

APPENDIX 10b

PRAIRIE VIEW APARTMENTS (DPR20- 00008)

TRAFFIC ANALYSIS

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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
CAPCOA	California Air Pollution Control Officers Association
CEQA	California Environmental Quality Act
CMP	Congestion Management Program
DIF	Development Impact Fee
DU	Dwelling Units
E+P	Existing Plus Project
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
N/A	Not Applicable
MPH	Miles per Hour
NCHRP	National Cooperative Highway Research Program
NP	No (Without) Project
OPR	Governor’s Office of Planning and Research
PHF	Peak Hour Factor
Project	Prairie View Apartments
RTA	Riverside Transit Authority
SCAG	Southern California Association of Governments
TA	Traffic Analysis
TDM	Transportation Demand Management
v/c	Volume to Capacity
VMT	Vehicle Miles Traveled
vphgpl	Vehicles per Hour Green per Lane
WP	With Project
WRCOG	Western Riverside Council of Governments

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1 INTRODUCTION

This report presents the results of the Traffic Analysis (TA) for Prairie View Apartments (“Project”), which is located on the north side of Dale Street between Wilson Avenue and Murrieta Road, in the City of Perris, as shown on Exhibit 1-1. The purpose of this TA is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project, and where necessary recommend improvements to achieve acceptable operations consistent with General Plan level of service goals and policies. This traffic study has been prepared in accordance with the County of Riverside’s Transportation Analysis Guidelines for Level of Service and Vehicle Miles Traveled (December 2020), and consultation with City of Perris staff during the traffic study scoping process. (1) The Project Traffic Study Scoping agreement is provided in Appendix 1.1 of this TA.

1.1 SUMMARY OF FINDINGS

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

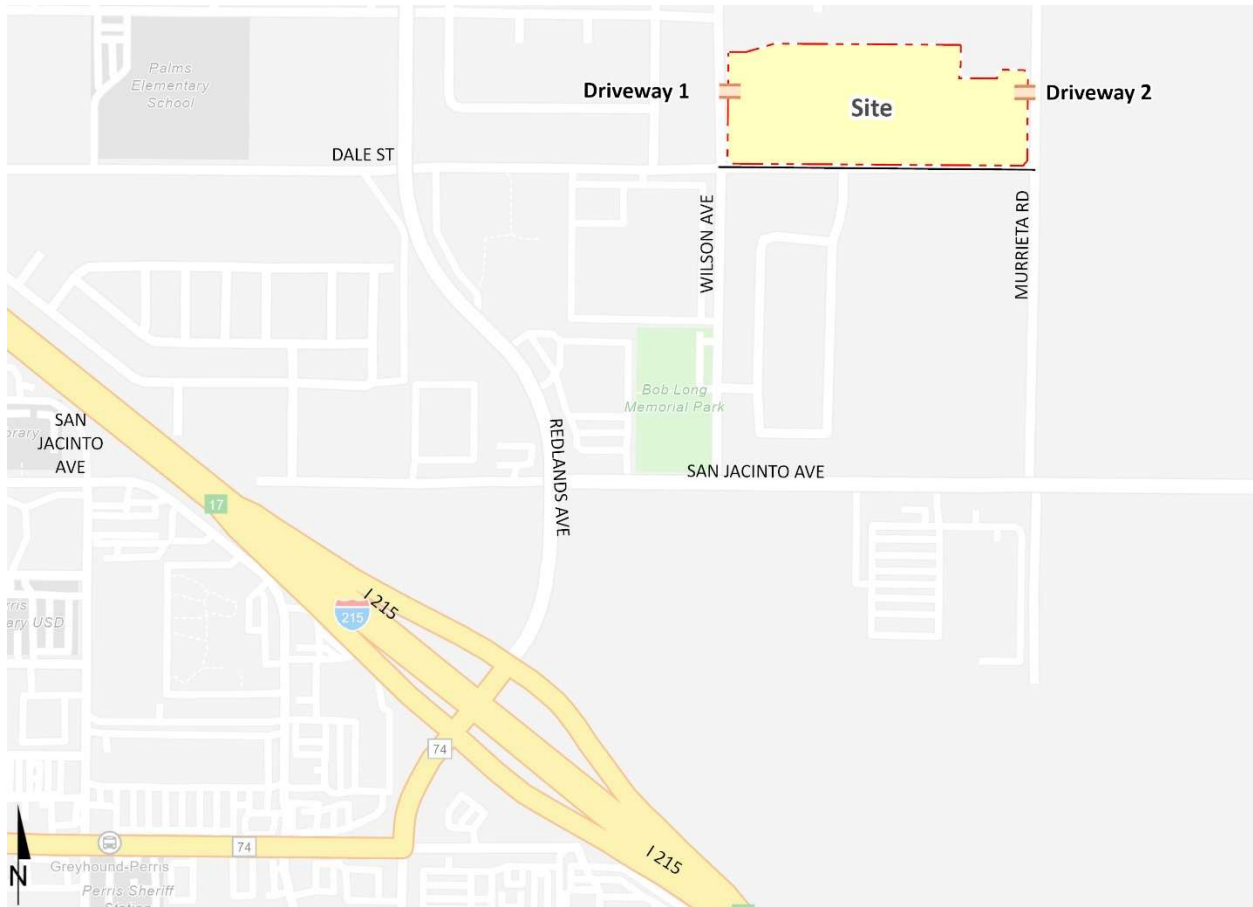
- The proposed driveway (Driveway 1) on Wilson Avenue will be gated and stop controlled for exiting (egress) traffic only.
- The proposed driveway (Driveway 2) on Murrieta Road will be gated and stop controlled.
- Project to construct Murrieta Road at its ultimate half-section-width as a Major Collector (78-foot right-of-way) from Dale Street to the northern Project boundary consistent with the City’s standards
- The site adjacent roadway, Wilson Avenue, appears to be built to its ultimate General Plan curb-to-curb width. However, the Project should improve the curb-and-gutter, sidewalks, and landscape along the frontage in addition to accommodating improvements to facilitate site access at the driveway.

Additional details and intersection lane geometrics are provided in Section 1.6 *Recommendations* of this report. The proposed Project is not anticipated to require the construction of any off-site improvements. However, the Project Applicant’s responsibility for the Project’s contributions towards deficient off-site intersections is fulfilled through fair share contribution or payment into pre-existing fee programs (if applicable) that would be assigned to the future construction of any future local/regional improvement needs. The Project Applicant would be required to pay requisite fees consistent with the City’s requirements (see Section 8 *Local and Regional Funding Mechanisms*).

1.1.1 VEHICLE MILES TRAVELED (VMT) SUMMARY

The Project was evaluated consistent with the City’s VMT Guidelines and Scoping Form. The Project was not found to meet any available screening criteria and a VMT analysis was performed. The Project was found to exceed the City’s adopted VMT per capita threshold for residential land uses using the City’s Scoping Form and has a potentially significant impact. With inclusion of VMT reduction measures for high density residential projects, the Project’s VMT per capita was reduced to a level below the City’s impact threshold and the Project’s VMT impact is less than significant. (Additional details can be found in Section 1.7 *Vehicle Miles Traveled (VMT)*)

EXHIBIT 1-1: LOCATION MAP



1.2 PROJECT OVERVIEW

A preliminary site plan for the proposