.824

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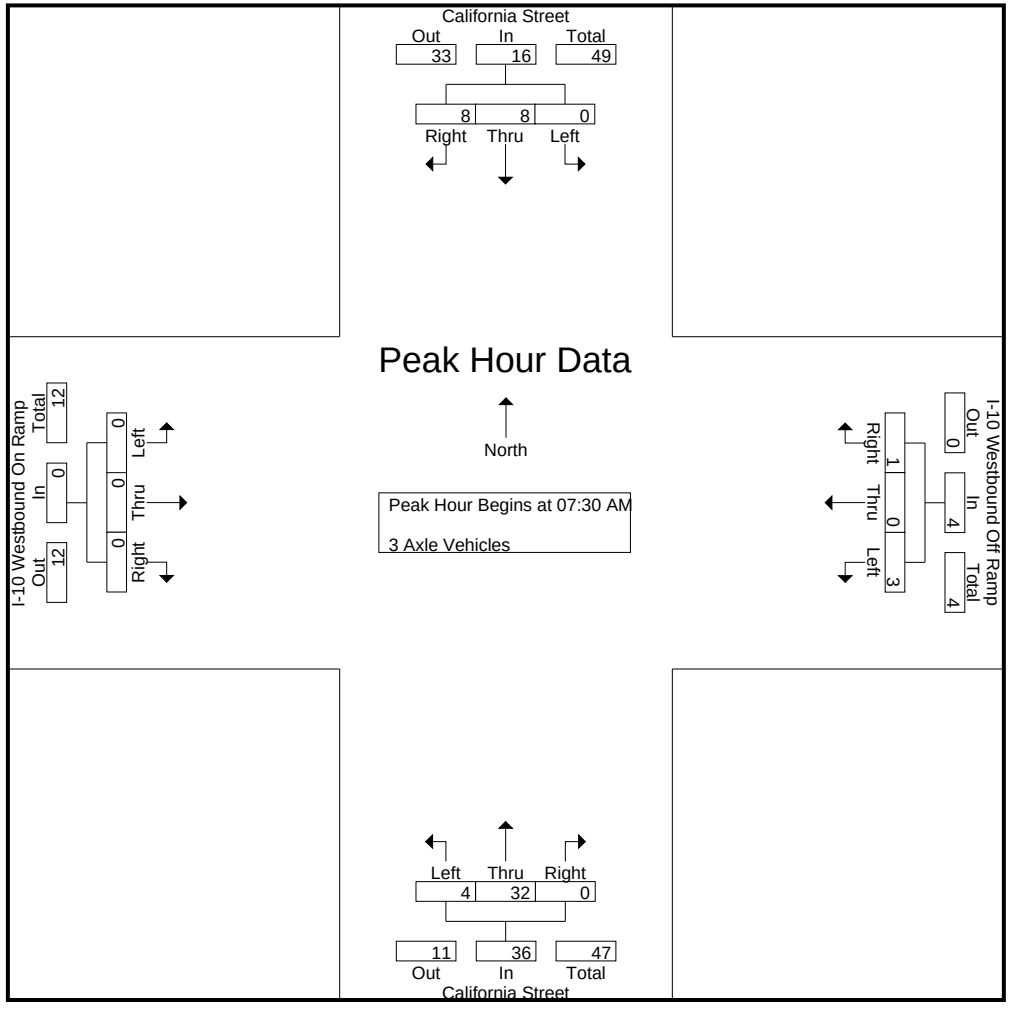
City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 05_RED_Cali_10W AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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City of Redlands
N/S: California Street
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File Name : 05_RED_Cali_10W AM
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Start Date : 6/1/2023

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	**3**	3	0	0	0	0	0	10	0	10	0	0	0	0	
+15 mins.	0	**5**	3	**8**	**3**	0	0	**3**	**2**	4	0	6	0	0	0	0	
+30 mins.	0	3	0	3	0	0	0	0	1	**11**	0	**12**	0	0	0	0	
+45 mins.	0	0	2	2	0	0	**1**	1	1	7	0	8	0	0	0	0	
Total Volume	0	8	8	16	3	0	1	4	4	32	0	36	0	0	0	0	
% App. Total	0	50	50		75	0	25		11.1	88.9	0		0	0	0		
PHF	.000	.400	.667	.500	.250	.000	.250	.333	.500	.727	.000	.750	.000	.000	.000	.000	

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City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 05_RED_Cali_10W AM
Site Code : 05123579
Start Date : 6/1/2023

Groups Printed- 4+ Axle Trucks

	California Street Southbound					I-10 Westbound Off Ramp Westbound					California Street Northbound					I-10 Westbound On Ramp 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	1	6	3	7	1	0	1	1	2	3	12	0	0	15	0	0	0	0	0	4	24	28
07:15 AM	0	1	14	4	15	2	0	1	1	3	2	11	0	0	13	0	0	0	0	0	5	31	36
07:30 AM	0	2	11	6	13	2	0	1	0	3	3	10	0	0	13	0	0	0	0	0	6	29	35
07:45 AM	0	0	9	6	9	0	0	1	0	1	6	14	0	0	20	0	0	0	0	0	6	30	36
Total	0	4	40	19	44	5	0	4	2	9	14	47	0	0	61	0	0	0	0	0	21	114	135
08:00 AM	0	0	10	7	10	0	0	2	0	2	6	14	0	0	20	0	0	0	0	0	7	32	39
08:15 AM	0	2	15	8	17	0	0	1	0	1	2	11	0	0	13	0	0	0	0	0	8	31	39
08:30 AM	0	4	20	11	24	0	0	0	0	0	1	17	0	0	18	0	0	0	0	0	11	42	53
08:45 AM	0	1	14	6	15	0	0	1	0	1	2	9	0	0	11	0	0	0	0	0	6	27	33
Total	0	7	59	32	66	0	0	4	0	4	11	51	0	0	62	0	0	0	0	0	32	132	164
Grand Total	0	11	99	51	110	5	0	8	2	13	25	98	0	0	123	0	0	0	0	0	53	246	299
Apprch %	0	10	90			38.5	0	61.5			20.3	79.7	0			0	0	0					
Total %	0	4.5	40.2		44.7	2	0	3.3		5.3	10.2	39.8	0		50	0	0	0		0	17.7	82.3	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**2**	11	13	**2**	0	1	**3**	3	10	0	13	0	0	0	0	29
07:45 AM	0	0	9	9	0	0	1	1	**6**	**14**	0	**20**	0	0	0	0	30
08:00 AM	0	0	10	10	0	0	**2**	2	6	14	0	20	0	0	0	0	**32**
08:15 AM	0	2	**15**	**17**	0	0	1	1	2	11	0	13	0	0	0	0	31
Total Volume	0	4	45	49	2	0	5	7	17	49	0	66	0	0	0	0	122
% App. Total	0	8.2	91.8		28.6	0	71.4		25.8	74.2	0		0	0	0		
PHF	.000	.500	.750	.721	.250	.000	.625	.583	.708	.875	.000	.825	.000	.000	.000	.000	.953

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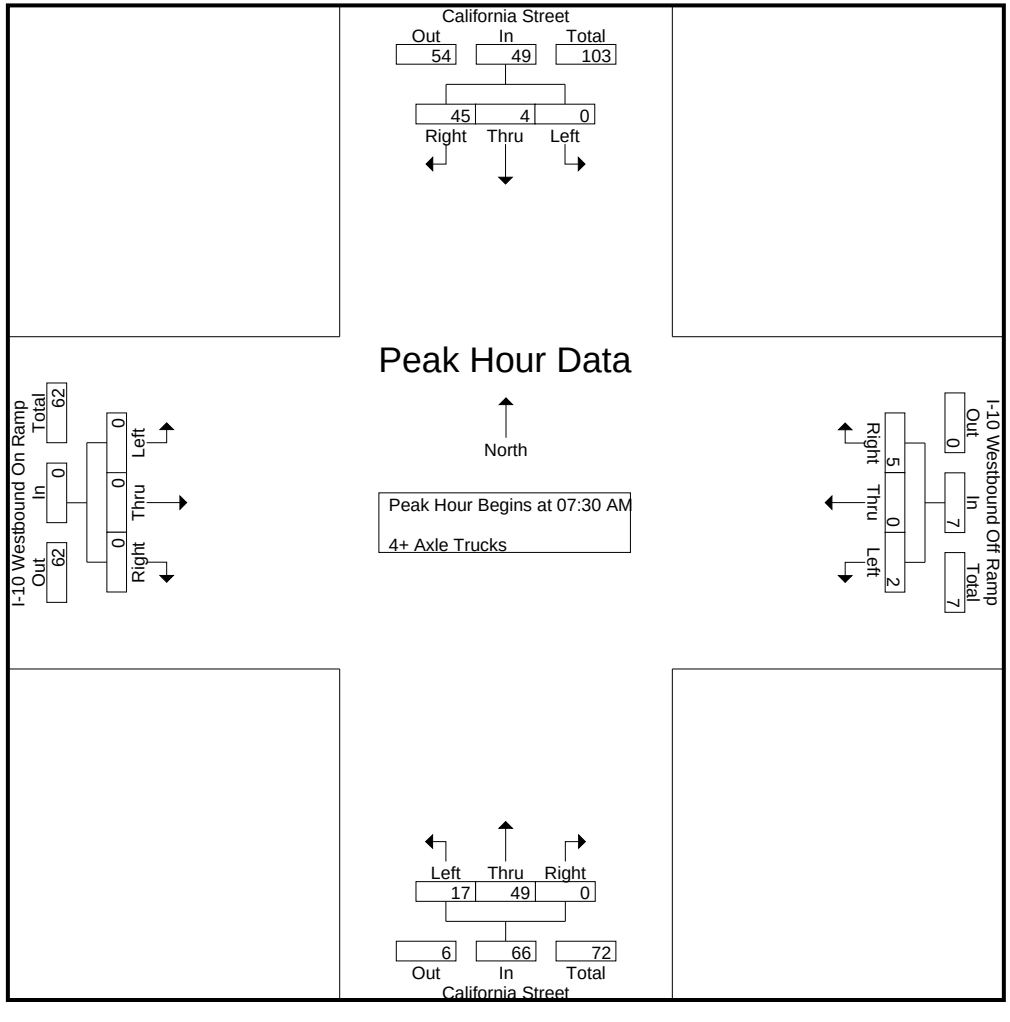
City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 05_RED_Cali_10W AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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City of Redlands
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File Name : 05_RED_Cali_10W AM
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Start Date : 6/1/2023

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	**2**	11	13	**2**	0	1	**3**	3	10	0	13	0	0	0	0	
+15 mins.	0	0	9	9	0	0	1	1	**6**	**14**	0	**20**	0	0	0	0	
+30 mins.	0	0	10	10	0	0	**2**	2	6	14	0	20	0	0	0	0	
+45 mins.	0	2	**15**	**17**	0	0	1	1	2	11	0	13	0	0	0	0	
Total Volume	0	4	45	49	2	0	5	7	17	49	0	66	0	0	0	0	
% App. Total	0	8.2	91.8		28.6	0	71.4		25.8	74.2	0		0	0	0		
PHF	.000	.500	.750	.721	.250	.000	.625	.583	.708	.875	.000	.825	.000	.000	.000	.000	

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File Name : 05_RED_Cali_10W PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

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

	California Street Southbound					I-10 Westbound Off Ramp Westbound					California Street Northbound					I-10 Westbound On Ramp 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	101	146	68	247	52	2	43	32	97	84	111	0	0	195	0	0	0	0	0	100	539	639
04:15 PM	0	116	93	52	209	79	0	23	13	102	91	113	0	0	204	0	0	0	0	0	65	515	580
04:30 PM	0	140	181	52	321	68	2	26	18	96	67	127	0	0	194	0	0	0	0	0	70	611	681
04:45 PM	0	94	94	54	188	61	1	26	17	88	109	116	0	0	225	0	0	0	0	0	71	501	572
Total	0	451	514	226	965	260	5	118	80	383	351	467	0	0	818	0	0	0	0	0	306	2166	2472
05:00 PM	0	118	166	71	284	48	0	26	21	74	107	113	0	0	220	0	0	0	0	0	92	578	670
05:15 PM	0	107	110	51	217	69	0	36	19	105	101	99	0	0	200	0	0	0	0	0	70	522	592
05:30 PM	0	92	132	68	224	62	0	28	23	90	96	104	0	0	200	0	0	0	0	0	91	514	605
05:45 PM	0	83	80	42	163	55	0	37	26	92	85	95	0	0	180	0	0	0	0	0	68	435	503
Total	0	400	488	232	888	234	0	127	89	361	389	411	0	0	800	0	0	0	0	0	321	2049	2370
Grand Total	0	851	1002	458	1853	494	5	245	169	744	740	878	0	0	1618	0	0	0	0	0	627	4215	4842
Apprch %	0	45.9	54.1			66.4	0.7	32.9			45.7	54.3	0			0	0	0					
Total %	0	20.2	23.8		44	11.7	0.1	5.8		17.7	17.6	20.8	0		38.4	0	0	0		0	12.9	87.1	
Passenger Vehicles	0	833	922		2185	491	4	225		875	708	786	0		1494	0	0	0		0	0	0	4554
% Passenger Vehicles	0	97.9	92	93.9	94.5	99.4	80	91.8	91.7	95.8	95.7	89.5	0	0	92.3	0	0	0	0	0	0	0	94.1
Large 2 Axle Vehicles	0	8	9		20	2	1	11		21	13	14	0		27	0	0	0		0	0	0	68
% Large 2 Axle Vehicles	0	0.9	0.9	0.7	0.9	0.4	20	4.5	4.1	2.3	1.8	1.6	0	0	1.7	0	0	0	0	0	0	0	1.4
3 Axle Vehicles	0	1	23		33	1	0	2		4	2	17	0		19	0	0	0		0	0	0	56
% 3 Axle Vehicles	0	0.1	2.3	2	1.4	0.2	0	0.8	0.6	0.4	0.3	1.9	0	0	1.2	0	0	0	0	0	0	0	1.2
4+ Axle Trucks	0	9	48		73	0	0	7		13	17	61	0		78	0	0	0		0	0	0	164
% 4+ Axle Trucks	0	1.1	4.8	3.5	3.2	0	0	2.9	3.6	1.4	2.3	6.9	0	0	4.8	0	0	0	0	0	0	0	3.4

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 04:30 PM																	
04:30 PM	0	**140**	**181**	**321**	68	**2**	26	96	67	**127**	0	194	0	0	0	0	**611**
04:45 PM	0	94	94	188	61	1	26	88	**109**	116	0	**225**	0	0	0	0	501
05:00 PM	0	118	166	284	48	0	26	74	107	113	0	220	0	0	0	0	578
05:15 PM	0	107	110	217	**69**	0	**36**	**105**	101	99	0	200	0	0	0	0	522
Total Volume	0	459	551	1010	246	3	114	363	384	455	0	839	0	0	0	0	2212
% App. Total	0	45.4	54.6		67.8	0.8	31.4		45.8	54.2	0		0	0	0		
PHF	.000	.820	.761	.787	.891	.375	.792	.864	.881	.896	.000	.932	.000	.000	.000	.000	.905

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City of Redlands
N/S: California Street
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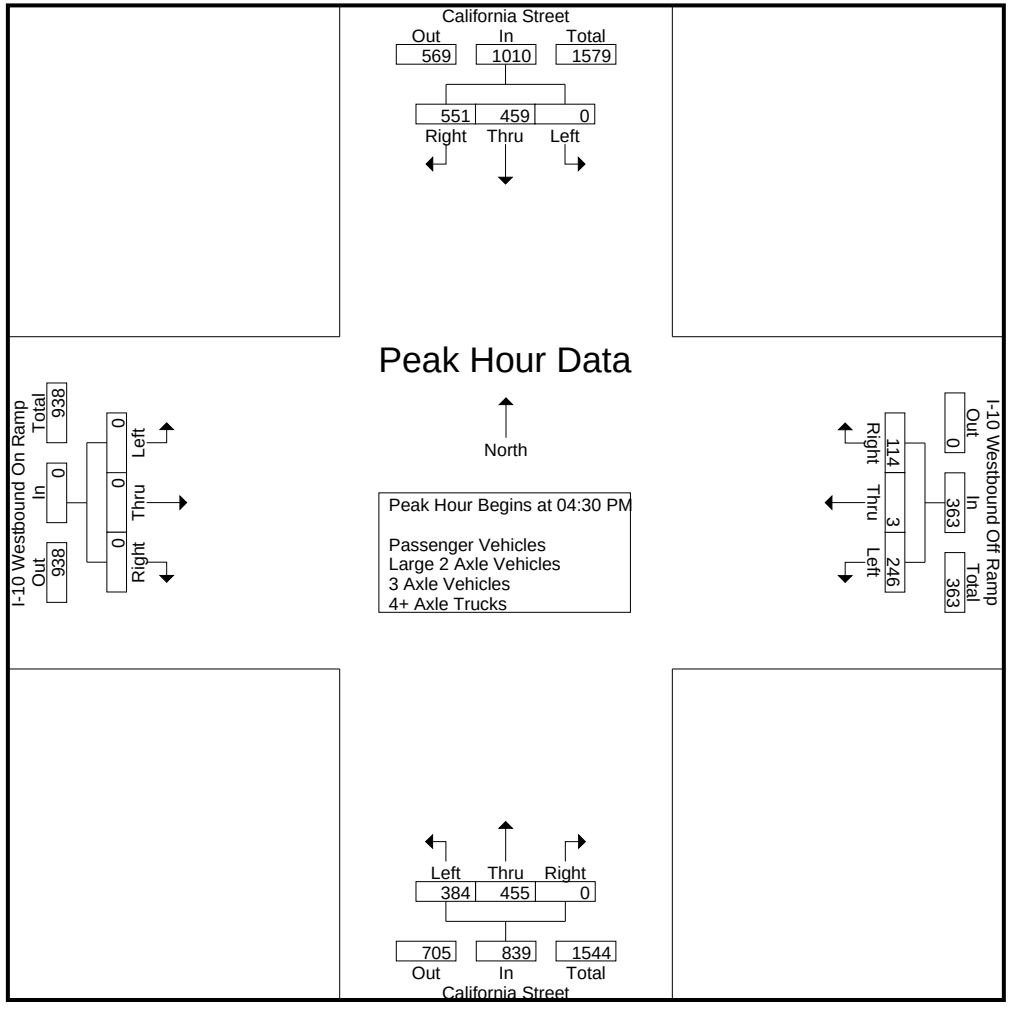
File Name : 05_RED_Cali_10W PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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File Name : 05_RED_Cali_10W PM
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Start Date : 6/1/2023

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 Each Approach Begins at:																	
	04:30 PM				04:00 PM				04:45 PM				04:00 PM				
+0 mins.	0	**140**	**181**	**321**	52	**2**	**43**	97	**109**	**116**	0	**225**	0	0	0	0	
+15 mins.	0	94	94	188	**79**	0	23	**102**	107	113	0	220	0	0	0	0	
+30 mins.	0	118	166	284	68	2	26	96	101	99	0	200	0	0	0	0	
+45 mins.	0	107	110	217	61	1	26	88	96	104	0	200	0	0	0	0	
Total Volume	0	459	551	1010	260	5	118	383	413	432	0	845	0	0	0	0	
% App. Total	0	45.4	54.6		67.9	1.3	30.8		48.9	51.1	0		0	0	0		
PHF	.000	.820	.761	.787	.823	.625	.686	.939	.947	.931	.000	.939	.000	.000	.000	.000	

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Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	California Street Southbound					I-10 Westbound Off Ramp Westbound					California Street Northbound					I-10 Westbound On Ramp 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	1	1	1	0	1	1	1	2	3	2	0	0	5	0	0	0	0	0	2	8	10
04:15 PM	0	3	1	0	4	1	0	2	2	3	2	0	0	0	2	0	0	0	0	0	2	9	11
04:30 PM	0	2	1	1	3	0	0	2	1	2	3	1	0	0	4	0	0	0	0	0	2	9	11
04:45 PM	0	1	0	0	1	1	0	3	2	4	1	3	0	0	4	0	0	0	0	0	2	9	11
Total	0	6	3	2	9	2	1	8	6	11	9	6	0	0	15	0	0	0	0	0	8	35	43
05:00 PM	0	1	3	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	6	6
05:15 PM	0	1	2	1	3	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	1	6	7
05:30 PM	0	0	1	0	1	0	0	1	1	1	2	4	0	0	6	0	0	0	0	0	1	8	9
05:45 PM	0	0	0	0	0	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	0	3	3
Total	0	2	6	1	8	0	0	3	1	3	4	8	0	0	12	0	0	0	0	0	2	23	25
Grand Total	0	8	9	3	17	2	1	11	7	14	13	14	0	0	27	0	0	0	0	0	10	58	68
Apprch %	0	47.1	52.9			14.3	7.1	78.6			48.1	51.9	0			0	0	0					
Total %	0	13.8	15.5		29.3	3.4	1.7	19		24.1	22.4	24.1	0		46.6	0	0	0		0	14.7	85.3	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**2**	1	3	0	0	2	2	**3**	1	0	**4**	0	0	0	0	**9**
04:45 PM	0	1	0	1	**1**	0	**3**	**4**	1	**3**	0	4	0	0	0	0	9
05:00 PM	0	1	**3**	**4**	0	0	0	0	0	2	0	2	0	0	0	0	6
05:15 PM	0	1	2	3	0	0	0	0	2	1	0	3	0	0	0	0	6
Total Volume	0	5	6	11	1	0	5	6	6	7	0	13	0	0	0	0	30
% App. Total	0	45.5	54.5		16.7	0	83.3		46.2	53.8	0		0	0	0		
PHF	.000	.625	.500	.688	.250	.000	.417	.375	.500	.583	.000	.813	.000	.000	.000	.000	.833

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File Name : 05_RED_Cali_10W PM
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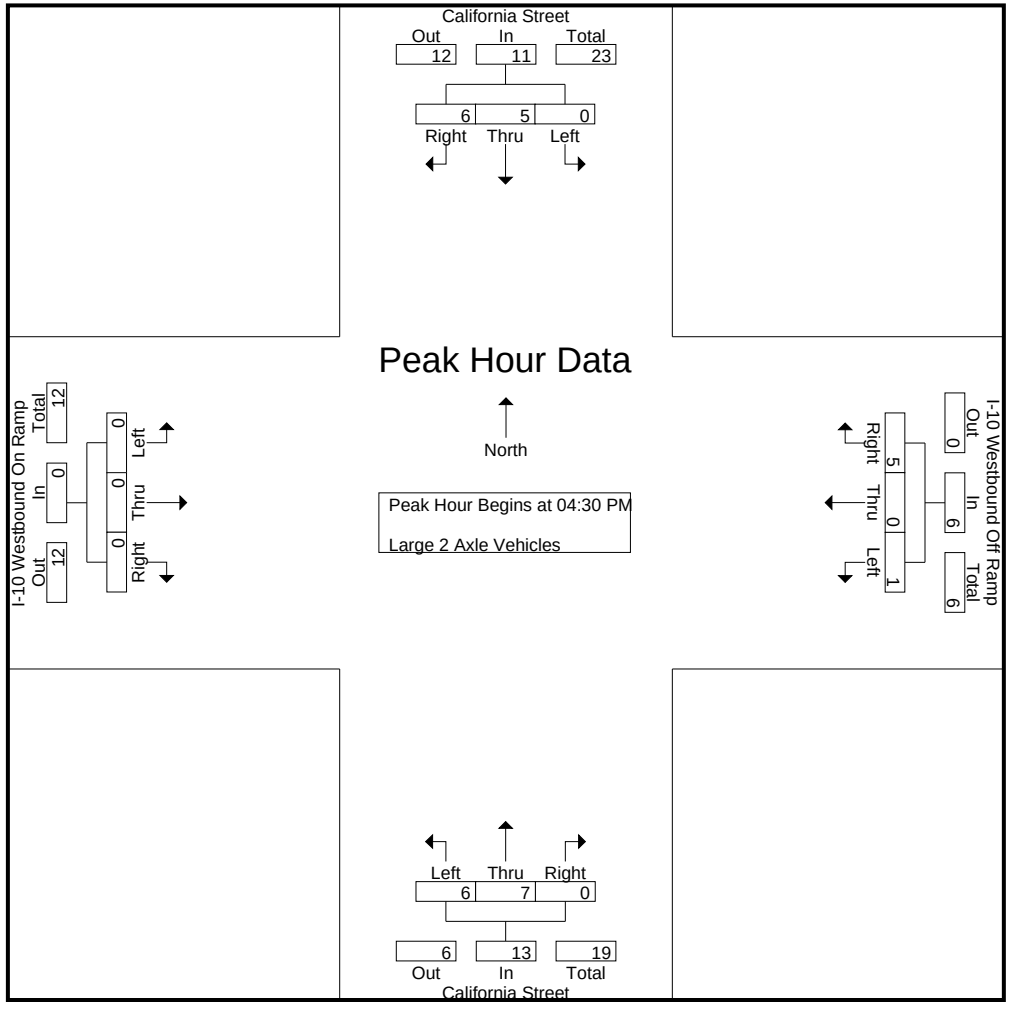

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	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	**2**	1	3	0	0	2	2	**3**	1	0	**4**	0	0	0	0	
+15 mins.	0	1	0	1	**1**	0	**3**	**4**	1	**3**	0	4	0	0	0	0	
+30 mins.	0	1	**3**	**4**	0	0	0	0	0	2	0	2	0	0	0	0	
+45 mins.	0	1	2	3	0	0	0	0	2	1	0	3	0	0	0	0	
Total Volume	0	5	6	11	1	0	5	6	6	7	0	13	0	0	0	0	
% App. Total	0	45.5	54.5		16.7	0	83.3		46.2	53.8	0		0	0	0		
PHF	.000	.625	.500	.688	.250	.000	.417	.375	.500	.583	.000	.813	.000	.000	.000	.000	

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File Name : 05_RED_Cali_10W PM
Site Code : 05123579
Start Date : 6/1/2023

Groups Printed- 3 Axle Vehicles

	California Street Southbound					I-10 Westbound Off Ramp Westbound					California Street Northbound					I-10 Westbound On Ramp 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	4	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	6
04:15 PM	0	0	2	1	2	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	1	8	9
04:30 PM	0	1	6	1	7	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	1	10	11
04:45 PM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
Total	0	1	13	4	14	0	0	1	0	1	1	8	0	0	9	0	0	0	0	0	4	24	28
05:00 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:15 PM	0	0	3	2	3	1	0	1	1	2	1	1	0	0	2	0	0	0	0	0	3	7	10
05:30 PM	0	0	2	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	5
05:45 PM	0	0	3	3	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	3	8	11
Total	0	0	10	5	10	1	0	1	1	2	1	9	0	0	10	0	0	0	0	0	6	22	28
Grand Total	0	1	23	9	24	1	0	2	1	3	2	17	0	0	19	0	0	0	0	0	10	46	56
Apprch %	0	4.2	95.8			33.3	0	66.7			10.5	89.5	0			0	0	0					
Total %	0	2.2	50		52.2	2.2	0	4.3		6.5	4.3	37	0		41.3	0	0	0		0	17.9	82.1	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**1**	**6**	**7**	0	0	0	0	**1**	**2**	0	**3**	0	0	0	0	**10**
04:45 PM	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:00 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	3	3	**1**	0	**1**	**2**	1	1	0	2	0	0	0	0	7
Total Volume	0	1	12	13	1	0	1	2	2	4	0	6	0	0	0	0	21
% App. Total	0	7.7	92.3		50	0	50		33.3	66.7	0		0	0	0		
PHF	.000	.250	.500	.464	.250	.000	.250	.250	.500	.500	.000	.500	.000	.000	.000	.000	.525

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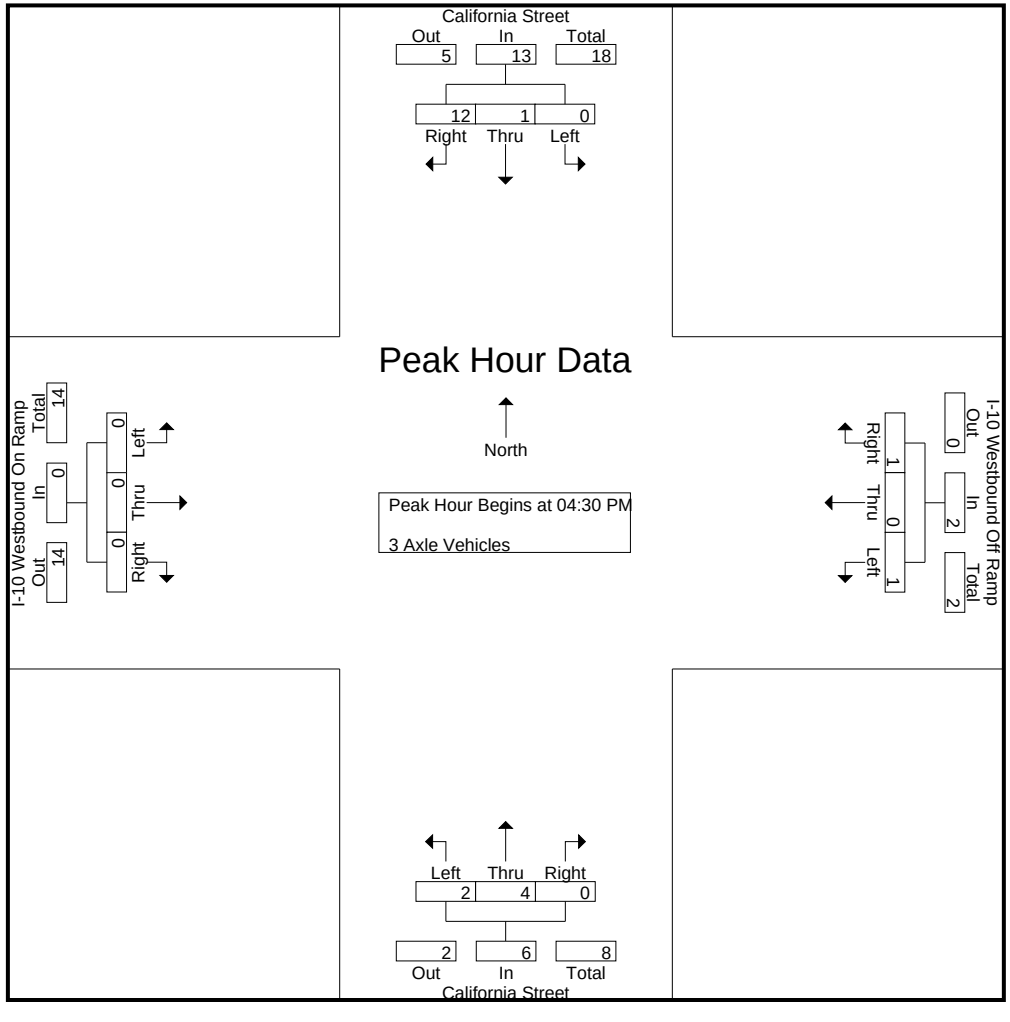
City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 05_RED_Cali_10W PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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City of Redlands
N/S: California Street
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Weather: Clear

File Name : 05_RED_Cali_10W PM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	**1**	**6**	**7**	0	0	0	0	**1**	**2**	0	**3**	0	0	0	0	
+15 mins.	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	
+30 mins.	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	3	3	**1**	0	**1**	**2**	1	1	0	2	0	0	0	0	
Total Volume	0	1	12	13	1	0	1	2	2	4	0	6	0	0	0	0	
% App. Total	0	7.7	92.3		50	0	50		33.3	66.7	0		0	0	0		
PHF	.000	.250	.500	.464	.250	.000	.250	.250	.500	.500	.000	.500	.000	.000	.000	.000	

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File Name : 05_RED_Cali_10W PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

	California Street Southbound					I-10 Westbound Off Ramp Westbound					California Street Northbound					I-10 Westbound On Ramp 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	3	6	2	9	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	2	16	18
04:15 PM	0	2	6	3	8	0	0	1	1	1	7	6	0	0	13	0	0	0	0	0	4	22	26
04:30 PM	0	1	10	3	11	0	0	2	2	2	1	8	0	0	9	0	0	0	0	0	5	22	27
04:45 PM	0	0	4	1	4	0	0	0	0	0	1	9	0	0	10	0	0	0	0	0	1	14	15
Total	0	6	26	9	32	0	0	3	3	3	9	30	0	0	39	0	0	0	0	0	12	74	86
05:00 PM	0	0	6	1	6	0	0	1	1	1	0	11	0	0	11	0	0	0	0	0	2	18	20
05:15 PM	0	1	4	1	5	0	0	1	1	1	4	6	0	0	10	0	0	0	0	0	2	16	18
05:30 PM	0	2	4	1	6	0	0	1	1	1	2	8	0	0	10	0	0	0	0	0	2	17	19
05:45 PM	0	0	8	4	8	0	0	1	0	1	2	6	0	0	8	0	0	0	0	0	4	17	21
Total	0	3	22	7	25	0	0	4	3	4	8	31	0	0	39	0	0	0	0	0	10	68	78
Grand Total	0	9	48	16	57	0	0	7	6	7	17	61	0	0	78	0	0	0	0	0	22	142	164
Apprch %	0	15.8	84.2			0	0	100			21.8	78.2	0			0	0	0					
Total %	0	6.3	33.8		40.1	0	0	4.9		4.9	12	43	0		54.9	0	0	0		0	13.4	86.6	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**1**	**10**	**11**	0	0	**2**	**2**	1	8	0	9	0	0	0	0	**22**
04:45 PM	0	0	4	4	0	0	0	0	1	9	0	10	0	0	0	0	14
05:00 PM	0	0	6	6	0	0	1	1	0	**11**	0	**11**	0	0	0	0	18
05:15 PM	0	1	4	5	0	0	1	1	**4**	6	0	10	0	0	0	0	16
Total Volume	0	2	24	26	0	0	4	4	6	34	0	40	0	0	0	0	70
% App. Total	0	7.7	92.3		0	0	100		15	85	0		0	0	0		
PHF	.000	.500	.600	.591	.000	.000	.500	.500	.375	.773	.000	.909	.000	.000	.000	.000	.795

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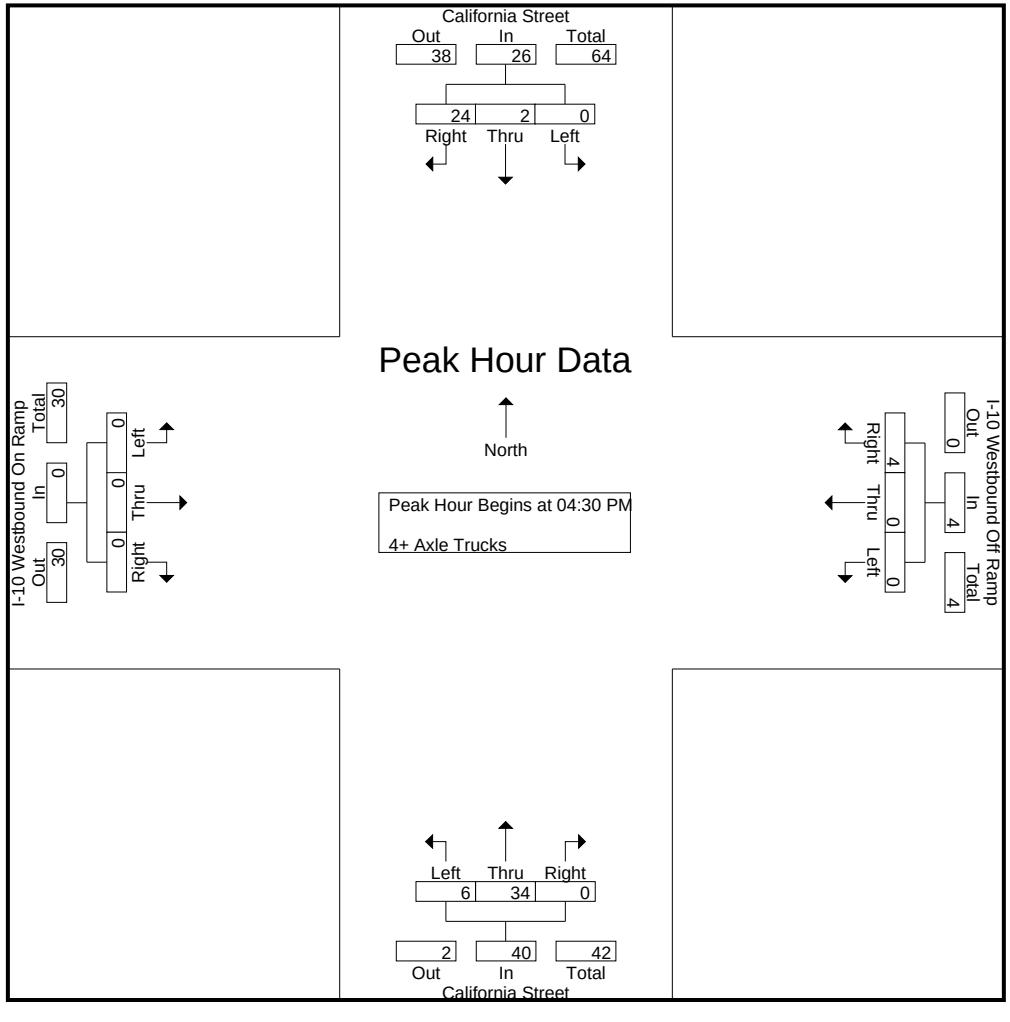
City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 05_RED_Cali_10W PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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File Name : 05_RED_Cali_10W PM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On 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 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	**1**	**10**	**11**	0	0	**2**	**2**	1	8	0	9	0	0	0	0	
+15 mins.	0	0	4	4	0	0	0	0	1	9	0	10	0	0	0	0	
+30 mins.	0	0	6	6	0	0	1	1	0	**11**	0	**11**	0	0	0	0	
+45 mins.	0	1	4	5	0	0	1	1	**4**	6	0	10	0	0	0	0	
Total Volume	0	2	24	26	0	0	4	4	6	34	0	40	0	0	0	0	
% App. Total	0	7.7	92.3		0	0	100		15	85	0		0	0	0		
PHF	.000	.500	.600	.591	.000	.000	.500	.500	.375	.773	.000	.909	.000	.000	.000	.000	

Location: Redlands
N/S: California Street
E/W: I-10 WB Ramps

Date: 6/1/2023
Day: Thursday

PEDESTRIANS

	North Leg California Street	East Leg I-10 WB Ramps	South Leg California Street	West Leg I-10 WB 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	1	0	0	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1

	North Leg California Street	East Leg I-10 WB Ramps	South Leg California Street	West Leg I-10 WB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	0	1
4:30 PM	0	1	0	0	1
4:45 PM	0	2	0	0	2
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	4	0	0	4

Location: Redlands
N/S: California Street
E/W: I-10 WB Ramps

Date: 6/1/2023
Day: Thursday

BICYCLES

	Southbound California Street			Westbound I-10 WB Ramps			Northbound California Street			Eastbound I-10 WB 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 California Street			Westbound I-10 WB Ramps			Northbound California Street			Eastbound I-10 WB 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	2	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	3	0	0	0	0	0	2	0	0	0	0	5

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City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

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

	California Street Southbound					I-10 Eastbound On Ramp Westbound					California Street Northbound					I-10 Eastbound Off Ramp 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	24	114	0	0	138	0	0	0	0	0	0	86	37	1	123	90	1	80	29	171	30	432	462
07:15 AM	20	129	0	0	149	0	0	0	0	0	0	108	50	1	158	78	1	113	39	192	40	499	539
07:30 AM	18	127	0	0	145	0	0	0	0	0	0	115	60	1	175	110	0	130	35	240	36	560	596
07:45 AM	10	139	0	0	149	0	0	0	0	0	0	139	71	0	210	92	0	122	32	214	32	573	605
Total	72	509	0	0	581	0	0	0	0	0	0	448	218	3	666	370	2	445	135	817	138	2064	2202
08:00 AM	23	118	0	0	141	0	0	0	0	0	0	113	71	6	184	93	0	130	52	223	58	548	606
08:15 AM	21	90	0	0	111	0	0	0	0	0	0	118	39	0	157	80	0	101	42	181	42	449	491
08:30 AM	25	109	0	0	134	0	0	0	0	0	0	96	54	2	150	103	0	102	35	205	37	489	526
08:45 AM	27	135	0	0	162	0	0	0	0	0	0	87	50	2	137	88	1	102	49	191	51	490	541
Total	96	452	0	0	548	0	0	0	0	0	0	414	214	10	628	364	1	435	178	800	188	1976	2164
Grand Total	168	961	0	0	1129	0	0	0	0	0	0	862	432	13	1294	734	3	880	313	1617	326	4040	4366
Apprch %	14.9	85.1	0			0	0	0			0	66.6	33.4			45.4	0.2	54.4					
Total %	4.2	23.8	0		27.9	0	0	0		0	0	21.3	10.7		32	18.2	0.1	21.8		40	7.5	92.5	
Passenger Vehicles	142	908	0		1050	0	0	0		0	0	789	399		1201	628	2	811		1733	0	0	3984
% Passenger Vehicles	84.5	94.5	0	0	93	0	0	0	0	0	0	91.5	92.4	100	91.9	85.6	66.7	92.2	93.3	89.8	0	0	91.3
Large 2 Axle Vehicles	15	29	0		44	0	0	0		0	0	29	24		53	13	1	31		59	0	0	156
% Large 2 Axle Vehicles	8.9	3	0	0	3.9	0	0	0	0	0	0	3.4	5.6	0	4.1	1.8	33.3	3.5	4.5	3.1	0	0	3.6
3 Axle Vehicles	3	22	0		25	0	0	0		0	0	30	6		36	21	0	7		30	0	0	91
% 3 Axle Vehicles	1.8	2.3	0	0	2.2	0	0	0	0	0	0	3.5	1.4	0	2.8	2.9	0	0.8	0.6	1.6	0	0	2.1
4+ Axle Trucks	8	2	0		10	0	0	0		0	0	14	3		17	72	0	31		108	0	0	135
% 4+ Axle Trucks	4.8	0.2	0	0	0.9	0	0	0	0	0	0	1.6	0.7	0	1.3	9.8	0	3.5	1.6	5.6	0	0	3.1

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 07:15 AM																	
07:15 AM	20	129	0	**149**	0	0	0	0	0	108	50	158	78	**1**	113	192	499
07:30 AM	18	127	0	145	0	0	0	0	0	115	60	175	**110**	0	**130**	**240**	560
07:45 AM	10	**139**	0	149	0	0	0	0	0	**139**	**71**	**210**	92	0	122	214	**573**
08:00 AM	**23**	118	0	141	0	0	0	0	0	113	71	184	93	0	130	223	548
Total Volume	71	513	0	584	0	0	0	0	0	475	252	727	373	1	495	869	2180
% App. Total	12.2	87.8	0		0	0	0		0	65.3	34.7		42.9	0.1	57		
PHF	.772	.923	.000	.980	.000	.000	.000	.000	.000	.854	.887	.865	.848	.250	.952	.905	.951

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City of Redlands
N/S: California Street
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File Name : 06_RED_Cali_10E AM
Site Code : 05123579
Start Date : 6/1/2023
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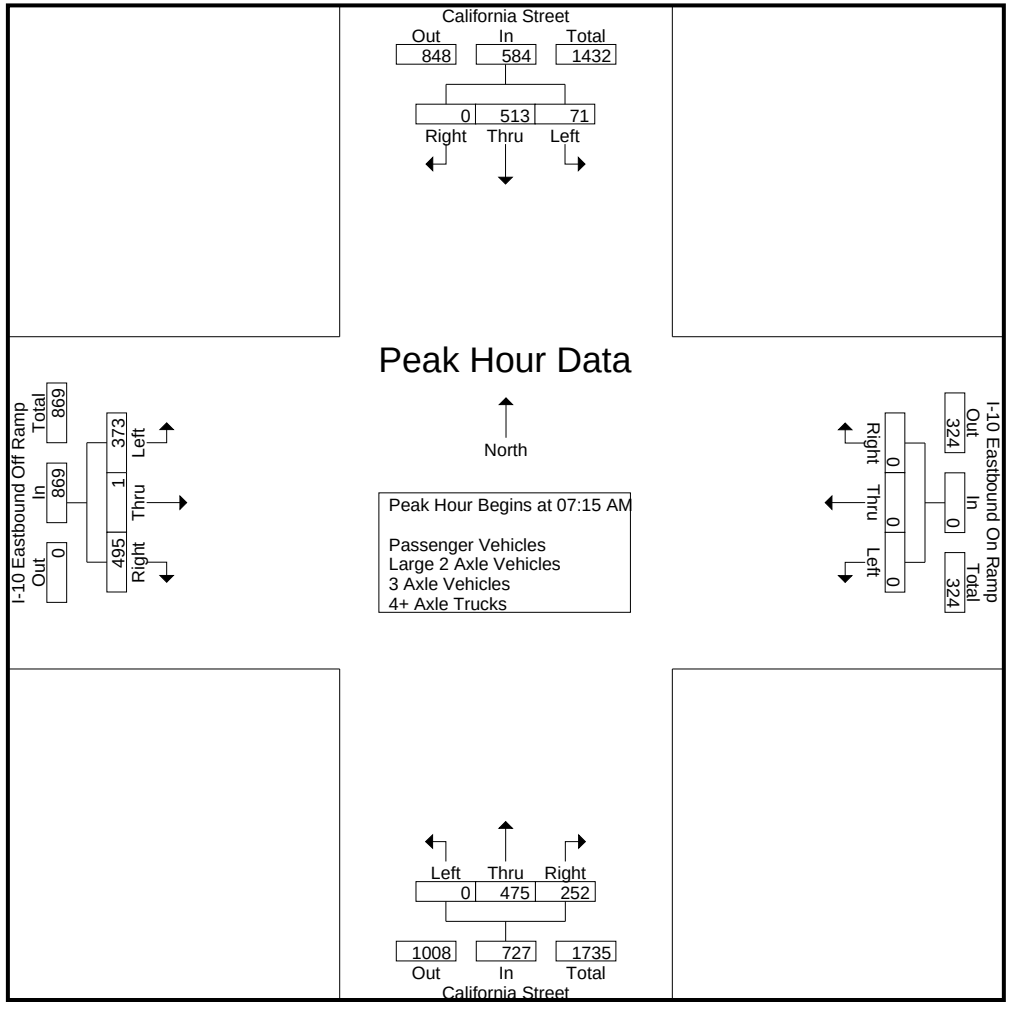

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File Name : 06_RED_Cali_10E AM
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Start Date : 6/1/2023

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 Each Approach Begins at:																	
	07:15 AM				07:00 AM				07:15 AM				07:15 AM				
+0 mins.	20	129	0	**149**	0	0	0	0	0	108	50	158	78	**1**	113	192	
+15 mins.	18	127	0	145	0	0	0	0	0	115	60	175	**110**	0	**130**	**240**	
+30 mins.	10	**139**	0	149	0	0	0	0	0	**139**	**71**	**210**	92	0	122	214	
+45 mins.	**23**	118	0	141	0	0	0	0	0	113	71	184	93	0	130	223	
Total Volume	71	513	0	584	0	0	0	0	0	475	252	727	373	1	495	869	
% App. Total	12.2	87.8	0		0	0	0		0	65.3	34.7		42.9	0.1	57		
PHF	.772	.923	.000	.980	.000	.000	.000	.000	.000	.854	.887	.865	.848	.250	.952	.905	

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Groups Printed- Large 2 Axle Vehicles

	California Street Southbound					I-10 Eastbound On Ramp Westbound					California Street Northbound					I-10 Eastbound Off Ramp 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	7	8	0	0	15	0	0	0	0	0	0	2	3	0	5	3	1	0	0	4	0	24	24
07:15 AM	2	9	0	0	11	0	0	0	0	0	0	4	8	0	12	1	0	3	2	4	2	27	29
07:30 AM	2	2	0	0	4	0	0	0	0	0	0	4	6	0	10	2	0	6	1	8	1	22	23
07:45 AM	0	2	0	0	2	0	0	0	0	0	0	9	3	0	12	3	0	4	1	7	1	21	22
Total	11	21	0	0	32	0	0	0	0	0	0	19	20	0	39	9	1	13	4	23	4	94	98
08:00 AM	2	0	0	0	2	0	0	0	0	0	0	2	2	0	4	1	0	8	5	9	5	15	20
08:15 AM	1	2	0	0	3	0	0	0	0	0	0	3	1	0	4	1	0	6	4	7	4	14	18
08:30 AM	1	5	0	0	6	0	0	0	0	0	0	2	1	0	3	0	0	1	0	1	0	10	10
08:45 AM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	2	0	3	1	5	1	9	10
Total	4	8	0	0	12	0	0	0	0	0	0	10	4	0	14	4	0	18	10	22	10	48	58
Grand Total	15	29	0	0	44	0	0	0	0	0	0	29	24	0	53	13	1	31	14	45	14	142	156
Apprch %	34.1	65.9	0			0	0	0			0	54.7	45.3			28.9	2.2	68.9					
Total %	10.6	20.4	0		31	0	0	0		0	0	20.4	16.9		37.3	9.2	0.7	21.8		31.7	9	91	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**2**	**9**	0	**11**	0	0	0	0	0	4	**8**	**12**	1	0	3	4	**27**
07:30 AM	2	2	0	4	0	0	0	0	0	4	6	10	2	0	6	8	22
07:45 AM	0	2	0	2	0	0	0	0	0	**9**	3	12	**3**	0	4	7	21
08:00 AM	2	0	0	2	0	0	0	0	0	2	2	4	1	0	**8**	**9**	15
Total Volume	6	13	0	19	0	0	0	0	0	19	19	38	7	0	21	28	85
% App. Total	31.6	68.4	0		0	0	0		0	50	50		25	0	75		
PHF	.750	.361	.000	.432	.000	.000	.000	.000	.000	.528	.594	.792	.583	.000	.656	.778	.787

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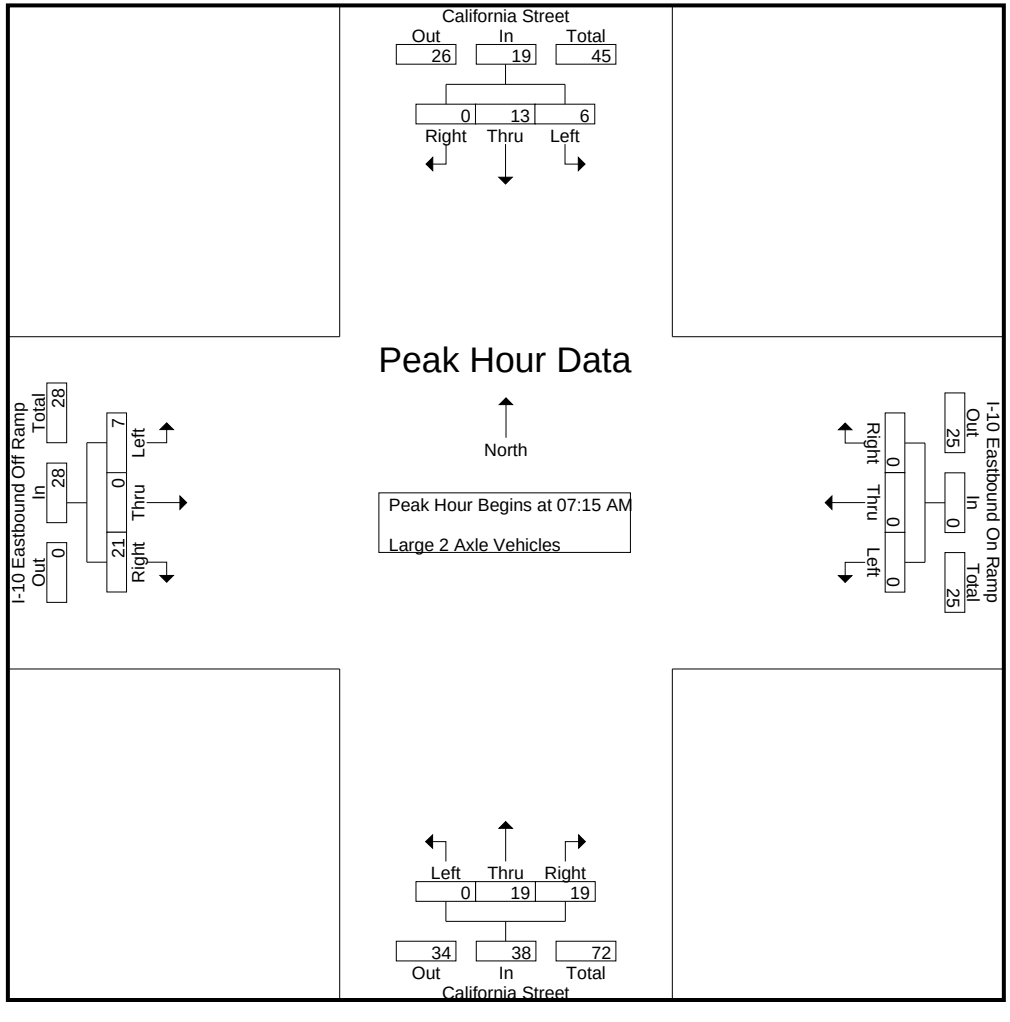
City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E AM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	**2**	**9**	0	**11**	0	0	0	0	0	4	**8**	**12**	1	0	3	4	
+15 mins.	2	2	0	4	0	0	0	0	0	4	6	10	2	0	6	8	
+30 mins.	0	2	0	2	0	0	0	0	0	**9**	3	12	**3**	0	4	7	
+45 mins.	2	0	0	2	0	0	0	0	0	2	2	4	1	0	**8**	**9**	
Total Volume	6	13	0	19	0	0	0	0	0	19	19	38	7	0	21	28	
% App. Total	31.6	68.4	0		0	0	0		0	50	50		25	0	75		
PHF	.750	.361	.000	.432	.000	.000	.000	.000	.000	.528	.594	.792	.583	.000	.656	.778	

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City of Redlands
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File Name : 06_RED_Cali_10E AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

	California Street Southbound					I-10 Eastbound On Ramp Westbound					California Street Northbound					I-10 Eastbound Off Ramp 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	4	0	0	4	1	0	3	1	4	1	8	9
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	1	0	1	0	2	0	8	8
07:30 AM	1	6	0	0	7	0	0	0	0	0	0	0	1	0	1	6	0	1	0	7	0	15	15
07:45 AM	0	3	0	0	3	0	0	0	0	0	0	3	1	0	4	4	0	0	0	4	0	11	11
Total	1	10	0	0	11	0	0	0	0	0	0	12	2	0	14	12	0	5	1	17	1	42	43
08:00 AM	1	1	0	0	2	0	0	0	0	0	0	8	0	0	8	2	0	0	0	2	0	12	12
08:15 AM	0	4	0	0	4	0	0	0	0	0	0	1	4	0	5	3	0	1	1	4	1	13	14
08:30 AM	1	5	0	0	6	0	0	0	0	0	0	2	0	0	2	4	0	0	0	4	0	12	12
08:45 AM	0	2	0	0	2	0	0	0	0	0	0	7	0	0	7	0	0	1	0	1	0	10	10
Total	2	12	0	0	14	0	0	0	0	0	0	18	4	0	22	9	0	2	1	11	1	47	48
Grand Total	3	22	0	0	25	0	0	0	0	0	0	30	6	0	36	21	0	7	2	28	2	89	91
Apprch %	12	88	0			0	0	0			0	83.3	16.7			75	0	25					
Total %	3.4	24.7	0		28.1	0	0	0		0	0	33.7	6.7		40.4	23.6	0	7.9		31.5	2.2	97.8	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	0	1	0	0	0	0	0	5	0	5	1	0	**1**	2	8
07:30 AM	**1**	**6**	0	**7**	0	0	0	0	0	0	**1**	1	**6**	0	1	**7**	**15**
07:45 AM	0	3	0	3	0	0	0	0	0	3	1	4	4	0	0	4	11
08:00 AM	1	1	0	2	0	0	0	0	0	**8**	0	**8**	2	0	0	2	12
Total Volume	2	11	0	13	0	0	0	0	0	16	2	18	13	0	2	15	46
% App. Total	15.4	84.6	0		0	0	0		0	88.9	11.1		86.7	0	13.3		
PHF	.500	.458	.000	.464	.000	.000	.000	.000	.000	.500	.500	.563	.542	.000	.500	.536	.767

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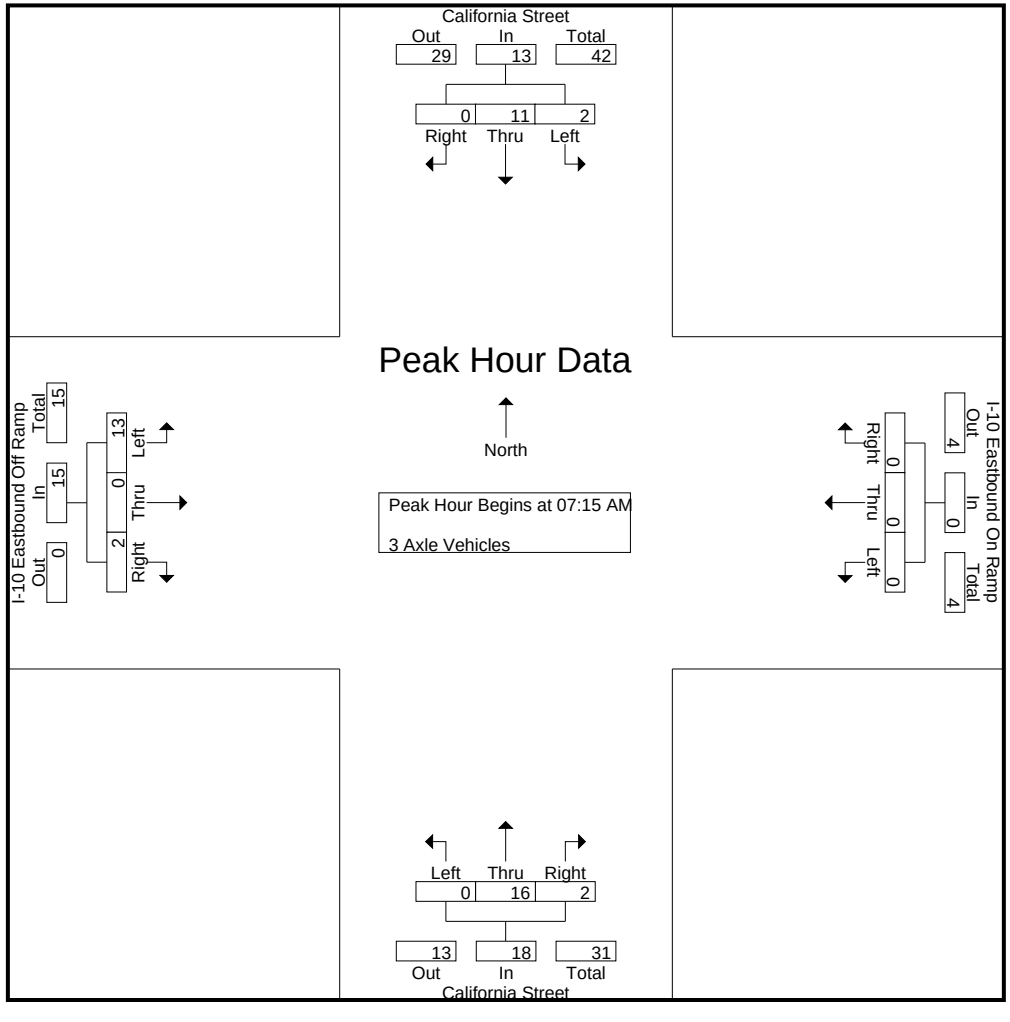
City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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File Name : 06_RED_Cali_10E AM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	1	0	1	0	0	0	0	0	5	0	5	1	0	**1**	2	
+15 mins.	**1**	**6**	0	**7**	0	0	0	0	0	0	**1**	1	**6**	0	1	**7**	
+30 mins.	0	3	0	3	0	0	0	0	0	3	1	4	4	0	0	4	
+45 mins.	1	1	0	2	0	0	0	0	0	**8**	0	**8**	2	0	0	2	
Total Volume	2	11	0	13	0	0	0	0	0	16	2	18	13	0	2	15	
% App. Total	15.4	84.6	0		0	0	0		0	88.9	11.1		86.7	0	13.3		
PHF	.500	.458	.000	.464	.000	.000	.000	.000	.000	.500	.500	.563	.542	.000	.500	.536	

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File Name : 06_RED_Cali_10E AM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

	California Street Southbound					I-10 Eastbound On Ramp Westbound					California Street Northbound					I-10 Eastbound Off Ramp 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	2	1	0	3	13	0	1	0	14	0	17	17
07:15 AM	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	12	0	4	0	16	0	20	20
07:30 AM	2	0	0	0	2	0	0	0	0	0	0	2	1	0	3	5	0	4	0	9	0	14	14
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	10	0	8	1	18	1	21	22
Total	3	1	0	0	4	0	0	0	0	0	0	9	2	0	11	40	0	17	1	57	1	72	73
08:00 AM	2	0	0	0	2	0	0	0	0	0	0	3	0	0	3	11	0	4	2	15	2	20	22
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3	0	1	0	4	0	5	5
08:30 AM	2	1	0	0	3	0	0	0	0	0	0	1	1	0	2	14	0	6	2	20	2	25	27
08:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4	0	3	0	7	0	8	8
Total	5	1	0	0	6	0	0	0	0	0	0	5	1	0	6	32	0	14	4	46	4	58	62
Grand Total	8	2	0	0	10	0	0	0	0	0	0	14	3	0	17	72	0	31	5	103	5	130	135
Apprch %	80	20	0			0	0	0			0	82.4	17.6			69.9	0	30.1					
Total %	6.2	1.5	0		7.7	0	0	0		0	0	10.8	2.3		13.1	55.4	0	23.8		79.2	3.7	96.3	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	**1**	0	**2**	0	0	0	0	0	2	0	2	**12**	0	4	16	20
07:30 AM	**2**	0	0	2	0	0	0	0	0	2	**1**	**3**	5	0	4	9	14
07:45 AM	0	0	0	0	0	0	0	0	0	**3**	0	3	10	0	**8**	**18**	**21**
08:00 AM	2	0	0	2	0	0	0	0	0	3	0	3	11	0	4	15	20
Total Volume	5	1	0	6	0	0	0	0	0	10	1	11	38	0	20	58	75
% App. Total	83.3	16.7	0		0	0	0		0	90.9	9.1		65.5	0	34.5		
PHF	.625	.250	.000	.750	.000	.000	.000	.000	.000	.833	.250	.917	.792	.000	.625	.806	.893

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City of Redlands
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Weather: Clear

File Name : 06_RED_Cali_10E AM
Site Code : 05123579
Start Date : 6/1/2023
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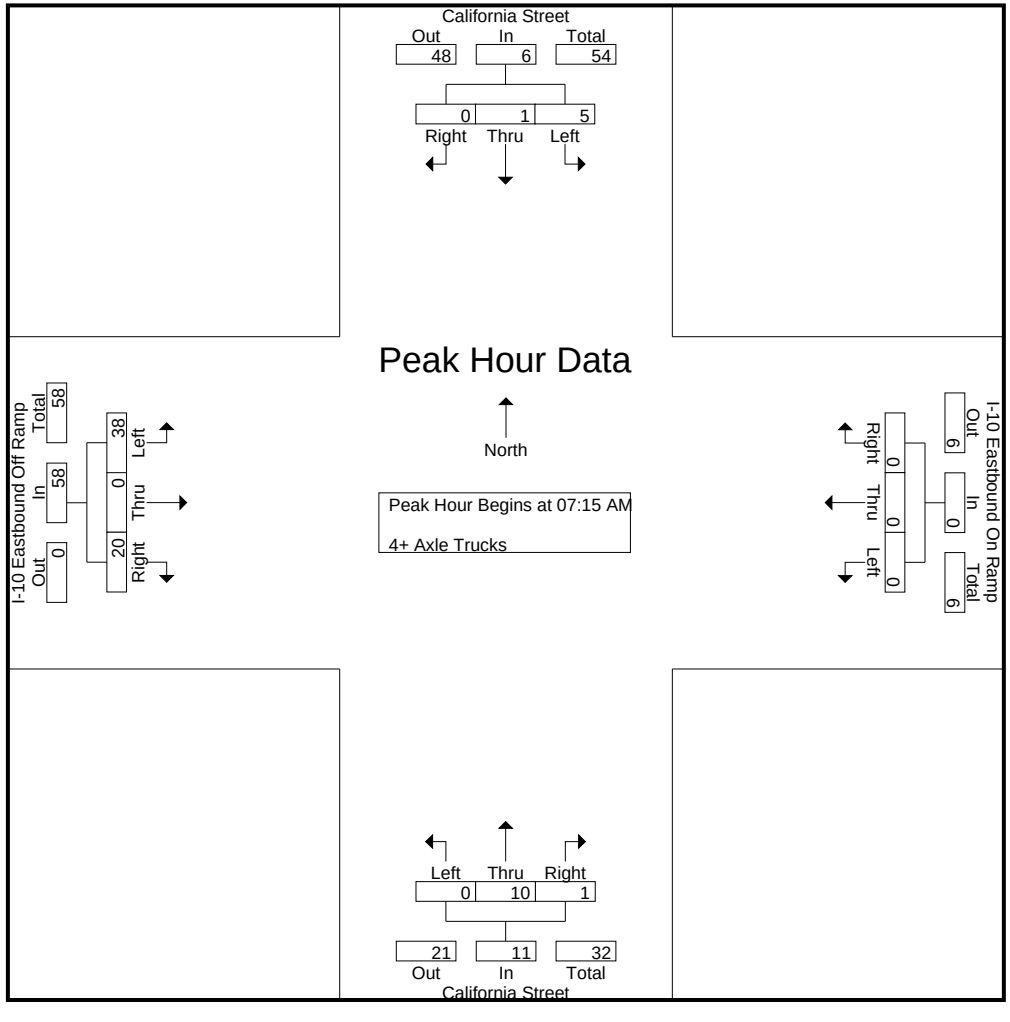

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	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	1	**1**	0	**2**	0	0	0	0	0	2	0	2	**12**	0	4	16	
+15 mins.	**2**	0	0	2	0	0	0	0	0	2	**1**	**3**	5	0	4	9	
+30 mins.	0	0	0	0	0	0	0	0	0	**3**	0	3	10	0	**8**	**18**	
+45 mins.	2	0	0	2	0	0	0	0	0	3	0	3	11	0	4	15	
Total Volume	5	1	0	6	0	0	0	0	0	10	1	11	38	0	20	58	
% App. Total	83.3	16.7	0		0	0	0		0	90.9	9.1		65.5	0	34.5		
PHF	.625	.250	.000	.750	.000	.000	.000	.000	.000	.833	.250	.917	.792	.000	.625	.806	

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File Name : 06_RED_Cali_10E PM
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	California Street Southbound					I-10 Eastbound On Ramp Westbound					California Street Northbound					I-10 Eastbound Off Ramp 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	51	106	0	0	157	0	0	0	0	0	0	138	112	0	250	46	1	104	51	151	51	558	609
04:15 PM	48	147	0	0	195	0	0	0	0	0	0	145	96	3	241	58	2	92	45	152	48	588	636
04:30 PM	47	153	0	0	200	0	0	0	0	0	0	134	79	0	213	60	0	94	53	154	53	567	620
04:45 PM	48	108	0	0	156	0	0	0	0	0	0	165	107	2	272	45	0	100	50	145	52	573	625
Total	194	514	0	0	708	0	0	0	0	0	0	582	394	5	976	209	3	390	199	602	204	2286	2490
05:00 PM	56	115	0	0	171	0	0	0	0	0	0	163	120	2	283	65	1	96	58	162	60	616	676
05:15 PM	46	121	0	0	167	0	0	0	0	0	0	140	117	0	257	47	0	94	44	141	44	565	609
05:30 PM	38	119	0	0	157	0	0	0	0	0	0	128	72	3	200	53	2	68	42	123	45	480	525
05:45 PM	28	114	0	0	142	0	0	0	0	0	0	137	93	0	230	52	4	92	53	148	53	520	573
Total	168	469	0	0	637	0	0	0	0	0	0	568	402	5	970	217	7	350	197	574	202	2181	2383
Grand Total	362	983	0	0	1345	0	0	0	0	0	0	1150	796	10	1946	426	10	740	396	1176	406	4467	4873
Apprch %	26.9	73.1	0			0	0	0			0	59.1	40.9			36.2	0.9	62.9					
Total %	8.1	22	0		30.1	0	0	0		0	0	25.7	17.8		43.6	9.5	0.2	16.6		26.3	8.3	91.7	
Passenger Vehicles	349	970	0		1319	0	0	0		0	0	1123	785		1918	365	9	721		1480	0	0	4717
% Passenger Vehicles	96.4	98.7	0	0	98.1	0	0	0	0	0	0	97.7	98.6	100	98.1	85.7	90	97.4	97.2	94.1	0	0	96.8
Large 2 Axle Vehicles	1	6	0		7	0	0	0		0	0	13	4		17	10	1	11		30	0	0	54
% Large 2 Axle Vehicles	0.3	0.6	0	0	0.5	0	0	0	0	0	0	1.1	0.5	0	0.9	2.3	10	1.5	2	1.9	0	0	1.1
3 Axle Vehicles	2	5	0		7	0	0	0		0	0	7	6		13	10	0	3		14	0	0	34
% 3 Axle Vehicles	0.6	0.5	0	0	0.5	0	0	0	0	0	0	0.6	0.8	0	0.7	2.3	0	0.4	0.3	0.9	0	0	0.7
4+ Axle Trucks	10	2	0		12	0	0	0		0	0	7	1		8	41	0	5		48	0	0	68
% 4+ Axle Trucks	2.8	0.2	0	0	0.9	0	0	0	0	0	0	0.6	0.1	0	0.4	9.6	0	0.7	0.5	3.1	0	0	1.4

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 04:15 PM																	
04:15 PM	48	147	0	195	0	0	0	0	0	145	96	241	58	**2**	92	152	588
04:30 PM	47	**153**	0	**200**	0	0	0	0	0	134	79	213	60	0	94	154	567
04:45 PM	48	108	0	156	0	0	0	0	0	**165**	107	272	45	0	**100**	145	573
05:00 PM	**56**	115	0	171	0	0	0	0	0	163	**120**	**283**	**65**	1	96	**162**	**616**
Total Volume	199	523	0	722	0	0	0	0	0	607	402	1009	228	3	382	613	2344
% App. Total	27.6	72.4	0		0	0	0		0	60.2	39.8		37.2	0.5	62.3		
PHF	.888	.855	.000	.903	.000	.000	.000	.000	.000	.920	.838	.891	.877	.375	.955	.946	.951

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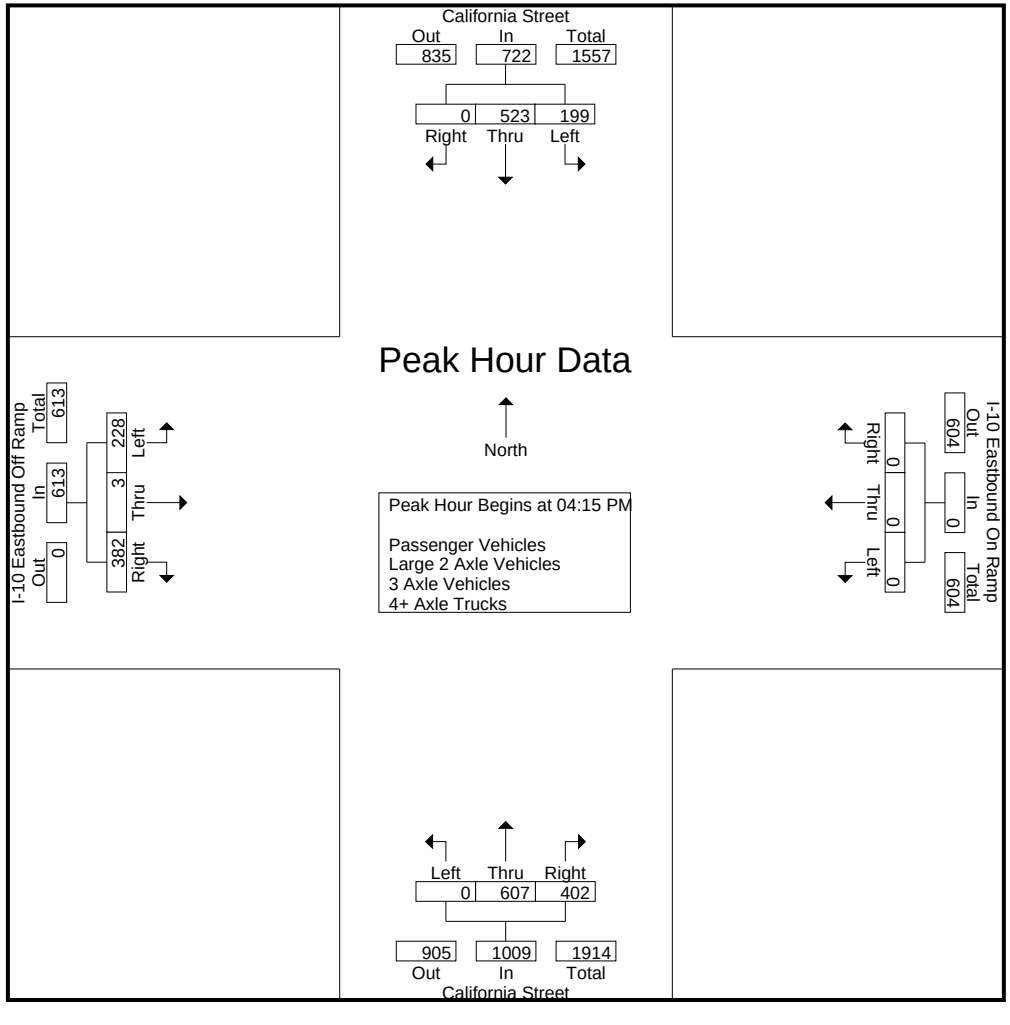
Start Date : 6/1/2023
Page No : 2



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

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E PM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 Each Approach Begins at:																	
	04:15 PM				04:00 PM				04:30 PM				04:15 PM				
+0 mins.	48	147	0	195	0	0	0	0	0	134	79	213	58	**2**	92	152	
+15 mins.	47	**153**	0	**200**	0	0	0	0	0	**165**	107	272	60	0	94	154	
+30 mins.	48	108	0	156	0	0	0	0	0	163	**120**	**283**	45	0	**100**	145	
+45 mins.	**56**	115	0	171	0	0	0	0	0	140	117	257	**65**	1	96	**162**	
Total Volume	199	523	0	722	0	0	0	0	0	602	423	1025	228	3	382	613	
% App. Total	27.6	72.4	0		0	0	0		0	58.7	41.3		37.2	0.5	62.3		
PHF	.888	.855	.000	.903	.000	.000	.000	.000	.000	.912	.881	.905	.877	.375	.955	.946	

Counts Unlimited, Inc.
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City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

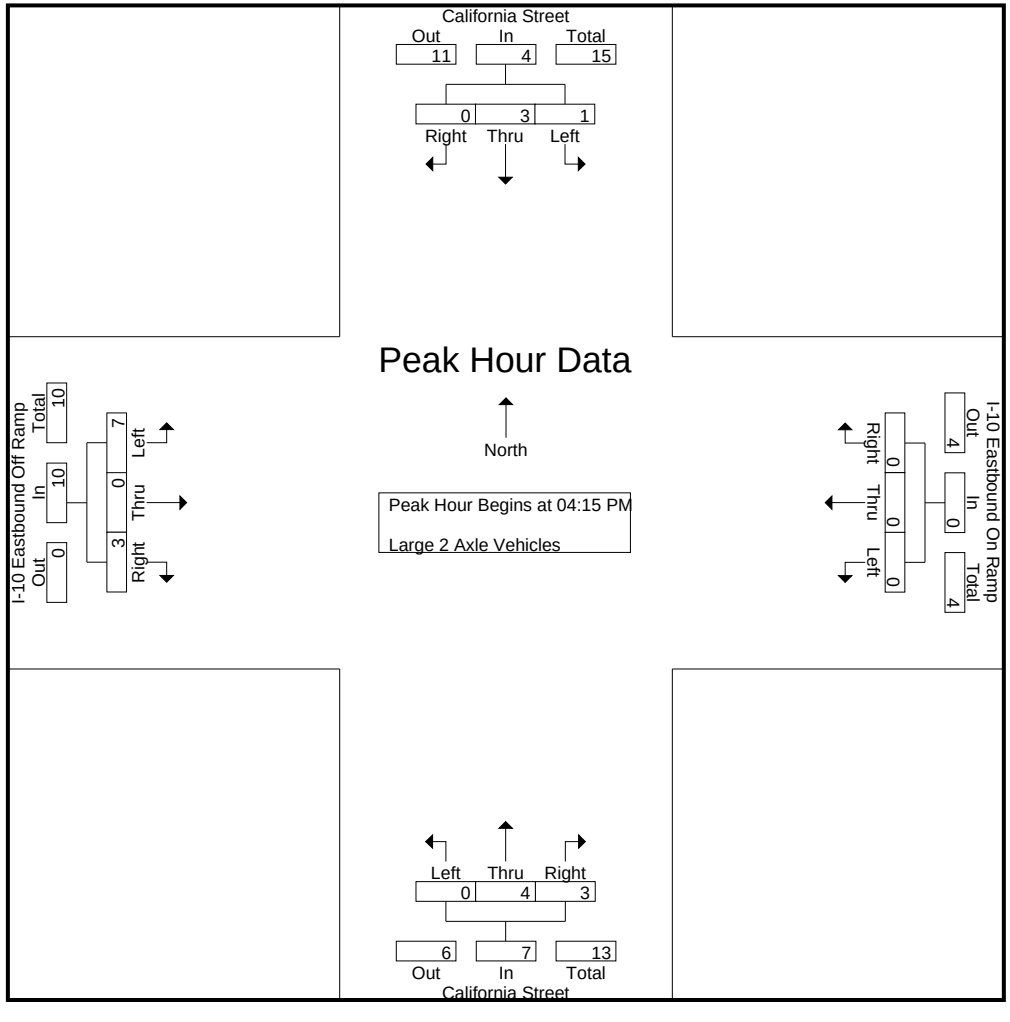
	California Street Southbound					I-10 Eastbound On Ramp Westbound					California Street Northbound					I-10 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	1	0	4	3	5	3	9	12
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2	0	1	1	3	1	5	6
04:30 PM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	4	4
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	1	0	1	1	2	1	6	7
Total	1	4	0	0	5	0	0	0	0	0	0	6	2	0	8	4	0	7	5	11	5	24	29
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	4	0	0	0	4	0	6	6
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3	2	3	2	4	6
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	3	3
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	1	1	1	1	3	1	9	10
Total	0	2	0	0	2	0	0	0	0	0	0	7	2	0	9	6	1	4	3	11	3	22	25
Grand Total	1	6	0	0	7	0	0	0	0	0	0	13	4	0	17	10	1	11	8	22	8	46	54
Apprch %	14.3	85.7	0			0	0	0			0	76.5	23.5			45.5	4.5	50					
Total %	2.2	13	0		15.2	0	0	0		0	0	28.3	8.7		37	21.7	2.2	23.9		47.8	14.8	85.2	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	**1**	0	1	0	0	0	0	0	1	0	1	2	0	**1**	3	5
04:30 PM	**1**	1	0	**2**	0	0	0	0	0	1	0	1	0	0	1	1	4
04:45 PM	0	0	0	0	0	0	0	0	0	**2**	**2**	**4**	1	0	1	2	**6**
05:00 PM	0	1	0	1	0	0	0	0	0	0	1	1	**4**	0	0	**4**	6
Total Volume	1	3	0	4	0	0	0	0	0	4	3	7	7	0	3	10	21
% App. Total	25	75	0		0	0	0		0	57.1	42.9		70	0	30		
PHF	.250	.750	.000	.500	.000	.000	.000	.000	.000	.500	.375	.438	.438	.000	.750	.625	.875

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

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E PM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	**1**	0	1	0	0	0	0	0	1	0	1	2	0	**1**	3	
+15 mins.	**1**	1	0	**2**	0	0	0	0	0	1	0	1	0	0	1	1	
+30 mins.	0	0	0	0	0	0	0	0	0	**2**	**2**	**4**	1	0	1	2	
+45 mins.	0	1	0	1	0	0	0	0	0	0	1	1	**4**	0	0	**4**	
Total Volume	1	3	0	4	0	0	0	0	0	4	3	7	7	0	3	10	
% App. Total	25	75	0		0	0	0		0	57.1	42.9		70	0	30		
PHF	.250	.750	.000	.500	.000	.000	.000	.000	.000	.500	.375	.438	.438	.000	.750	.625	

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City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

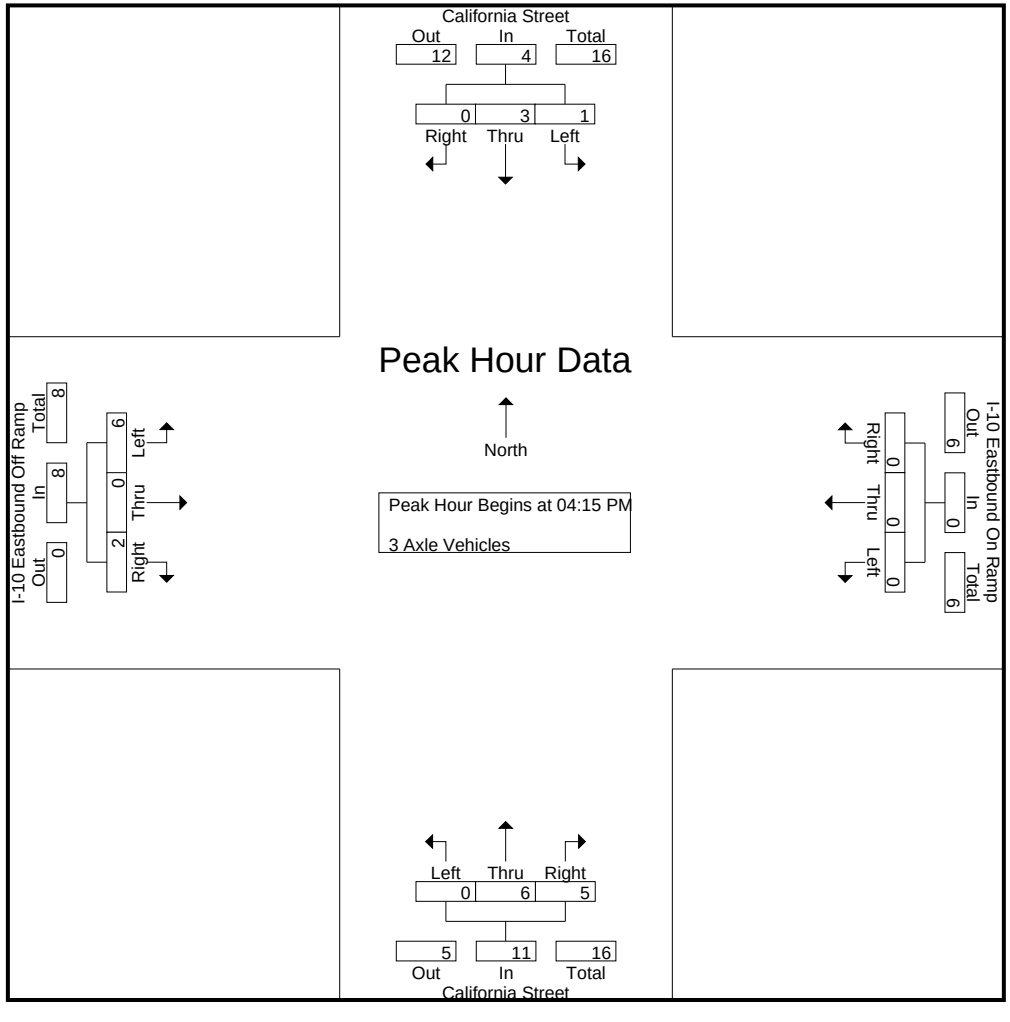
	California Street Southbound					I-10 Eastbound On Ramp Westbound					California Street Northbound					I-10 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	2	2
04:30 PM	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	2	0	1	0	3	0	7	7
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3	0	1	0	4	0	6	6
Total	0	4	0	0	4	0	0	0	0	0	0	3	2	0	5	6	0	2	0	8	0	17	17
05:00 PM	1	0	0	0	1	0	0	0	0	0	0	3	4	0	7	0	0	0	0	0	0	8	8
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	2
05:30 PM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	4	4
Total	2	1	0	0	3	0	0	0	0	0	0	4	4	0	8	4	0	1	1	5	1	16	17
Grand Total	2	5	0	0	7	0	0	0	0	0	0	7	6	0	13	10	0	3	1	13	1	33	34
Apprch %	28.6	71.4	0			0	0	0			0	53.8	46.2			76.9	0	23.1					
Total %	6.1	15.2	0		21.2	0	0	0		0	0	21.2	18.2		39.4	30.3	0	9.1		39.4	2.9	97.1	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	2
04:30 PM	0	**2**	0	**2**	0	0	0	0	0	1	1	2	2	0	**1**	3	7
04:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	**3**	0	1	**4**	6
05:00 PM	**1**	0	0	1	0	0	0	0	0	**3**	**4**	**7**	0	0	0	0	**8**
Total Volume	1	3	0	4	0	0	0	0	0	6	5	11	6	0	2	8	23
% App. Total	25	75	0		0	0	0		0	54.5	45.5		75	0	25		
PHF	.250	.375	.000	.500	.000	.000	.000	.000	.000	.500	.313	.393	.500	.000	.500	.500	.719

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

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E PM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	
+15 mins.	0	**2**	0	**2**	0	0	0	0	0	1	1	2	2	0	**1**	3	
+30 mins.	0	1	0	1	0	0	0	0	0	1	0	1	**3**	0	1	**4**	
+45 mins.	**1**	0	0	1	0	0	0	0	0	**3**	**4**	**7**	0	0	0	0	
Total Volume	1	3	0	4	0	0	0	0	0	6	5	11	6	0	2	8	
% App. Total	25	75	0		0	0	0		0	54.5	45.5		75	0	25		
PHF	.250	.375	.000	.500	.000	.000	.000	.000	.000	.500	.313	.393	.500	.000	.500	.500	

Counts Unlimited, Inc.
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City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

	California Street Southbound					I-10 Eastbound On Ramp Westbound					California Street Northbound					I-10 Eastbound Off Ramp 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	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	7	0	2	1	9	1	13	14
04:15 PM	4	0	0	0	4	0	0	0	0	0	0	1	0	0	1	6	0	0	0	6	0	11	11
04:30 PM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	4	0	0	0	4	0	6	6
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5	0	0	0	5	0	6	6
Total	7	2	0	0	9	0	0	0	0	0	0	2	1	0	3	22	0	2	1	24	1	36	37
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	6	0	3	1	9	1	10	11
05:15 PM	2	0	0	0	2	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	5	5
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	0	4	4
05:45 PM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	9	0	0	0	9	0	11	11
Total	3	0	0	0	3	0	0	0	0	0	0	5	0	0	5	19	0	3	1	22	1	30	31
Grand Total	10	2	0	0	12	0	0	0	0	0	0	7	1	0	8	41	0	5	2	46	2	66	68
Apprch %	83.3	16.7	0			0	0	0			0	87.5	12.5			89.1	0	10.9					
Total %	15.2	3	0		18.2	0	0	0		0	0	10.6	1.5		12.1	62.1	0	7.6		69.7	2.9	97.1	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	**4**	0	0	**4**	0	0	0	0	0	**1**	0	**1**	**6**	0	0	6	**11**
04:30 PM	1	0	0	1	0	0	0	0	0	1	0	1	4	0	0	4	6
04:45 PM	0	0	0	0	0	0	0	0	0	0	**1**	1	5	0	0	5	6
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	6	0	**3**	**9**	10
Total Volume	5	0	0	5	0	0	0	0	0	3	1	4	21	0	3	24	33
% App. Total	100	0	0		0	0	0		0	75	25		87.5	0	12.5		
PHF	.313	.000	.000	.313	.000	.000	.000	.000	.000	.750	.250	1.00	.875	.000	.250	.667	.750

Counts Unlimited, Inc.
PO Box 1178
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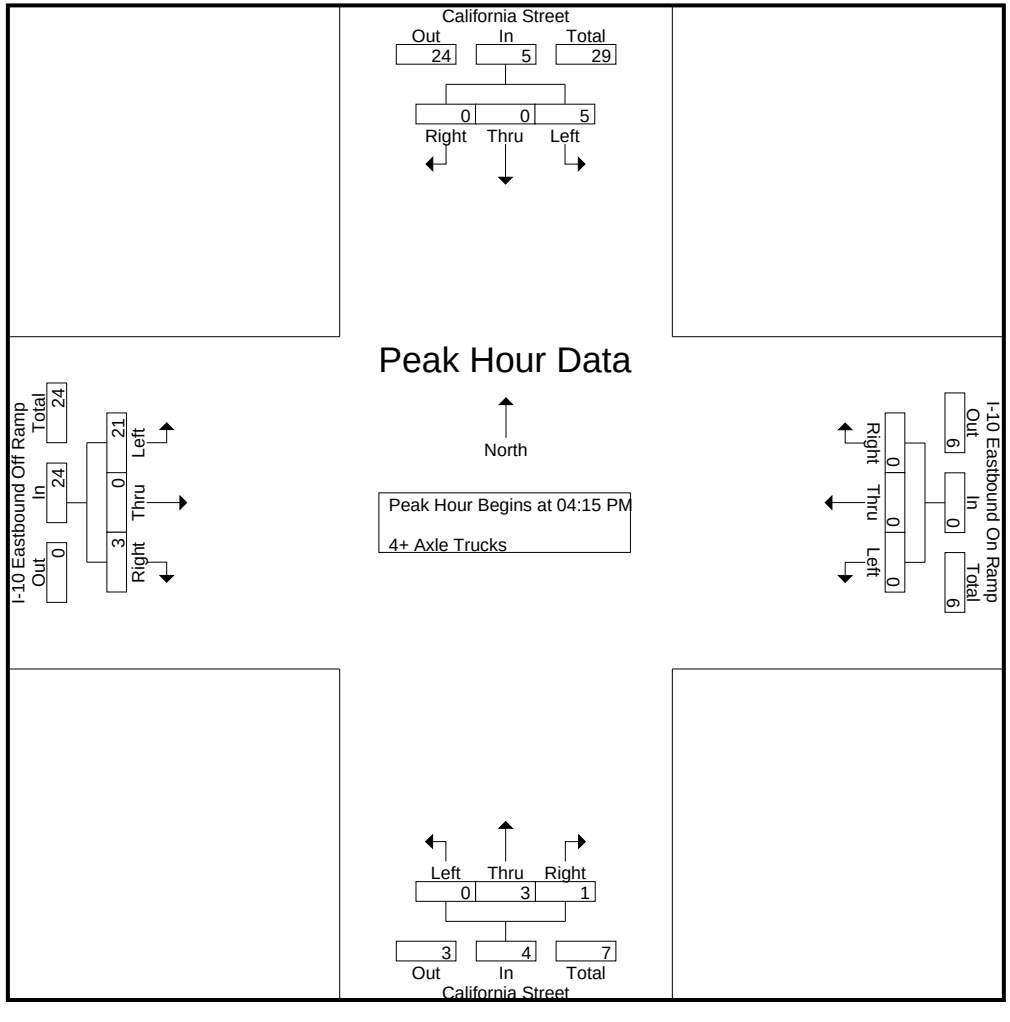
City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E PM
Site Code : 05123579
Start Date : 6/1/2023
Page No : 2



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City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 06_RED_Cali_10E PM
Site Code : 05123579
Start Date : 6/1/2023

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 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 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	**4**	0	0	**4**	0	0	0	0	0	**1**	0	**1**	**6**	0	0	6	
+15 mins.	1	0	0	1	0	0	0	0	0	1	0	1	4	0	0	4	
+30 mins.	0	0	0	0	0	0	0	0	0	0	**1**	1	5	0	0	5	
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	6	0	**3**	**9**	
Total Volume	5	0	0	5	0	0	0	0	0	3	1	4	21	0	3	24	
% App. Total	100	0	0		0	0	0		0	75	25		87.5	0	12.5		
PHF	.313	.000	.000	.313	.000	.000	.000	.000	.000	.750	.250	1.000	.875	.000	.250	.667	

Location: Redlands
N/S: California Street
E/W: I-10 EB Ramps

Date: 6/1/2023
Day: Thursday

PEDESTRIANS

	North Leg California Street	East Leg I-10 EB Ramps	South Leg California Street	West Leg I-10 EB 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	1	1
7:45 AM	0	0	0	4	4
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	0	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	5	6

	North Leg California Street	East Leg I-10 EB Ramps	South Leg California Street	West Leg I-10 EB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	1	2
4:30 PM	0	0	0	1	1
4:45 PM	0	1	0	1	2
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	1	1
5:30 PM	0	1	0	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	3	0	4	7

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951-268-6268

Location: Redlands
N/S: California Street
E/W: I-10 EB Ramps

Date: 6/1/2023
Day: Thursday

BICYCLES

	Southbound California Street			Westbound I-10 EB Ramps			Northbound California Street			Eastbound I-10 EB 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	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound California Street			Westbound I-10 EB Ramps			Northbound California Street			Eastbound I-10 EB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
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	1	0	0	0	0	0	2	0	0	0	0	3
TOTAL VOLUMES:	0	2	0	0	0	0	0	4	0	0	0	0	6

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

City of Redlands
Lugonia Avenue
W/ California Street
24 Hour Directional Classification Count

RED001
Site Code: 051-23579

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
06/01/23	0	33	8	0	0	4	0	0	5	0	0	0	0	50
01:00	0	13	0	0	0	5	0	0	5	0	0	0	0	23
02:00	0	35	6	0	0	1	0	0	5	0	**1**	0	0	48
03:00	**1**	50	8	0	1	3	0	0	9	0	0	0	0	72
04:00	0	129	33	0	5	4	0	0	16	0	0	0	0	187
05:00	0	183	**81**	0	**11**	4	0	0	12	0	0	0	0	291
06:00	0	170	56	0	5	5	0	0	25	0	0	0	0	261
07:00	1	**235**	65	0	8	13	0	**4**	27	0	0	0	0	353
08:00	0	194	48	1	10	5	0	0	29	0	0	0	0	287
09:00	0	235	81	0	9	19	0	2	25	0	0	0	0	**371**
10:00	1	216	77	0	10	**33**	0	3	26	0	0	0	0	366
11:00	0	231	43	**3**	6	19	0	2	**32**	0	0	0	0	336
12 PM	0	244	44	0	**19**	10	0	1	**15**	0	0	0	0	333
13:00	0	**342**	**57**	0	4	10	0	2	13	0	0	0	**1**	**429**
14:00	1	251	45	**1**	5	10	0	**3**	10	0	0	0	0	326
15:00	**2**	311	51	0	8	6	0	3	7	0	0	0	0	388
16:00	1	300	48	0	7	8	0	0	10	0	0	0	0	374
17:00	0	228	25	0	2	**11**	0	0	15	0	0	0	0	281
18:00	0	191	29	0	7	4	0	0	12	0	0	0	0	243
19:00	0	108	13	0	5	5	0	0	6	0	0	0	0	137
20:00	1	91	17	0	0	3	0	1	8	0	0	0	0	121
21:00	0	61	7	0	0	4	0	0	6	0	0	0	0	78
22:00	0	44	4	0	1	5	0	0	9	0	0	0	0	63
23:00	0	37	6	0	0	5	0	0	5	0	0	0	0	53
Total	8	3932	852	5	123	196	0	21	332	0	1	0	1	5471
Percent	0.1%	71.9%	15.6%	0.1%	2.2%	3.6%	0.0%	0.4%	6.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	03:00	07:00	05:00	11:00	05:00	10:00		07:00	11:00		02:00			09:00
Vol.	1	235	81	3	11	33		4	32		1			371
PM Peak	15:00	13:00	13:00	14:00	12:00	17:00		14:00	12:00				13:00	13:00
Vol.	2	342	57	1	19	11		3	15				1	429
Grand Total	8	3932	852	5	123	196	0	21	332	0	1	0	1	5471
Percent	0.1%	71.9%	15.6%	0.1%	2.2%	3.6%	0.0%	0.4%	6.1%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

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

City of Redlands
California Street
S/ Lugonia Avenue
24 Hour Directional Classification Count
Northbound, Southbound

RED002
Site Code: 051-23579

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
06/01/23	0	70	6	0	2	21	0	0	37	0	2	0	0	138
01:00	0	85	4	0	0	14	0	0	15	0	2	0	0	120
02:00	0	196	18	0	0	7	0	0	25	0	**3**	0	0	249
03:00	5	569	66	0	2	13	0	0	40	0	0	0	0	695
04:00	2	558	114	0	14	8	0	0	36	0	0	0	0	732
05:00	2	679	153	0	24	14	2	12	59	0	0	0	0	945
06:00	0	**1044**	173	0	20	18	24	6	78	0	2	0	0	**1365**
07:00	3	831	**176**	0	19	26	**28**	**14**	100	0	0	0	0	1197
08:00	0	839	153	3	**27**	16	26	13	130	**2**	0	0	0	1209
09:00	0	797	175	2	19	42	24	4	**152**	0	0	0	0	1215
10:00	**7**	874	157	0	18	**48**	24	11	123	0	0	0	0	1262
11:00	2	936	119	**7**	26	43	24	9	149	0	0	0	0	1315
12 PM	3	1012	149	0	**40**	**35**	**22**	8	**115**	0	0	0	0	1384
13:00	3	**1080**	193	2	36	20	18	9	55	0	0	0	**1**	**1417**
14:00	3	999	**222**	**3**	20	29	0	11	57	0	0	0	0	1344
15:00	**11**	920	148	1	8	17	0	5	41	0	0	0	0	1151
16:00	3	753	112	0	13	20	0	**14**	44	0	0	0	0	959
17:00	3	577	74	0	11	24	0	8	45	0	0	0	0	742
18:00	0	419	57	0	15	16	0	2	51	0	0	0	0	560
19:00	0	306	36	0	5	15	0	2	42	0	0	0	0	406
20:00	1	314	32	0	0	11	0	8	30	0	0	0	0	396
21:00	0	221	29	0	2	12	0	2	16	**2**	0	0	0	284
22:00	0	172	12	0	5	9	0	0	37	0	**2**	0	0	237
23:00	0	117	10	0	0	9	0	2	11	0	2	0	0	151
Total	48	14368	2388	18	326	487	192	140	1488	4	13	0	1	19473
Percent	0.2%	73.8%	12.3%	0.1%	1.7%	2.5%	1.0%	0.7%	7.6%	0.0%	0.1%	0.0%	0.0%	
AM Peak	10:00	06:00	07:00	11:00	08:00	10:00	07:00	07:00	09:00	08:00	02:00			06:00
Vol.	7	1044	176	7	27	48	28	14	152	2	3			1365
PM Peak	15:00	13:00	14:00	14:00	12:00	12:00	12:00	16:00	12:00	21:00	22:00		13:00	13:00
Vol.	11	1080	222	3	40	35	22	14	115	2	2		1	1417
Grand Total	48	14368	2388	18	326	487	192	140	1488	4	13	0	1	19473
Percent	0.2%	73.8%	12.3%	0.1%	1.7%	2.5%	1.0%	0.7%	7.6%	0.0%	0.1%	0.0%	0.0%	

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

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Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	120	0	0	197	107	0	0	0	29	0	2
Future Vol, veh/h	2	120	0	0	197	107	0	0	0	29	0	2
Conflicting Peds, #/hr	0	0	0	0	0	1	0	0	1	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	100	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	130	0	0	214	116	0	0	0	32	0	2

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	331	0	-	-	-	0			342	407	166
Stage 1	-	-	-	-	-	-			273	273	-
Stage 2	-	-	-	-	-	-			69	134	-
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	1240	-	0	0	-	-			634	537	856
Stage 1	-	-	0	0	-	-			754	688	-
Stage 2	-	-	0	0	-	-			952	789	-
Platoon blocked, %		-			-	-					
Mov Cap-1 Maneuver	1239	-	-	-	-	-			631	0	855
Mov Cap-2 Maneuver	-	-	-	-	-	-			656	0	-
Stage 1	-	-	-	-	-	-			752	0	-
Stage 2	-	-	-	-	-	-			951	0	-

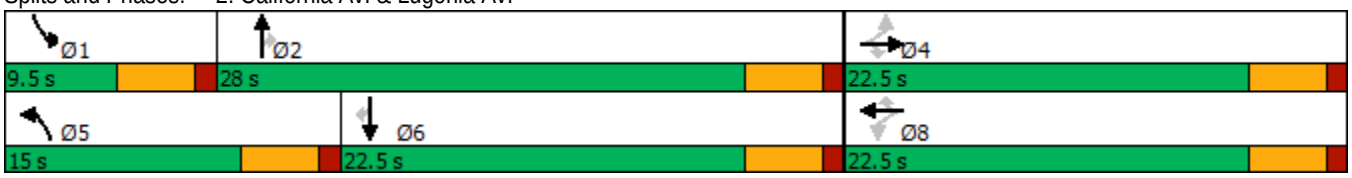
Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1239	-	-	-	666
HCM Lane V/C Ratio	0.002	-	-	-	0.051
HCM Control Delay (s)	7.9	-	-	-	10.7
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	22	115	108	53	28	236	499	87	18	339	15
Future Volume (vph)	12	22	115	108	53	28	236	499	87	18	339	15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	15.0	28.0	28.0	9.5	22.5	22.5
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%	25.0%	46.7%	46.7%	15.8%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)		8.1	8.1		8.2	8.2	10.3	26.2	26.2	5.3	11.2	11.2
Actuated g/C Ratio		0.20	0.20		0.20	0.20	0.25	0.64	0.64	0.13	0.28	0.28
v/c Ratio		0.12	0.27		0.31	0.06	0.57	0.45	0.09	0.09	0.38	0.03
Control Delay		16.7	2.9		17.3	0.2	23.3	8.4	2.1	20.6	14.3	0.1
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		16.7	2.9		17.3	0.2	23.3	8.4	2.1	20.6	14.3	0.1
LOS		B	A		B	A	C	A	A	C	B	A
Approach Delay		6.0			14.8			12.0			14.0	
Approach LOS		A			B			B			B	

Intersection Summary			
Cycle Length: 60			
Actuated Cycle Length: 40.7			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 12.3		Intersection LOS: B	
Intersection Capacity Utilization 54.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: California Av. & Lugonia Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	22	115	108	53	28	236	499	87	18	339	15
Future Volume (veh/h)	12	22	115	108	53	28	236	499	87	18	339	15
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	24	83	119	58	12	259	548	51	20	373	16
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	202	251	277	422	283	277	336	745	631	46	837	373
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.19	0.39	0.39	0.03	0.23	0.23
Sat Flow, veh/h	315	1457	1610	1182	1643	1610	1810	1900	1610	1810	3610	1610
Grp Volume(v), veh/h	37	0	83	119	58	12	259	548	51	20	373	16
Grp Sat Flow(s),veh/h/ln	1772	0	1610	1182	1643	1610	1810	1900	1610	1810	1805	1610
Q Serve(g_s), s	0.0	0.0	1.5	2.8	1.0	0.2	4.5	8.1	0.7	0.4	2.9	0.3
Cycle Q Clear(g_c), s	0.5	0.0	1.5	3.3	1.0	0.2	4.5	8.1	0.7	0.4	2.9	0.3
Prop In Lane	0.35		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	453	0	277	422	283	277	336	745	631	46	837	373
V/C Ratio(X)	0.08	0.00	0.30	0.28	0.20	0.04	0.77	0.74	0.08	0.44	0.45	0.04
Avail Cap(c_a), veh/h	1076	0	881	912	898	881	577	1357	1150	275	1974	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	0.0	11.9	12.9	11.7	11.4	12.7	8.5	6.3	15.8	10.8	9.8
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.4	0.4	0.1	3.7	1.4	0.1	6.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.4	0.6	0.3	0.1	1.5	1.8	0.1	0.2	0.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.6	0.0	12.5	13.3	12.0	11.4	16.5	10.0	6.3	22.2	11.2	9.9
LnGrp LOS	B	A	B	B	B	B	B	A	A	C	B	A
Approach Vol, veh/h		120			189			858			409	
Approach Delay, s/veh		12.2			12.8			11.7			11.7	
Approach LOS		B			B			B			B	

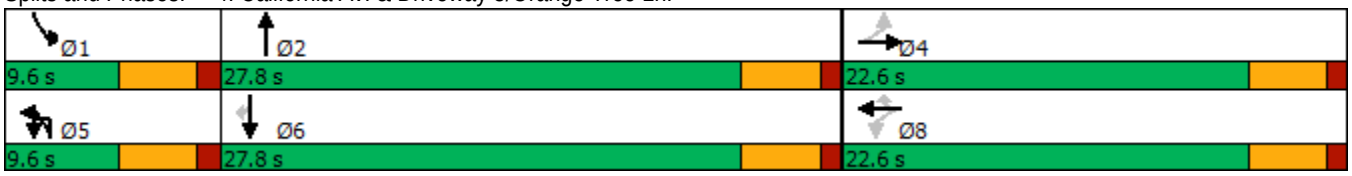
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	17.4		10.2	10.6	12.1		10.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	23.5		18.0	10.5	18.0		18.0				
Max Q Clear Time (g_c+I1), s	2.4	10.1		3.5	6.5	4.9		5.3				
Green Ext Time (p_c), s	0.0	2.8		0.3	0.3	1.8		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		11.9	
HCM 6th LOS		B	

Lane Group	WBL	WBT	WBR	NBL	NBT	SBL	SBT	Ø4
Lane Configurations								
Traffic Volume (vph)	95	0	14	0	844	44	518	
Future Volume (vph)	95	0	14	0	844	44	518	
Turn Type	Perm	NA	Perm	Prot	NA	Prot	NA	
Protected Phases		8		5	2	1	6	4
Permitted Phases	8		8					
Detector Phase	8	8	8	5	2	1	6	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	22.5	9.5	22.5	22.5
Total Split (s)	22.6	22.6	22.6	9.6	27.8	9.6	27.8	22.6
Total Split (%)	37.7%	37.7%	37.7%	16.0%	46.3%	16.0%	46.3%	38%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag				Lead	Lag	Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	Max	None	Max	None
Act Effct Green (s)		9.2	9.2	5.2	30.9	5.2	32.7	
Actuated g/C Ratio		0.19	0.19	0.11	0.63	0.11	0.66	
v/c Ratio		0.41	0.04	0.15	0.57	0.27	0.25	
Control Delay		22.7	0.2	23.7	10.5	25.8	6.2	
Queue Delay		0.0	0.0	0.0	0.1	0.0	0.0	
Total Delay		22.7	0.2	23.7	10.6	25.8	6.2	
LOS		C	A	C	B	C	A	
Approach Delay		19.8			10.9		7.8	
Approach LOS		B			B		A	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 49.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 10.4	Intersection LOS: B
Intersection Capacity Utilization 49.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: California Av. & Driveway 3/Orange Tree Ln.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	95	0	14	24	0	844	235	44	518
Future Volume (veh/h)	0	0	0	95	0	14	24	0	844	235	44	518
Initial Q (Qb), veh	0	0	0	0	0	0		0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00		1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No				No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900		1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	0	0	110	0	3		0	981	213	51	602
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86		0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0		0	0	0	0	0
Cap, veh/h	0	183	0	305	0	155		4	1589	344	96	2511
Arrive On Green	0.00	0.00	0.00	0.10	0.00	0.10		0.00	0.54	0.54	0.05	0.70
Sat Flow, veh/h	0	1900	0	1440	0	1610		1810	2950	639	1810	3610
Grp Volume(v), veh/h	0	0	0	110	0	3		0	600	594	51	602
Grp Sat Flow(s),veh/h/ln	0	1900	0	1440	0	1610		1810	1805	1784	1810	1805
Q Serve(g_s), s	0.0	0.0	0.0	3.2	0.0	0.1		0.0	9.9	10.0	1.2	2.6
Cycle Q Clear(g_c), s	0.0	0.0	0.0	3.2	0.0	0.1		0.0	9.9	10.0	1.2	2.6
Prop In Lane	0.00		0.00	1.00		1.00		1.00		0.36	1.00	
Lane Grp Cap(c), veh/h	0	183	0	305	0	155		4	972	961	96	2511
V/C Ratio(X)	0.00	0.00	0.00	0.36	0.00	0.02		0.00	0.62	0.62	0.53	0.24
Avail Cap(c_a), veh/h	0	795	0	769	0	674		213	972	961	213	2511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00		0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	19.1	0.0	17.7		0.0	6.9	6.9	20.0	2.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	0.0		0.0	2.9	3.0	4.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	1.0	0.0	0.0		0.0	2.6	2.5	0.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	19.8	0.0	17.7		0.0	9.8	9.9	24.5	2.6
LnGrp LOS	A	A	A	B	A	B		A	A	A	C	A
Approach Vol, veh/h		0			113				1194			653
Approach Delay, s/veh		0.0			19.8				9.9			4.3
Approach LOS					B				A			A

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	27.8		8.7	0.0	34.6		8.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	23.3		18.1	5.1	23.3		18.1				
Max Q Clear Time (g_c+I1), s	3.2	12.0		0.0	0.0	4.6		5.2				
Green Ext Time (p_c), s	0.0	5.5		0.0	0.0	3.5		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		8.6	
HCM 6th LOS		A	

Notes

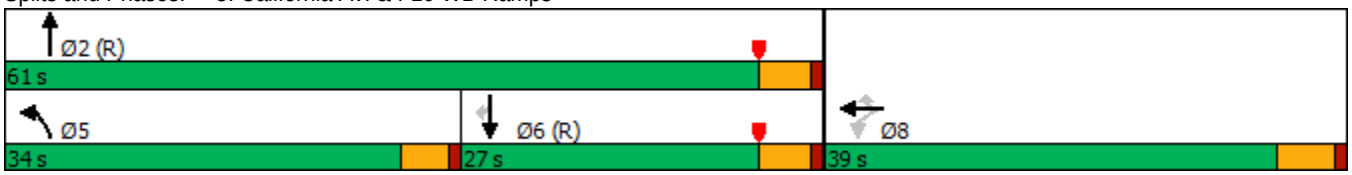
User approved ignoring U-Turning movement.

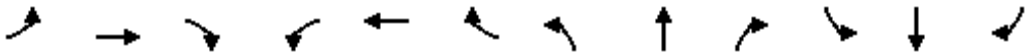
Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (veh/h)	0
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	0
Peak Hour Factor	0.86
Percent Heavy Veh, %	0
Cap, veh/h	1120
Arrive On Green	0.00
Sat Flow, veh/h	1610
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	1610
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	1120
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	1120
HCM Platoon Ratio	1.00
Upstream Filter(I)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	15	371	348	732	232	381
Future Volume (vph)	15	371	348	732	232	381
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	15.3	14.5	21.9	21.9	21.9
Total Split (s)	39.0	39.0	34.0	61.0	27.0	27.0
Total Split (%)	39.0%	39.0%	34.0%	61.0%	27.0%	27.0%
Yellow Time (s)	4.3	4.3	3.5	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.5	4.9	4.9	4.9
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	28.3	28.3	24.5	61.5	32.6	32.6
Actuated g/C Ratio	0.28	0.28	0.24	0.62	0.33	0.33
v/c Ratio	0.85	0.70	0.86	0.36	0.15	0.51
Control Delay	49.9	24.4	63.8	10.6	26.9	5.9
Queue Delay	0.0	0.0	9.2	0.3	0.0	0.2
Total Delay	49.9	24.4	73.0	10.8	26.9	6.1
LOS	D	C	E	B	C	A
Approach Delay	37.7			30.9	14.0	
Approach LOS	D			C	B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 28.8	Intersection LOS: C
Intersection Capacity Utilization 105.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 5: California Av. & I-10 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	387	15	371	348	732	0	0	232	381
Future Volume (veh/h)	0	0	0	387	15	371	348	732	0	0	232	381
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				421	16	189	378	796	0	0	252	218
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				465	18	429	403	2280	0	0	1888	586
Arrive On Green				0.27	0.27	0.27	0.45	1.00	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1746	66	1610	1810	3705	0	0	5358	1610
Grp Volume(v), veh/h				437	0	189	378	796	0	0	252	218
Grp Sat Flow(s),veh/h/ln				1813	0	1610	1810	1805	0	0	1729	1610
Q Serve(g_s), s				23.3	0.0	9.8	19.9	0.0	0.0	0.0	3.2	10.0
Cycle Q Clear(g_c), s				23.3	0.0	9.8	19.9	0.0	0.0	0.0	3.2	10.0
Prop In Lane				0.96		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				483	0	429	403	2280	0	0	1888	586
V/C Ratio(X)				0.90	0.00	0.44	0.94	0.35	0.00	0.00	0.13	0.37
Avail Cap(c_a), veh/h				611	0	543	534	2280	0	0	1888	586
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.97	0.97	0.00	0.00	0.98	0.98
Uniform Delay (d), s/veh				35.5	0.0	30.5	27.1	0.0	0.0	0.0	21.3	23.4
Incr Delay (d2), s/veh				13.0	0.0	0.3	18.4	0.4	0.0	0.0	0.1	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.4	0.0	3.6	7.8	0.1	0.0	0.0	1.3	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				48.4	0.0	30.8	45.4	0.4	0.0	0.0	21.4	25.2
LnGrp LOS				D	A	C	D	A	A	A	C	C
Approach Vol, veh/h					626			1174			470	
Approach Delay, s/veh					43.1			14.9			23.1	
Approach LOS					D			B			C	

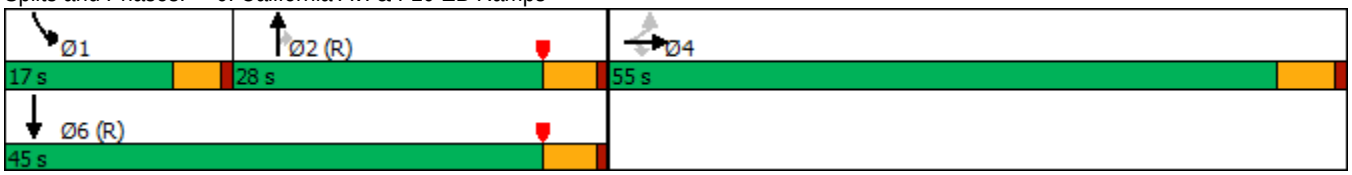
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		68.1			26.8	41.3		31.9				
Change Period (Y+Rc), s		4.9			4.5	4.9		5.3				
Max Green Setting (Gmax), s		56.1			29.5	22.1		33.7				
Max Q Clear Time (g_c+I1), s		2.0			21.9	12.0		25.3				
Green Ext Time (p_c), s		3.5			0.4	1.0		1.3				

Intersection Summary												
HCM 6th Ctrl Delay			24.4									
HCM 6th LOS			C									

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	1	548	566	266	86	533
Future Volume (vph)	1	548	566	266	86	533
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	15.3	23.9	23.9	14.5	25.9
Total Split (s)	55.0	55.0	28.0	28.0	17.0	45.0
Total Split (%)	55.0%	55.0%	28.0%	28.0%	17.0%	45.0%
Yellow Time (s)	4.3	4.3	3.9	3.9	3.5	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.9	4.9	4.5	4.9
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	37.7	37.7	39.7	39.7	10.9	52.1
Actuated g/C Ratio	0.38	0.38	0.40	0.40	0.11	0.52
v/c Ratio	0.80	0.81	0.29	0.35	0.46	0.30
Control Delay	36.3	28.1	24.1	5.1	53.3	21.3
Queue Delay	1.0	0.0	0.0	0.0	0.0	0.3
Total Delay	37.3	28.1	24.1	5.1	53.3	21.6
LOS	D	C	C	A	D	C
Approach Delay	32.6		18.0			26.1
Approach LOS	C		B			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 26.2	Intersection LOS: C
Intersection Capacity Utilization 105.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 6: California Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	515	1	548	0	0	0	0	566	266	86	533	0
Future Volume (veh/h)	515	1	548	0	0	0	0	566	266	86	533	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	542	1	411				0	596	272	91	561	0
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	601	1	536				0	2221	690	167	2041	0
Arrive On Green	0.33	0.33	0.33				0.00	0.43	0.43	0.09	0.57	0.00
Sat Flow, veh/h	1806	3	1610				0	5358	1610	1810	3705	0
Grp Volume(v), veh/h	543	0	411				0	596	272	91	561	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1610	1810	1805	0
Q Serve(g_s), s	28.6	0.0	22.9				0.0	7.4	11.6	4.8	8.0	0.0
Cycle Q Clear(g_c), s	28.6	0.0	22.9				0.0	7.4	11.6	4.8	8.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	602	0	536				0	2221	690	167	2041	0
V/C Ratio(X)	0.90	0.00	0.77				0.00	0.27	0.39	0.55	0.27	0.00
Avail Cap(c_a), veh/h	899	0	800				0	2221	690	226	2041	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	31.8	0.0	29.9				0.0	18.5	19.7	43.4	11.2	0.0
Incr Delay (d2), s/veh	6.5	0.0	1.2				0.0	0.3	1.7	1.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	0.0	8.4				0.0	2.8	4.4	2.1	2.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.3	0.0	31.0				0.0	18.8	21.4	44.4	11.5	0.0
LnGrp LOS	D	A	C				A	B	C	D	B	A
Approach Vol, veh/h		954						868			652	
Approach Delay, s/veh		35.2						19.6			16.1	
Approach LOS		D						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	13.7	47.7		38.6		61.4
Change Period (Y+Rc), s	4.5	4.9		5.3		4.9
Max Green Setting (Gmax), s	12.5	23.1		49.7		40.1
Max Q Clear Time (g_c+I1), s	6.8	13.6		30.6		10.0
Green Ext Time (p_c), s	0.0	2.2		2.7		2.3

Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	175	0	0	91	40	0	0	0	93	0	6
Future Vol, veh/h	0	175	0	0	91	40	0	0	0	93	0	6
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	100	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	194	0	0	101	44	0	0	0	103	0	7

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	145	0	-	-	-	0			220	317	73
Stage 1	-	-	-	-	-	-			123	123	-
Stage 2	-	-	-	-	-	-			97	194	-
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	1450	-	0	0	-	-			754	602	981
Stage 1	-	-	0	0	-	-			895	798	-
Stage 2	-	-	0	0	-	-			922	744	-
Platoon blocked, %		-			-	-					
Mov Cap-1 Maneuver	1450	-	-	-	-	-			754	0	981
Mov Cap-2 Maneuver	-	-	-	-	-	-			758	0	-
Stage 1	-	-	-	-	-	-			895	0	-
Stage 2	-	-	-	-	-	-			922	0	-

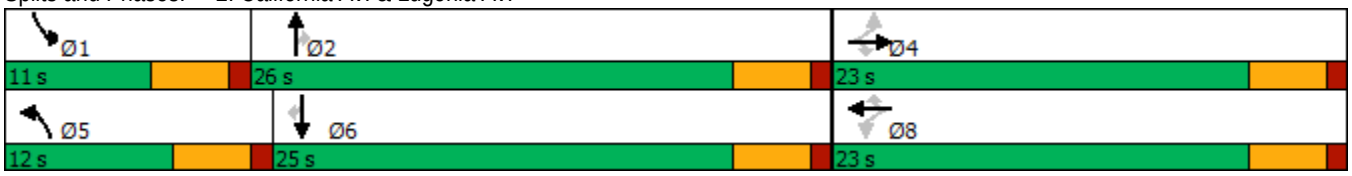
Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.5
HCM LOS			B

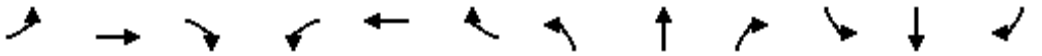
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1450	-	-	-	769
HCM Lane V/C Ratio	-	-	-	-	0.143
HCM Control Delay (s)	0	-	-	-	10.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	52	196	139	38	33	84	313	120	64	504	10
Future Volume (vph)	21	52	196	139	38	33	84	313	120	64	504	10
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.0	23.0	23.0	23.0	23.0	23.0	12.0	26.0	26.0	11.0	25.0	25.0
Total Split (%)	38.3%	38.3%	38.3%	38.3%	38.3%	38.3%	20.0%	43.3%	43.3%	18.3%	41.7%	41.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)		8.4	8.4		8.6	8.6	7.1	19.6	19.6	6.6	17.1	17.1
Actuated g/C Ratio		0.23	0.23		0.23	0.23	0.19	0.53	0.53	0.18	0.46	0.46
v/c Ratio		0.20	0.39		0.27	0.07	0.25	0.32	0.14	0.20	0.31	0.01
Control Delay		15.8	5.8		15.1	0.3	18.3	10.2	3.3	18.8	10.9	0.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		15.8	5.8		15.1	0.3	18.3	10.2	3.3	18.8	10.9	0.0
LOS		B	A		B	A	B	B	A	B	B	A
Approach Delay		8.5			12.8			9.9			11.6	
Approach LOS		A			B			A			B	

Intersection Summary			
Cycle Length: 60			
Actuated Cycle Length: 37.1			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay: 10.7		Intersection LOS: B	
Intersection Capacity Utilization 46.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: California Av. & Lugonia Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	52	196	139	38	33	84	313	120	64	504	10
Future Volume (veh/h)	21	52	196	139	38	33	84	313	120	64	504	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	21	53	131	142	39	19	86	319	102	65	514	9
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	201	341	354	457	361	354	152	542	449	124	975	435
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.08	0.29	0.29	0.07	0.27	0.27
Sat Flow, veh/h	252	1550	1610	1044	1643	1610	1810	1900	1573	1810	3610	1610
Grp Volume(v), veh/h	74	0	131	142	39	19	86	319	102	65	514	9
Grp Sat Flow(s),veh/h/ln	1802	0	1610	1044	1643	1610	1810	1900	1573	1810	1805	1610
Q Serve(g_s), s	0.0	0.0	2.2	3.4	0.6	0.3	1.4	4.6	1.6	1.1	3.8	0.1
Cycle Q Clear(g_c), s	1.0	0.0	2.2	4.4	0.6	0.3	1.4	4.6	1.6	1.1	3.8	0.1
Prop In Lane	0.28		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	542	0	354	457	361	354	152	542	449	124	975	435
V/C Ratio(X)	0.14	0.00	0.37	0.31	0.11	0.05	0.57	0.59	0.23	0.52	0.53	0.02
Avail Cap(c_a), veh/h	1165	0	940	901	959	940	428	1290	1068	371	2337	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.0	0.0	10.5	11.8	9.9	9.8	14.0	9.7	8.7	14.2	9.8	8.5
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.4	0.1	0.1	3.3	1.0	0.3	3.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.6	0.7	0.2	0.1	0.5	1.2	0.3	0.4	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.1	0.0	11.1	12.2	10.0	9.8	17.3	10.7	8.9	17.6	10.3	8.5
LnGrp LOS	B	A	B	B	B	A	B	B	A	B	B	A
Approach Vol, veh/h		205			200			507			588	
Approach Delay, s/veh		10.8			11.5			11.5			11.1	
Approach LOS		B			B			B			B	

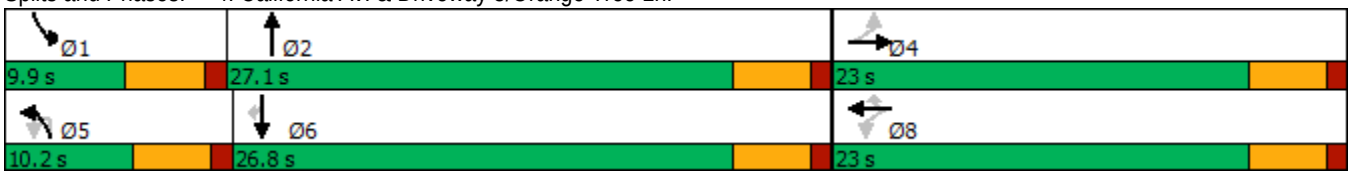
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	13.5		11.5	7.2	13.1		11.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	21.5		18.5	7.5	20.5		18.5				
Max Q Clear Time (g_c+I1), s	3.1	6.6		4.2	3.4	5.8		6.4				
Green Ext Time (p_c), s	0.0	1.7		0.6	0.1	2.7		0.8				

Intersection Summary												
HCM 6th Ctrl Delay			11.2									
HCM 6th LOS			B									

Lane Group	WBL	WBT	WBR	NBU	NBL	NBT	SBL	SBT	Ø4
Lane Configurations									
Traffic Volume (vph)	280	0	12	32	0	484	34	805	
Future Volume (vph)	280	0	12	32	0	484	34	805	
Turn Type	Perm	NA	Perm	custom	Prot	NA	Prot	NA	
Protected Phases		8			5	2	1	6	4
Permitted Phases	8		8	5					
Detector Phase	8	8	8	5	5	2	1	6	
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	9.5	9.5	22.5	9.5	22.5	22.5
Total Split (s)	23.0	23.0	23.0	10.2	10.2	27.1	9.9	26.8	23.0
Total Split (%)	38.3%	38.3%	38.3%	17.0%	17.0%	45.2%	16.5%	44.7%	38%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.5	4.5		4.5	4.5	4.5	4.5	
Lead/Lag				Lead	Lead	Lag	Lead	Lag	
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	Max	None	Max	None
Act Effct Green (s)		15.3	15.3		5.8	23.8	5.5	23.7	
Actuated g/C Ratio		0.30	0.30		0.11	0.46	0.11	0.46	
v/c Ratio		0.76	0.03		0.17	0.44	0.20	0.56	
Control Delay		30.9	0.1		25.9	11.0	26.8	13.7	
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		30.9	0.1		25.9	11.0	26.8	13.7	
LOS		C	A		C	B	C	B	
Approach Delay		29.6				11.8		14.2	
Approach LOS		C				B		B	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 51.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 15.8	Intersection LOS: B
Intersection Capacity Utilization 51.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: California Av. & Driveway 3/Orange Tree Ln.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	280	0	12	32	0	484	145	34	805
Future Volume (veh/h)	0	0	0	280	0	12	32	0	484	145	34	805
Initial Q (Qb), veh	0	0	0	0	0	0		0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00		1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No				No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900		1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	0	0	322	0	5		0	556	120	39	925
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87		0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0		0	0	0	0	0
Cap, veh/h	0	503	0	520	0	426		3	1283	276	75	2030
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26		0.00	0.43	0.43	0.04	0.56
Sat Flow, veh/h	0	1900	0	1440	0	1610		1810	2954	635	1810	3610
Grp Volume(v), veh/h	0	0	0	322	0	5		0	339	337	39	925
Grp Sat Flow(s),veh/h/ln	0	1900	0	1440	0	1610		1810	1805	1784	1810	1805
Q Serve(g_s), s	0.0	0.0	0.0	11.0	0.0	0.1		0.0	6.8	6.9	1.1	7.8
Cycle Q Clear(g_c), s	0.0	0.0	0.0	11.0	0.0	0.1		0.0	6.8	6.9	1.1	7.8
Prop In Lane	0.00		0.00	1.00		1.00		1.00		0.36	1.00	
Lane Grp Cap(c), veh/h	0	503	0	520	0	426		3	784	775	75	2030
V/C Ratio(X)	0.00	0.00	0.00	0.62	0.00	0.01		0.00	0.43	0.43	0.52	0.46
Avail Cap(c_a), veh/h	0	676	0	650	0	573		198	784	775	188	2030
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00		0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.1	0.0	14.1		0.0	10.2	10.3	24.4	6.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.2	0.0	0.0		0.0	1.7	1.8	5.5	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	3.4	0.0	0.0		0.0	2.3	2.3	0.5	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	19.3	0.0	14.1		0.0	12.0	12.0	29.9	7.4
LnGrp LOS	A	A	A	B	A	B		A	B	B	C	A
Approach Vol, veh/h		0			327				676			964
Approach Delay, s/veh		0.0			19.2				12.0			8.3
Approach LOS					B				B			A

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	27.1		18.3	0.0	33.8		18.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.4	22.6		18.5	5.7	22.3		18.5				
Max Q Clear Time (g_c+I1), s	3.1	8.9		0.0	0.0	9.8		13.0				
Green Ext Time (p_c), s	0.0	3.2		0.0	0.0	4.7		0.9				

Intersection Summary			
HCM 6th Ctrl Delay		11.4	
HCM 6th LOS		B	

Notes

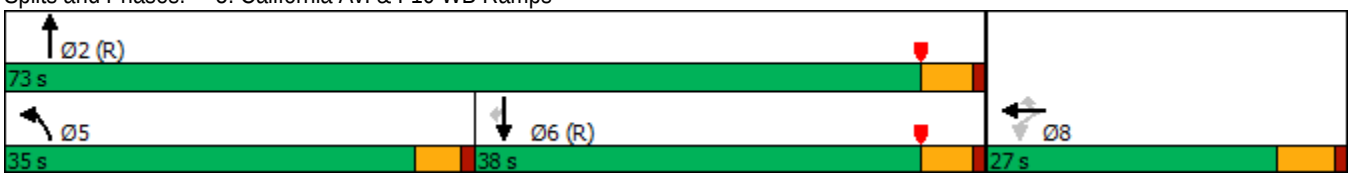
User approved ignoring U-Turning movement.

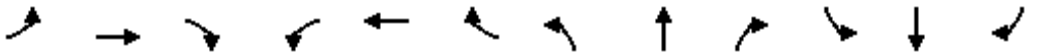
Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (veh/h)	0
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	0
Peak Hour Factor	0.87
Percent Heavy Veh, %	0
Cap, veh/h	905
Arrive On Green	0.00
Sat Flow, veh/h	1610
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	1610
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	905
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	905
HCM Platoon Ratio	1.00
Upstream Filter(I)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	3	131	407	531	467	618
Future Volume (vph)	3	131	407	531	467	618
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	15.3	14.5	21.9	21.9	21.9
Total Split (s)	27.0	27.0	35.0	73.0	38.0	38.0
Total Split (%)	27.0%	27.0%	35.0%	73.0%	38.0%	38.0%
Yellow Time (s)	4.3	4.3	3.5	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.5	4.9	4.9	4.9
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	19.6	19.6	27.6	70.2	38.2	38.2
Actuated g/C Ratio	0.20	0.20	0.28	0.70	0.38	0.38
v/c Ratio	0.86	0.33	0.90	0.23	0.26	0.72
Control Delay	61.8	7.9	71.9	5.7	22.9	11.1
Queue Delay	0.0	0.0	53.2	0.2	0.0	1.1
Total Delay	61.8	7.9	125.0	5.9	22.9	12.2
LOS	E	A	F	A	C	B
Approach Delay	44.4			57.6	16.8	
Approach LOS	D			E	B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 37.2	Intersection LOS: D
Intersection Capacity Utilization 88.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 5: California Av. & I-10 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	273	3	131	407	531	0	0	467	618
Future Volume (veh/h)	0	0	0	273	3	131	407	531	0	0	467	618
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				300	3	62	447	584	0	0	513	428
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				336	3	302	469	2566	0	0	2110	655
Arrive On Green				0.19	0.19	0.19	0.52	1.00	0.00	0.00	0.41	0.41
Sat Flow, veh/h				1792	18	1610	1810	3705	0	0	5358	1610
Grp Volume(v), veh/h				303	0	62	447	584	0	0	513	428
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1610
Q Serve(g_s), s				16.3	0.0	3.3	23.5	0.0	0.0	0.0	6.5	21.5
Cycle Q Clear(g_c), s				16.3	0.0	3.3	23.5	0.0	0.0	0.0	6.5	21.5
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				339	0	302	469	2566	0	0	2110	655
V/C Ratio(X)				0.89	0.00	0.21	0.95	0.23	0.00	0.00	0.24	0.65
Avail Cap(c_a), veh/h				393	0	349	552	2566	0	0	2110	655
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.97	0.97	0.00	0.00	0.81	0.81
Uniform Delay (d), s/veh				39.7	0.0	34.3	23.5	0.0	0.0	0.0	19.5	24.0
Incr Delay (d2), s/veh				18.6	0.0	0.1	23.5	0.2	0.0	0.0	0.2	4.1
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				8.7	0.0	1.2	9.0	0.1	0.0	0.0	2.5	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				58.3	0.0	34.5	47.0	0.2	0.0	0.0	19.8	28.1
LnGrp LOS				E	A	C	D	A	A	A	B	C
Approach Vol, veh/h					365			1031			941	
Approach Delay, s/veh					54.2			20.5			23.5	
Approach LOS					D			C			C	

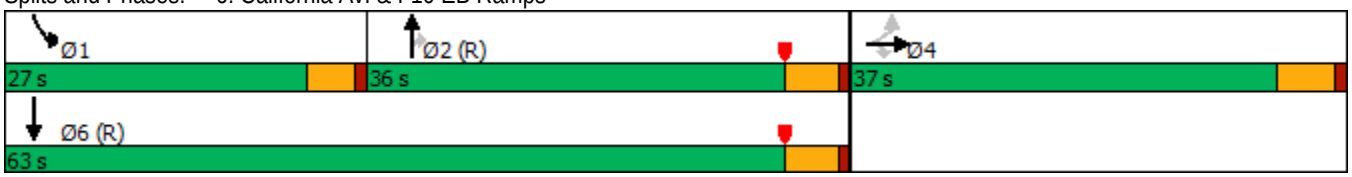
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.0			30.4	45.6		24.0				
Change Period (Y+Rc), s		4.9			4.5	4.9		5.3				
Max Green Setting (Gmax), s		68.1			30.5	33.1		21.7				
Max Q Clear Time (g_c+I1), s		2.0			25.5	23.5		18.3				
Green Ext Time (p_c), s		2.4			0.4	2.2		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			27.0									
HCM 6th LOS			C									

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	3	392	629	411	211	529
Future Volume (vph)	3	392	629	411	211	529
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	15.3	23.9	23.9	14.5	25.9
Total Split (s)	37.0	37.0	36.0	36.0	27.0	63.0
Total Split (%)	37.0%	37.0%	36.0%	36.0%	27.0%	63.0%
Yellow Time (s)	4.3	4.3	3.9	3.9	3.5	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.9	4.9	4.5	4.9
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	23.1	23.1	45.6	45.6	16.6	66.7
Actuated g/C Ratio	0.23	0.23	0.46	0.46	0.17	0.67
v/c Ratio	0.78	0.68	0.28	0.45	0.74	0.23
Control Delay	48.9	14.3	19.4	4.2	63.0	8.4
Queue Delay	2.9	0.0	0.0	0.0	0.2	0.2
Total Delay	51.8	14.3	19.4	4.2	63.2	8.6
LOS	D	B	B	A	E	A
Approach Delay	30.9		13.4			24.1
Approach LOS	C		B			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 21.5	Intersection LOS: C
Intersection Capacity Utilization 88.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: California Av. & I-10 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	309	3	392	0	0	0	0	629	411	211	529	0
Future Volume (veh/h)	309	3	392	0	0	0	0	629	411	211	529	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	325	3	196				0	662	426	222	557	0
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	372	3	334				0	2628	797	252	2493	0
Arrive On Green	0.21	0.21	0.21				0.00	0.51	0.51	0.28	1.00	0.00
Sat Flow, veh/h	1794	17	1610				0	5358	1574	1810	3705	0
Grp Volume(v), veh/h	328	0	196				0	662	426	222	557	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1574	1810	1805	0
Q Serve(g_s), s	17.5	0.0	11.0				0.0	7.2	18.3	11.7	0.0	0.0
Cycle Q Clear(g_c), s	17.5	0.0	11.0				0.0	7.2	18.3	11.7	0.0	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	375	0	334				0	2628	797	252	2493	0
V/C Ratio(X)	0.87	0.00	0.59				0.00	0.25	0.53	0.88	0.22	0.00
Avail Cap(c_a), veh/h	574	0	510				0	2628	797	407	2493	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.98	0.98	0.00
Uniform Delay (d), s/veh	38.4	0.0	35.8				0.0	14.0	16.7	35.3	0.0	0.0
Incr Delay (d2), s/veh	6.3	0.0	0.6				0.0	0.2	2.6	7.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.0	4.2				0.0	2.6	6.5	4.7	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.7	0.0	36.4				0.0	14.2	19.2	42.9	0.2	0.0
LnGrp LOS	D	A	D				A	B	B	D	A	A
Approach Vol, veh/h		524						1088			779	
Approach Delay, s/veh		41.6						16.2			12.4	
Approach LOS		D						B			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	18.4	55.6		26.0		74.0						
Change Period (Y+Rc), s	4.5	4.9		5.3		4.9						
Max Green Setting (Gmax), s	22.5	31.1		31.7		58.1						
Max Q Clear Time (g_c+I1), s	13.7	20.3		19.5		2.0						
Green Ext Time (p_c), s	0.2	2.8		1.2		2.3						

Intersection Summary												
HCM 6th Ctrl Delay			20.5									
HCM 6th LOS			C									

APPENDIX 3.3: EXISTING (2023) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

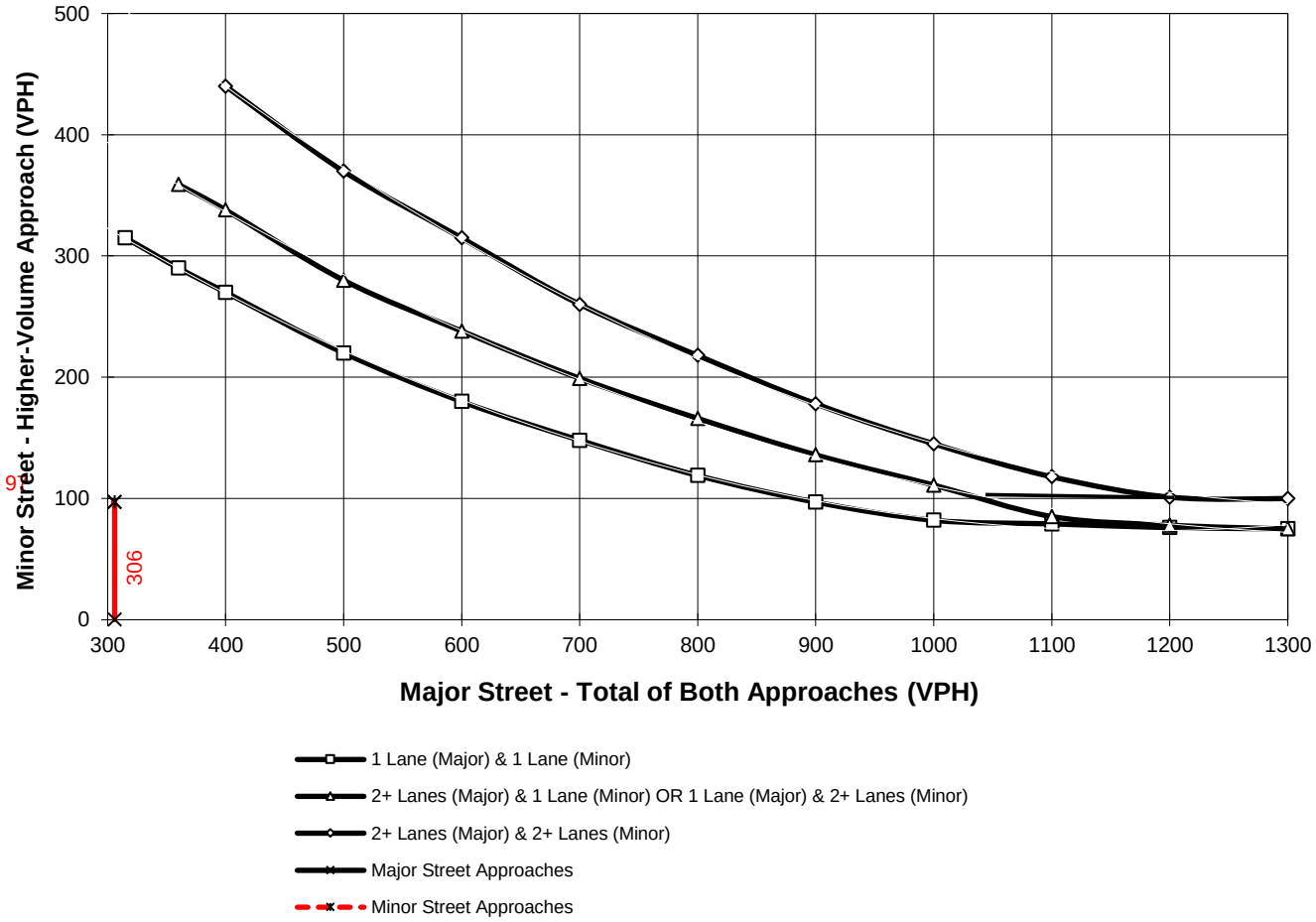
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

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

Major Street Name = **Lugonia Av.**
Total of Both Approaches (VPH) = **306**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Driveway 1**
High Volume Approach (VPH) = **97**
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

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APPENDIX 3.4: EXISTING (2023) CONDITIONS FREEWAY OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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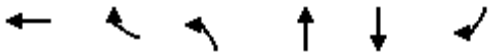


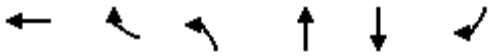
Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	437	403	378	796	252	414
v/c Ratio	0.85	0.70	0.86	0.36	0.15	0.51
Control Delay	49.9	24.4	63.8	10.6	26.9	5.9
Queue Delay	0.0	0.0	9.2	0.3	0.0	0.2
Total Delay	49.9	24.4	73.0	10.8	26.9	6.1
Queue Length 50th (ft)	259	131	262	141	42	0
Queue Length 95th (ft)	356	225	356	164	72	80
Internal Link Dist (ft)	1516			274	259	
Turn Bay Length (ft)						
Base Capacity (vph)	610	655	532	2221	1689	805
Starvation Cap Reductn	0	0	122	740	0	67
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.62	0.92	0.54	0.15	0.56

Intersection Summary

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	543	577	596	280	91	561
v/c Ratio	0.80	0.81	0.29	0.35	0.46	0.30
Control Delay	36.3	28.1	24.1	5.1	53.3	21.3
Queue Delay	1.0	0.0	0.0	0.0	0.0	0.3
Total Delay	37.3	28.1	24.1	5.1	53.3	21.6
Queue Length 50th (ft)	303	237	97	0	63	132
Queue Length 95th (ft)	358	315	157	64	m100	168
Internal Link Dist (ft)	2056		773			274
Turn Bay Length (ft)		740				
Base Capacity (vph)	899	887	2057	809	228	1882
Starvation Cap Reductn	0	0	0	0	0	703
Spillback Cap Reductn	153	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.65	0.29	0.35	0.40	0.48

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	303	144	447	584	513	679
v/c Ratio	0.86	0.33	0.90	0.23	0.26	0.72
Control Delay	61.8	7.9	71.9	5.7	22.9	11.1
Queue Delay	0.0	0.0	53.2	0.2	0.0	1.1
Total Delay	61.8	7.9	125.0	5.9	22.9	12.2
Queue Length 50th (ft)	183	0	295	76	86	64
Queue Length 95th (ft)	#309	49	#437	86	117	223
Internal Link Dist (ft)	1516			274	259	
Turn Bay Length (ft)						
Base Capacity (vph)	392	463	550	2535	1980	949
Starvation Cap Reductn	0	0	169	1081	0	101
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.31	1.17	0.40	0.26	0.80

Intersection Summary

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

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	328	413	662	433	222	557
v/c Ratio	0.78	0.68	0.28	0.45	0.74	0.23
Control Delay	48.9	14.3	19.4	4.2	63.0	8.4
Queue Delay	2.9	0.0	0.0	0.0	0.2	0.2
Total Delay	51.8	14.3	19.4	4.2	63.2	8.6
Queue Length 50th (ft)	196	54	94	0	155	82
Queue Length 95th (ft)	266	142	156	69	m219	104
Internal Link Dist (ft)	2056		773			274
Turn Bay Length (ft)		740				
Base Capacity (vph)	574	723	2364	952	407	2406
Starvation Cap Reductn	0	0	0	0	16	992
Spillback Cap Reductn	149	0	59	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.57	0.29	0.45	0.57	0.39

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

APPENDIX 5.1: EXISITNG PLUS PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	120	0	17	197	107	0	0	9	29	0	2
Future Vol, veh/h	2	120	0	17	197	107	0	0	9	29	0	2
Conflicting Peds, #/hr	0	0	0	0	0	1	0	0	1	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	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	130	0	18	214	116	0	0	10	32	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	331	0	0	130	0	0	277	501	66	379	443	166
Stage 1	-	-	-	-	-	-	134	134	-	309	309	-
Stage 2	-	-	-	-	-	-	143	367	-	70	134	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1240	-	-	1468	-	-	659	475	991	558	512	856
Stage 1	-	-	-	-	-	-	861	789	-	682	663	-
Stage 2	-	-	-	-	-	-	851	626	-	938	789	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1239	-	-	1468	-	-	650	468	990	546	504	855
Mov Cap-2 Maneuver	-	-	-	-	-	-	683	519	-	588	547	-
Stage 1	-	-	-	-	-	-	859	787	-	680	654	-
Stage 2	-	-	-	-	-	-	838	618	-	926	787	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.4	8.7	11.4
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	990	1239	-	-	1468	-	-	600
HCM Lane V/C Ratio	0.01	0.002	-	-	0.013	-	-	0.056
HCM Control Delay (s)	8.7	7.9	-	-	7.5	-	-	11.4
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	155	0	0	312	0	2
Future Vol, veh/h	155	0	0	312	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	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	168	0	0	339	0	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	84
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	965
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	965
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

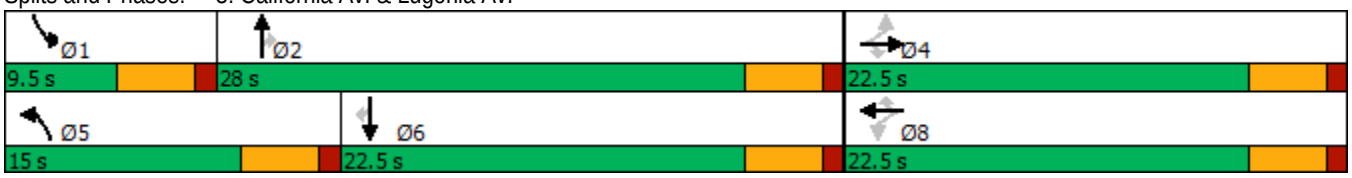
Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.7
HCM LOS			A

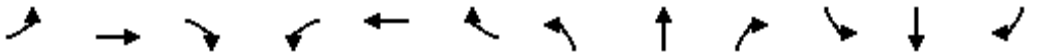
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	965	-	-	-
HCM Lane V/C Ratio	0.002	-	-	-
HCM Control Delay (s)	8.7	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	22	124	118	53	28	245	501	92	18	351	15
Future Volume (vph)	12	22	124	118	53	28	245	501	92	18	351	15
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	15.0	28.0	28.0	9.5	22.5	22.5
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%	25.0%	46.7%	46.7%	15.8%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)		8.4	8.4		8.5	8.5	10.5	26.1	26.1	5.4	10.7	10.7
Actuated g/C Ratio		0.21	0.21		0.21	0.21	0.26	0.64	0.64	0.13	0.26	0.26
v/c Ratio		0.12	0.28		0.31	0.06	0.58	0.45	0.09	0.08	0.41	0.03
Control Delay		16.6	3.2		17.3	0.2	23.9	8.6	2.2	20.8	14.7	0.1
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		16.6	3.2		17.3	0.2	23.9	8.6	2.2	20.8	14.7	0.1
LOS		B	A		B	A	C	A	A	C	B	A
Approach Delay		6.1			14.9			12.4			14.4	
Approach LOS		A			B			B			B	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 40.7	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 55.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: California Av. & Lugonia Av.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	22	124	118	53	28	245	501	92	18	351	15
Future Volume (veh/h)	12	22	124	118	53	28	245	501	92	18	351	15
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	24	93	130	58	12	269	551	56	20	386	16
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	204	263	293	429	299	293	347	744	630	46	812	362
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.39	0.39	0.03	0.22	0.22
Sat Flow, veh/h	326	1442	1610	1180	1643	1610	1810	1900	1610	1810	3610	1610
Grp Volume(v), veh/h	37	0	93	130	58	12	269	551	56	20	386	16
Grp Sat Flow(s),veh/h/ln	1768	0	1610	1180	1643	1610	1810	1900	1610	1810	1805	1610
Q Serve(g_s), s	0.0	0.0	1.7	3.1	1.0	0.2	4.8	8.4	0.7	0.4	3.1	0.3
Cycle Q Clear(g_c), s	0.5	0.0	1.7	3.7	1.0	0.2	4.8	8.4	0.7	0.4	3.1	0.3
Prop In Lane	0.35		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	467	0	293	429	299	293	347	744	630	46	812	362
V/C Ratio(X)	0.08	0.00	0.32	0.30	0.19	0.04	0.78	0.74	0.09	0.44	0.48	0.04
Avail Cap(c_a), veh/h	1053	0	861	885	878	861	564	1326	1124	269	1930	861
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	0.0	11.9	13.0	11.7	11.3	12.9	8.8	6.5	16.2	11.3	10.2
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.4	0.3	0.1	3.7	1.5	0.1	6.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.5	0.7	0.3	0.1	1.6	1.9	0.1	0.2	0.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.6	0.0	12.6	13.4	12.0	11.4	16.6	10.3	6.5	22.6	11.8	10.3
LnGrp LOS	B	A	B	B	B	B	B	B	A	C	B	B
Approach Vol, veh/h		130			200			876			422	
Approach Delay, s/veh		12.3			12.9			12.0			12.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	17.7		10.6	11.0	12.1		10.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.0	23.5		18.0	10.5	18.0		18.0				
Max Q Clear Time (g_c+I1), s	2.4	10.4		3.7	6.8	5.1		5.7				
Green Ext Time (p_c), s	0.0	2.8		0.3	0.3	1.8		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		12.2	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	0	838	571	16
Future Vol, veh/h	0	4	0	838	571	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	4	0	911	621	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	319	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	582	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	582	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

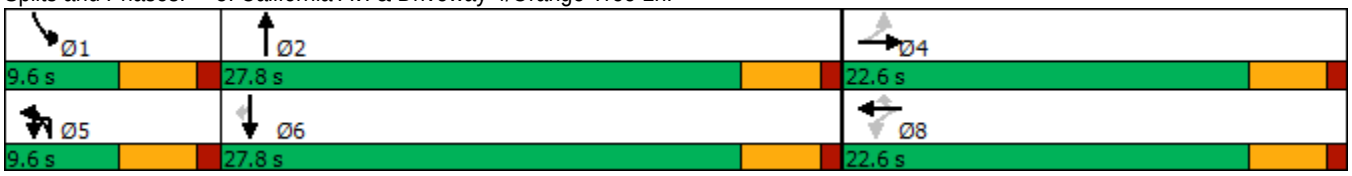
Approach	EB	NB	SB
HCM Control Delay, s	11.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	582	-	-
HCM Lane V/C Ratio	-	0.007	-	-
HCM Control Delay (s)	-	11.2	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	3	1	95	4	14	52	857	44	531
Future Volume (vph)	3	1	95	4	14	52	857	44	531
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	22.6	22.6	22.6	22.6	22.6	9.6	27.8	9.6	27.8
Total Split (%)	37.7%	37.7%	37.7%	37.7%	37.7%	16.0%	46.3%	16.0%	46.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max
Act Effct Green (s)		9.4		9.4	9.4	5.1	31.9	5.1	28.1
Actuated g/C Ratio		0.19		0.19	0.19	0.10	0.63	0.10	0.56
v/c Ratio		0.03		0.45	0.04	0.48	0.57	0.28	0.31
Control Delay		12.8		24.3	0.2	33.8	10.7	26.9	9.6
Queue Delay		0.0		0.0	0.0	0.0	0.3	0.0	0.0
Total Delay		12.8		24.3	0.2	33.8	11.0	26.9	9.6
LOS		B		C	A	C	B	C	A
Approach Delay		12.8		21.3			12.5		11.0
Approach LOS		B		C			B		B

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 50.5	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.57	
Intersection Signal Delay: 12.6	Intersection LOS: B
Intersection Capacity Utilization 58.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: California Av. & Driveway 4/Orange Tree Ln.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	3	1	5	95	4	14	24	52	857	235	44	531
Future Volume (veh/h)	3	1	5	95	4	14	24	52	857	235	44	531
Initial Q (Qb), veh	0	0	0	0	0	0		0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00		1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No				No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900		1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	3	1	6	110	5	3		60	997	213	51	617
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86		0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0		0	0	0	0	0
Cap, veh/h	122	30	67	311	7	148		107	1609	343	96	1940
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09		0.06	0.54	0.54	0.05	0.54
Sat Flow, veh/h	157	326	724	1618	74	1610		1810	2960	631	1810	3610
Grp Volume(v), veh/h	10	0	0	115	0	3		60	607	603	51	617
Grp Sat Flow(s),veh/h/ln	1207	0	0	1692	0	1610		1810	1805	1786	1810	1805
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.1		1.4	10.0	10.1	1.2	4.1
Cycle Q Clear(g_c), s	2.7	0.0	0.0	2.7	0.0	0.1		1.4	10.0	10.1	1.2	4.1
Prop In Lane	0.30		0.60	0.96		1.00		1.00		0.35	1.00	
Lane Grp Cap(c), veh/h	219	0	0	318	0	148		107	981	971	96	1940
V/C Ratio(X)	0.05	0.00	0.00	0.36	0.00	0.02		0.56	0.62	0.62	0.53	0.32
Avail Cap(c_a), veh/h	731	0	0	789	0	672		213	981	971	213	1940
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00		1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	0.0	19.1	0.0	17.9		19.8	6.8	6.8	20.0	5.6
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.7	0.0	0.1		4.5	2.9	3.0	4.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	1.0	0.0	0.0		0.6	2.6	2.6	0.5	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.1	0.0	0.0	19.8	0.0	18.0		24.3	9.7	9.8	24.5	6.0
LnGrp LOS	B	A	A	B	A	B		C	A	A	C	A
Approach Vol, veh/h		10			118				1270			668
Approach Delay, s/veh		18.1			19.7				10.5			7.4
Approach LOS		B			B				B			A

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	28.1		8.5	7.1	27.8		8.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	23.3		18.1	5.1	23.3		18.1				
Max Q Clear Time (g_c+I1), s	3.2	12.1		4.7	3.4	6.1		4.7				
Green Ext Time (p_c), s	0.0	5.5		0.0	0.0	3.5		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		10.0	
HCM 6th LOS		B	

Notes

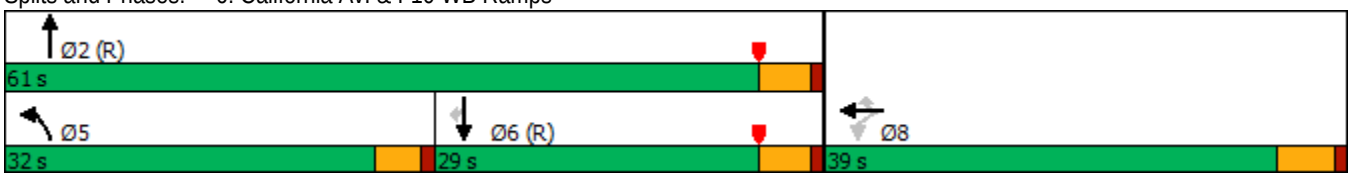
User approved ignoring U-Turning movement.

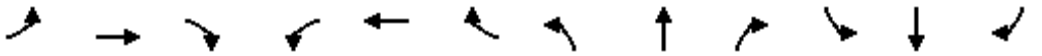
Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (veh/h)	0
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	0
Peak Hour Factor	0.86
Percent Heavy Veh, %	0
Cap, veh/h	865
Arrive On Green	0.00
Sat Flow, veh/h	1610
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	1610
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	865
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	865
HCM Platoon Ratio	1.00
Upstream Filter(I)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	15	394	348	774	239	391
Future Volume (vph)	15	394	348	774	239	391
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	15.3	14.5	21.9	21.9	21.9
Total Split (s)	39.0	39.0	32.0	61.0	29.0	29.0
Total Split (%)	39.0%	39.0%	32.0%	61.0%	29.0%	29.0%
Yellow Time (s)	4.3	4.3	3.5	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.5	4.9	4.9	4.9
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	28.4	28.4	24.2	61.4	32.7	32.7
Actuated g/C Ratio	0.28	0.28	0.24	0.61	0.33	0.33
v/c Ratio	0.85	0.76	0.87	0.38	0.15	0.52
Control Delay	49.4	29.2	63.1	10.6	26.6	5.8
Queue Delay	0.0	0.0	17.8	0.3	0.0	0.2
Total Delay	49.4	29.2	81.0	10.9	26.6	6.1
LOS	D	C	F	B	C	A
Approach Delay	39.4			32.7	13.8	
Approach LOS	D			C	B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 30.1	Intersection LOS: C
Intersection Capacity Utilization 107.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 6: California Av. & I-10 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	387	15	394	348	774	0	0	239	391
Future Volume (veh/h)	0	0	0	387	15	394	348	774	0	0	239	391
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				421	16	214	378	841	0	0	260	229
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				466	18	429	402	2279	0	0	1888	586
Arrive On Green				0.27	0.27	0.27	0.44	1.00	0.00	0.00	0.36	0.36
Sat Flow, veh/h				1746	66	1610	1810	3705	0	0	5358	1610
Grp Volume(v), veh/h				437	0	214	378	841	0	0	260	229
Grp Sat Flow(s),veh/h/ln				1813	0	1610	1810	1805	0	0	1729	1610
Q Serve(g_s), s				23.3	0.0	11.2	19.9	0.0	0.0	0.0	3.4	10.5
Cycle Q Clear(g_c), s				23.3	0.0	11.2	19.9	0.0	0.0	0.0	3.4	10.5
Prop In Lane				0.96		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				483	0	429	402	2279	0	0	1888	586
V/C Ratio(X)				0.90	0.00	0.50	0.94	0.37	0.00	0.00	0.14	0.39
Avail Cap(c_a), veh/h				611	0	543	498	2279	0	0	1888	586
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.96	0.96	0.00	0.00	0.96	0.96
Uniform Delay (d), s/veh				35.4	0.0	31.0	27.1	0.0	0.0	0.0	21.3	23.6
Incr Delay (d2), s/veh				12.9	0.0	0.3	21.0	0.4	0.0	0.0	0.1	1.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.4	0.0	4.2	8.1	0.1	0.0	0.0	1.3	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				48.3	0.0	31.3	48.2	0.4	0.0	0.0	21.4	25.5
LnGrp LOS				D	A	C	D	A	A	A	C	C
Approach Vol, veh/h					651			1219			489	
Approach Delay, s/veh					42.7			15.2			23.3	
Approach LOS					D			B			C	

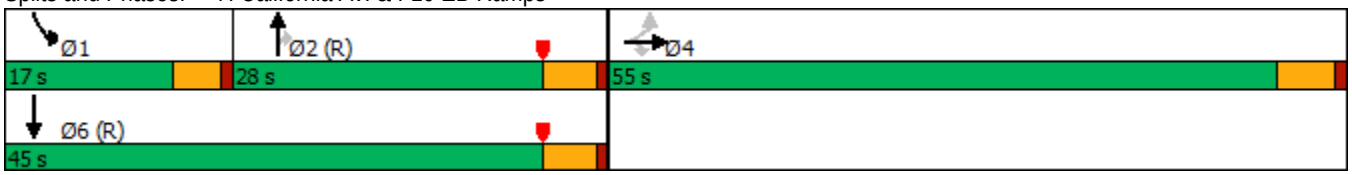
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		68.0			26.7	41.3		32.0				
Change Period (Y+Rc), s		4.9			4.5	4.9		5.3				
Max Green Setting (Gmax), s		56.1			27.5	24.1		33.7				
Max Q Clear Time (g_c+I1), s		2.0			21.9	12.5		25.3				
Green Ext Time (p_c), s		3.8			0.3	1.1		1.4				

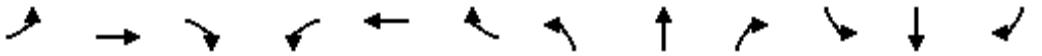
Intersection Summary												
HCM 6th Ctrl Delay			24.5									
HCM 6th LOS			C									

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	1	548	574	266	92	535
Future Volume (vph)	1	548	574	266	92	535
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	15.3	23.9	23.9	14.5	25.9
Total Split (s)	55.0	55.0	28.0	28.0	17.0	45.0
Total Split (%)	55.0%	55.0%	28.0%	28.0%	17.0%	45.0%
Yellow Time (s)	4.3	4.3	3.9	3.9	3.5	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.9	4.9	4.5	4.9
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	39.5	39.5	37.8	37.8	10.9	50.3
Actuated g/C Ratio	0.40	0.40	0.38	0.38	0.11	0.50
v/c Ratio	0.81	0.78	0.31	0.36	0.49	0.31
Control Delay	35.9	25.6	25.4	5.3	56.2	22.2
Queue Delay	1.2	0.0	0.0	0.0	0.0	0.3
Total Delay	37.0	25.6	25.4	5.3	56.2	22.5
LOS	D	C	C	A	E	C
Approach Delay	31.3		19.0			27.4
Approach LOS	C		B			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 26.3	Intersection LOS: C
Intersection Capacity Utilization 107.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 7: California Av. & I-10 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	549	1	548	0	0	0	0	574	266	92	535	0
Future Volume (veh/h)	549	1	548	0	0	0	0	574	266	92	535	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	578	1	411				0	604	272	97	563	0
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	637	1	568				0	2112	656	169	1969	0
Arrive On Green	0.35	0.35	0.35				0.00	0.41	0.41	0.09	0.55	0.00
Sat Flow, veh/h	1807	3	1610				0	5358	1610	1810	3705	0
Grp Volume(v), veh/h	579	0	411				0	604	272	97	563	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1610	1810	1805	0
Q Serve(g_s), s	30.5	0.0	22.2				0.0	7.8	12.0	5.1	8.4	0.0
Cycle Q Clear(g_c), s	30.5	0.0	22.2				0.0	7.8	12.0	5.1	8.4	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	638	0	568				0	2112	656	169	1969	0
V/C Ratio(X)	0.91	0.00	0.72				0.00	0.29	0.41	0.57	0.29	0.00
Avail Cap(c_a), veh/h	899	0	800				0	2112	656	226	1969	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.99	0.99	0.00
Uniform Delay (d), s/veh	30.8	0.0	28.1				0.0	19.9	21.1	43.4	12.2	0.0
Incr Delay (d2), s/veh	8.0	0.0	0.9				0.0	0.3	1.9	1.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	0.0	8.1				0.0	3.0	4.6	2.3	3.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.8	0.0	29.0				0.0	20.2	23.1	44.6	12.6	0.0
LnGrp LOS	D	A	C				A	C	C	D	B	A
Approach Vol, veh/h		990						876			660	
Approach Delay, s/veh		34.8						21.1			17.3	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	13.8	45.6		40.5		59.5						
Change Period (Y+Rc), s	4.5	4.9		5.3		4.9						
Max Green Setting (Gmax), s	12.5	23.1		49.7		40.1						
Max Q Clear Time (g_c+I1), s	7.1	14.0		32.5		10.4						
Green Ext Time (p_c), s	0.0	2.2		2.8		2.3						

Intersection Summary												
HCM 6th Ctrl Delay			25.5									
HCM 6th LOS			C									

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	0	175	0	15	91	40	0	0	19	93	0	6
Future Vol, veh/h	0	175	0	15	91	40	0	0	19	93	0	6
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	100	-	-	100	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	194	0	17	101	44	0	0	21	103	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	145	0	0	194	0	0	279	373	97	254	351	73
Stage 1	-	-	-	-	-	-	194	194	-	157	157	-
Stage 2	-	-	-	-	-	-	85	179	-	97	194	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1450	-	-	1391	-	-	657	561	947	684	577	981
Stage 1	-	-	-	-	-	-	795	744	-	835	772	-
Stage 2	-	-	-	-	-	-	919	755	-	905	744	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1450	-	-	1391	-	-	646	554	947	663	570	981
Mov Cap-2 Maneuver	-	-	-	-	-	-	676	593	-	691	599	-
Stage 1	-	-	-	-	-	-	795	744	-	835	763	-
Stage 2	-	-	-	-	-	-	902	746	-	885	744	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.8	8.9	11.1
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	947	1450	-	-	1391	-	-	704
HCM Lane V/C Ratio	0.022	-	-	-	0.012	-	-	0.156
HCM Control Delay (s)	8.9	0	-	-	7.6	-	-	11.1
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	280	0	0	144	0	7
Future Vol, veh/h	280	0	0	144	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	304	0	0	157	0	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	152
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	873
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	873
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

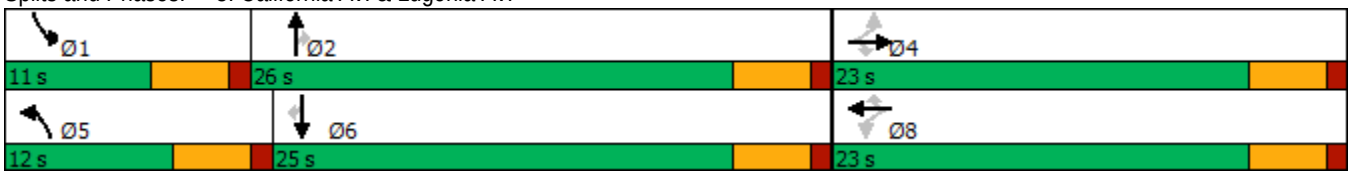
Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	873	-	-	-
HCM Lane V/C Ratio	0.009	-	-	-
HCM Control Delay (s)	9.2	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	52	215	148	38	33	97	324	124	64	506	10
Future Volume (vph)	21	52	215	148	38	33	97	324	124	64	506	10
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Detector Phase	4	4	4	8	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	23.0	23.0	23.0	23.0	23.0	23.0	12.0	26.0	26.0	11.0	25.0	25.0
Total Split (%)	38.3%	38.3%	38.3%	38.3%	38.3%	38.3%	20.0%	43.3%	43.3%	18.3%	41.7%	41.7%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Act Effct Green (s)		8.6	8.6		8.8	8.8	7.3	19.9	19.9	6.6	17.3	17.3
Actuated g/C Ratio		0.23	0.23		0.24	0.24	0.20	0.53	0.53	0.18	0.46	0.46
v/c Ratio		0.20	0.41		0.28	0.07	0.28	0.33	0.14	0.20	0.31	0.01
Control Delay		16.0	5.7		15.3	0.3	19.0	10.3	3.3	19.2	11.0	0.0
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		16.0	5.7		15.3	0.3	19.0	10.3	3.3	19.2	11.0	0.0
LOS		B	A		B	A	B	B	A	B	B	A
Approach Delay		8.3			13.0			10.2			11.7	
Approach LOS		A			B			B			B	

Intersection Summary			
Cycle Length: 60			
Actuated Cycle Length: 37.4			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 10.8		Intersection LOS: B	
Intersection Capacity Utilization 47.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: California Av. & Lugonia Av.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	52	215	148	38	33	97	324	124	64	506	10
Future Volume (veh/h)	21	52	215	148	38	33	97	324	124	64	506	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	21	53	150	151	39	19	99	331	107	65	516	9
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	199	355	368	457	376	368	164	550	455	123	963	430
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.09	0.29	0.29	0.07	0.27	0.27
Sat Flow, veh/h	252	1550	1610	1034	1643	1610	1810	1900	1573	1810	3610	1610
Grp Volume(v), veh/h	74	0	150	151	39	19	99	331	107	65	516	9
Grp Sat Flow(s),veh/h/ln	1802	0	1610	1034	1643	1610	1810	1900	1573	1810	1805	1610
Q Serve(g_s), s	0.0	0.0	2.6	3.8	0.6	0.3	1.7	4.9	1.7	1.1	4.0	0.1
Cycle Q Clear(g_c), s	1.0	0.0	2.6	4.8	0.6	0.3	1.7	4.9	1.7	1.1	4.0	0.1
Prop In Lane	0.28		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	554	0	368	457	376	368	164	550	455	123	963	430
V/C Ratio(X)	0.13	0.00	0.41	0.33	0.10	0.05	0.60	0.60	0.24	0.53	0.54	0.02
Avail Cap(c_a), veh/h	1132	0	913	862	931	913	416	1252	1036	360	2268	1011
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.1	0.0	10.7	12.0	9.9	9.8	14.3	10.0	8.8	14.7	10.2	8.8
Incr Delay (d2), s/veh	0.1	0.0	0.7	0.4	0.1	0.1	3.5	1.1	0.3	3.4	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.7	0.7	0.2	0.1	0.6	1.3	0.4	0.4	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.2	0.0	11.4	12.4	10.1	9.9	17.8	11.0	9.1	18.1	10.7	8.8
LnGrp LOS	B	A	B	B	B	A	B	B	A	B	B	A
Approach Vol, veh/h		224			209			537			590	
Approach Delay, s/veh		11.0			11.8			11.9			11.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	13.9		12.0	7.5	13.2		12.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	21.5		18.5	7.5	20.5		18.5				
Max Q Clear Time (g_c+I1), s	3.1	6.9		4.6	3.7	6.0		6.8				
Green Ext Time (p_c), s	0.0	1.8		0.6	0.1	2.7		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		11.6	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	18	0	544	861	3
Future Vol, veh/h	0	18	0	544	861	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	20	0	591	936	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	470	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	466	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	466	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

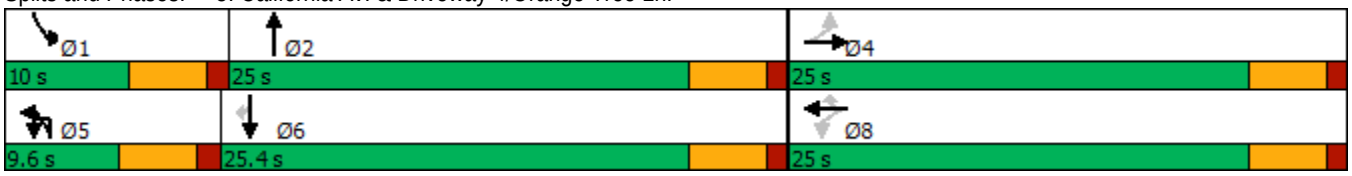
Approach	EB	NB	SB
HCM Control Delay, s	13.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	466	-	-
HCM Lane V/C Ratio	-	0.042	-	-
HCM Control Delay (s)	-	13.1	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	15	4	280	1	12	10	498	34	846
Future Volume (vph)	15	4	280	1	12	10	498	34	846
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Prot	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8				
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	25.0	25.0	25.0	25.0	25.0	9.6	25.0	10.0	25.4
Total Split (%)	41.7%	41.7%	41.7%	41.7%	41.7%	16.0%	41.7%	16.7%	42.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5		4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	Max
Act Effct Green (s)		16.8		16.8	16.8	5.2	23.8	5.6	22.2
Actuated g/C Ratio		0.31		0.31	0.31	0.10	0.45	0.10	0.42
v/c Ratio		0.10		0.78	0.02	0.27	0.47	0.21	0.65
Control Delay		9.2		32.4	0.1	29.6	12.4	27.8	17.3
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		9.2		32.4	0.1	29.6	12.4	27.8	17.3
LOS		A		C	A	C	B	C	B
Approach Delay		9.2		31.1			13.4		17.7
Approach LOS		A		C			B		B

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 53.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 18.0	Intersection LOS: B
Intersection Capacity Utilization 61.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: California Av. & Driveway 4/Orange Tree Ln.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	15	4	22	280	1	12	32	10	498	145	34	846
Future Volume (veh/h)	15	4	22	280	1	12	32	10	498	145	34	846
Initial Q (Qb), veh	0	0	0	0	0	0		0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00		1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No				No			No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900		1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	17	5	25	322	1	5		11	572	120	39	972
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87		0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	0	0	0	0	0	0		0	0	0	0	0
Cap, veh/h	86	50	57	395	1	581		25	1072	224	73	1398
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36		0.01	0.36	0.36	0.04	0.39
Sat Flow, veh/h	0	138	157	744	2	1610		1810	2970	621	1810	3610
Grp Volume(v), veh/h	47	0	0	323	0	5		11	347	345	39	972
Grp Sat Flow(s),veh/h/ln	296	0	0	746	0	1610		1810	1805	1786	1810	1805
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.1		0.3	8.6	8.7	1.2	12.8
Cycle Q Clear(g_c), s	20.5	0.0	0.0	20.5	0.0	0.1		0.3	8.6	8.7	1.2	12.8
Prop In Lane	0.36		0.53	1.00		1.00		1.00		0.35	1.00	
Lane Grp Cap(c), veh/h	193	0	0	396	0	581		25	651	645	73	1398
V/C Ratio(X)	0.24	0.00	0.00	0.82	0.00	0.01		0.43	0.53	0.54	0.53	0.70
Avail Cap(c_a), veh/h	193	0	0	396	0	581		162	651	645	175	1398
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00		1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	0.0	19.8	0.0	11.6		27.8	14.4	14.4	26.7	14.6
Incr Delay (d2), s/veh	0.6	0.0	0.0	12.4	0.0	0.0		11.2	3.1	3.2	5.9	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	5.5	0.0	0.0		0.2	3.4	3.4	0.6	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.1	0.0	0.0	32.3	0.0	11.6		39.0	17.5	17.5	32.6	17.5
LnGrp LOS	B	A	A	C	A	B		D	B	B	C	B
Approach Vol, veh/h		47			328				703			1011
Approach Delay, s/veh		15.1			32.0				17.8			18.0
Approach LOS		B			C				B			B

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	25.0		25.0	5.3	26.5		25.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	20.5		20.5	5.1	20.9		20.5				
Max Q Clear Time (g_c+I1), s	3.2	10.7		22.5	2.3	14.8		22.5				
Green Ext Time (p_c), s	0.0	2.8		0.0	0.0	3.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		20.1
HCM 6th LOS		C

Notes

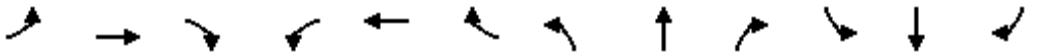
User approved ignoring U-Turning movement.

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (veh/h)	0
Initial Q (Qb), veh	0
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1900
Adj Flow Rate, veh/h	0
Peak Hour Factor	0.87
Percent Heavy Veh, %	0
Cap, veh/h	624
Arrive On Green	0.00
Sat Flow, veh/h	1610
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	1610
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	1.00
Lane Grp Cap(c), veh/h	624
V/C Ratio(X)	0.00
Avail Cap(c_a), veh/h	624
HCM Platoon Ratio	1.00
Upstream Filter(I)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3),s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d),s/veh	0.0
LnGrp LOS	A
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	3	139	407	547	496	652
Future Volume (vph)	3	139	407	547	496	652
Turn Type	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8				6
Detector Phase	8	8	5	2	6	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	15.3	14.5	21.9	21.9	21.9
Total Split (s)	27.0	27.0	35.0	73.0	38.0	38.0
Total Split (%)	27.0%	27.0%	35.0%	73.0%	38.0%	38.0%
Yellow Time (s)	4.3	4.3	3.5	3.9	3.9	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.5	4.9	4.9	4.9
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	19.6	19.6	27.6	70.2	38.2	38.2
Actuated g/C Ratio	0.20	0.20	0.28	0.70	0.38	0.38
v/c Ratio	0.86	0.35	0.90	0.24	0.28	0.75
Control Delay	61.8	7.9	72.6	5.7	23.0	13.3
Queue Delay	0.1	0.0	53.5	0.2	0.0	1.4
Total Delay	61.9	7.9	126.1	5.9	23.0	14.8
LOS	E	A	F	A	C	B
Approach Delay	43.7			57.2	18.3	
Approach LOS	D			E	B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 37.2	Intersection LOS: D
Intersection Capacity Utilization 90.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: California Av. & I-10 WB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	273	3	139	407	547	0	0	496	652
Future Volume (veh/h)	0	0	0	273	3	139	407	547	0	0	496	652
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				300	3	71	447	601	0	0	545	465
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				336	3	302	469	2565	0	0	2109	655
Arrive On Green				0.19	0.19	0.19	0.52	1.00	0.00	0.00	0.41	0.41
Sat Flow, veh/h				1792	18	1610	1810	3705	0	0	5358	1610
Grp Volume(v), veh/h				303	0	71	447	601	0	0	545	465
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1810	1805	0	0	1729	1610
Q Serve(g_s), s				16.3	0.0	3.7	23.5	0.0	0.0	0.0	7.0	24.1
Cycle Q Clear(g_c), s				16.3	0.0	3.7	23.5	0.0	0.0	0.0	7.0	24.1
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				339	0	302	469	2565	0	0	2109	655
V/C Ratio(X)				0.89	0.00	0.24	0.95	0.23	0.00	0.00	0.26	0.71
Avail Cap(c_a), veh/h				393	0	349	552	2565	0	0	2109	655
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.97	0.97	0.00	0.00	0.76	0.76
Uniform Delay (d), s/veh				39.7	0.0	34.5	23.5	0.0	0.0	0.0	19.7	24.7
Incr Delay (d2), s/veh				18.5	0.0	0.1	23.5	0.2	0.0	0.0	0.2	4.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.7	0.0	1.4	9.0	0.1	0.0	0.0	2.7	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				58.2	0.0	34.7	47.0	0.2	0.0	0.0	19.9	29.7
LnGrp LOS				E	A	C	D	A	A	A	B	C
Approach Vol, veh/h					374			1048			1010	
Approach Delay, s/veh					53.7			20.2			24.4	
Approach LOS					D			C			C	

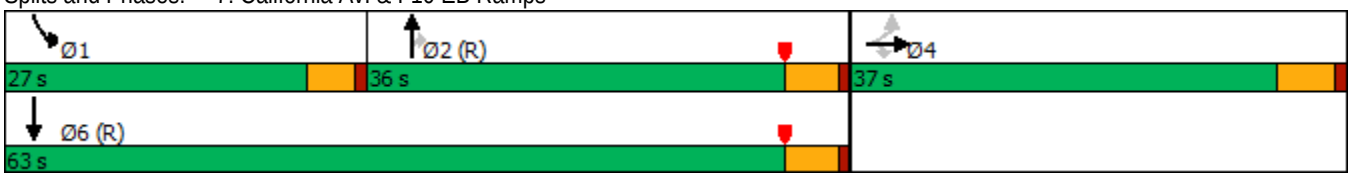
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.0			30.4	45.6		24.0				
Change Period (Y+Rc), s		4.9			4.5	4.9		5.3				
Max Green Setting (Gmax), s		68.1			30.5	33.1		21.7				
Max Q Clear Time (g_c+I1), s		2.0			25.5	26.1		18.3				
Green Ext Time (p_c), s		2.5			0.4	2.0		0.4				

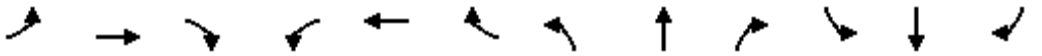
Intersection Summary												
HCM 6th Ctrl Delay			27.1									
HCM 6th LOS			C									

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	3	392	631	411	233	536
Future Volume (vph)	3	392	631	411	233	536
Turn Type	NA	Perm	NA	Perm	Prot	NA
Protected Phases	4		2		1	6
Permitted Phases		4		2		
Detector Phase	4	4	2	2	1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	15.3	15.3	23.9	23.9	14.5	25.9
Total Split (s)	37.0	37.0	36.0	36.0	27.0	63.0
Total Split (%)	37.0%	37.0%	36.0%	36.0%	27.0%	63.0%
Yellow Time (s)	4.3	4.3	3.9	3.9	3.5	3.9
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	5.3	4.9	4.9	4.5	4.9
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)	23.9	23.9	43.9	43.9	17.5	65.9
Actuated g/C Ratio	0.24	0.24	0.44	0.44	0.18	0.66
v/c Ratio	0.80	0.67	0.29	0.46	0.78	0.24
Control Delay	49.0	14.3	20.4	4.3	66.2	8.4
Queue Delay	4.2	0.0	0.0	0.0	0.3	0.2
Total Delay	53.2	14.3	20.4	4.3	66.5	8.6
LOS	D	B	C	A	E	A
Approach Delay	32.0		14.1			26.1
Approach LOS	C		B			C

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 22.8	Intersection LOS: C
Intersection Capacity Utilization 90.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 7: California Av. & I-10 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	324	3	392	0	0	0	0	631	411	233	536	0
Future Volume (veh/h)	324	3	392	0	0	0	0	631	411	233	536	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	341	3	196				0	664	426	245	564	0
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	388	3	348				0	2519	764	274	2462	0
Arrive On Green	0.22	0.22	0.22				0.00	0.49	0.49	0.30	1.00	0.00
Sat Flow, veh/h	1794	16	1610				0	5358	1573	1810	3705	0
Grp Volume(v), veh/h	344	0	196				0	664	426	245	564	0
Grp Sat Flow(s),veh/h/ln	1810	0	1610				0	1729	1573	1810	1805	0
Q Serve(g_s), s	18.4	0.0	10.9				0.0	7.6	19.1	12.9	0.0	0.0
Cycle Q Clear(g_c), s	18.4	0.0	10.9				0.0	7.6	19.1	12.9	0.0	0.0
Prop In Lane	0.99		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	391	0	348				0	2519	764	274	2462	0
V/C Ratio(X)	0.88	0.00	0.56				0.00	0.26	0.56	0.89	0.23	0.00
Avail Cap(c_a), veh/h	574	0	510				0	2519	764	407	2462	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.97	0.97	0.00
Uniform Delay (d), s/veh	37.9	0.0	35.0				0.0	15.2	18.1	34.1	0.0	0.0
Incr Delay (d2), s/veh	7.7	0.0	0.5				0.0	0.3	2.9	11.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	4.1				0.0	2.8	6.9	5.4	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.7	0.0	35.5				0.0	15.4	21.1	45.7	0.2	0.0
LnGrp LOS	D	A	D				A	B	C	D	A	A
Approach Vol, veh/h		540						1090			809	
Approach Delay, s/veh		42.0						17.6			14.0	
Approach LOS		D						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.6	53.5		26.9		73.1
Change Period (Y+Rc), s	4.5	4.9		5.3		4.9
Max Green Setting (Gmax), s	22.5	31.1		31.7		58.1
Max Q Clear Time (g_c+I1), s	14.9	21.1		20.4		2.0
Green Ext Time (p_c), s	0.2	2.8		1.2		2.3

Intersection Summary	
HCM 6th Ctrl Delay	21.8
HCM 6th LOS	C

APPENDIX 5.2: EXISTING PLUS PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

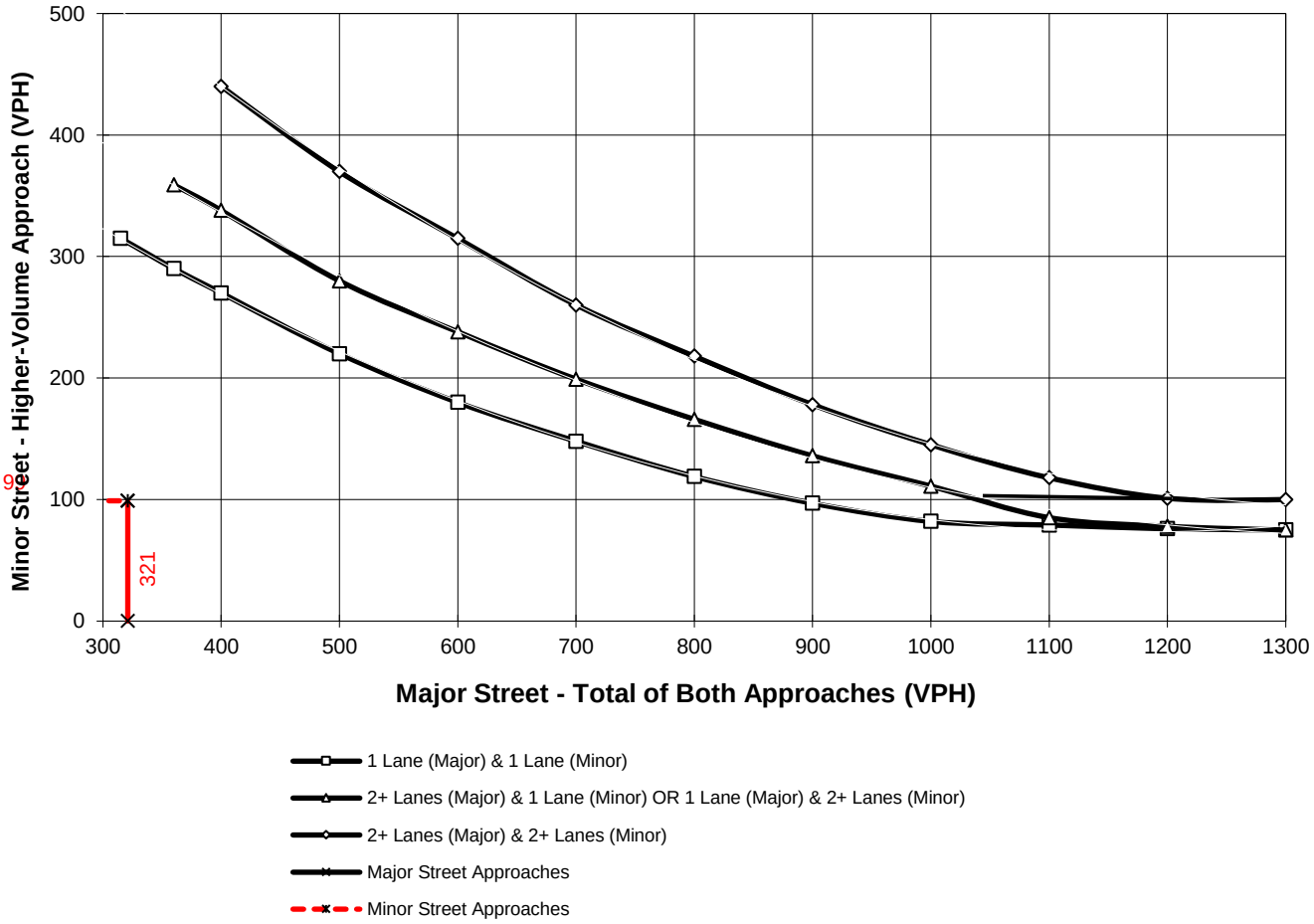
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P Conditions - Weekday PM Peak Hour**

Major Street Name = **Lugonia Av.**
Total of Both Approaches (VPH) = **321**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Driveway 1**
High Volume Approach (VPH) = **99**
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

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APPENDIX 5.3: EXISTING PLUS PROJECT CONDITIONS FREEWAY OFF-RAMP QUEUING ANALYSIS WORKSHEETS

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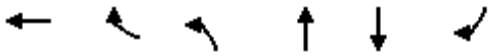


Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	437	428	378	841	260	425
v/c Ratio	0.85	0.76	0.87	0.38	0.15	0.52
Control Delay	49.4	29.2	63.1	10.6	26.6	5.8
Queue Delay	0.0	0.0	17.8	0.3	0.0	0.2
Total Delay	49.4	29.2	81.0	10.9	26.6	6.1
Queue Length 50th (ft)	259	161	262	150	44	0
Queue Length 95th (ft)	356	261	#368	177	72	78
Internal Link Dist (ft)	1516			274	259	
Turn Bay Length (ft)						
Base Capacity (vph)	610	644	498	2217	1697	814
Starvation Cap Reductn	0	0	113	727	0	70
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.66	0.98	0.56	0.15	0.57

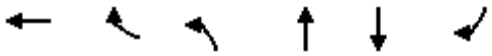
Intersection Summary

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

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	579	577	604	280	97	563
v/c Ratio	0.81	0.78	0.31	0.36	0.49	0.31
Control Delay	35.9	25.6	25.4	5.3	56.2	22.2
Queue Delay	1.2	0.0	0.0	0.0	0.0	0.3
Total Delay	37.0	25.6	25.4	5.3	56.2	22.5
Queue Length 50th (ft)	319	228	102	0	67	131
Queue Length 95th (ft)	386	311	161	64	m105	167
Internal Link Dist (ft)	2056		773			274
Turn Bay Length (ft)		740				
Base Capacity (vph)	899	886	1960	784	228	1816
Starvation Cap Reductn	0	0	0	0	0	635
Spillback Cap Reductn	140	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.65	0.31	0.36	0.43	0.48

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	303	153	447	601	545	716
v/c Ratio	0.86	0.35	0.90	0.24	0.28	0.75
Control Delay	61.8	7.9	72.6	5.7	23.0	13.3
Queue Delay	0.1	0.0	53.5	0.2	0.0	1.4
Total Delay	61.9	7.9	126.1	5.9	23.0	14.8
Queue Length 50th (ft)	183	0	309	80	92	93
Queue Length 95th (ft)	#309	51	#437	88	124	272
Internal Link Dist (ft)	1516			274	259	
Turn Bay Length (ft)						
Base Capacity (vph)	392	470	550	2535	1980	949
Starvation Cap Reductn	0	0	179	1075	0	96
Spillback Cap Reductn	2	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.33	1.20	0.41	0.28	0.84

Intersection Summary

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

Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	344	413	664	433	245	564
v/c Ratio	0.80	0.67	0.29	0.46	0.78	0.24
Control Delay	49.0	14.3	20.4	4.3	66.2	8.4
Queue Delay	4.2	0.0	0.0	0.0	0.3	0.2
Total Delay	53.2	14.3	20.4	4.3	66.5	8.6
Queue Length 50th (ft)	206	56	98	0	171	80
Queue Length 95th (ft)	278	144	157	69	m240	102
Internal Link Dist (ft)	2056		773			274
Turn Bay Length (ft)		740				
Base Capacity (vph)	574	720	2279	933	406	2379
Starvation Cap Reductn	0	0	0	0	15	946
Spillback Cap Reductn	156	0	52	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.57	0.30	0.46	0.63	0.39

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.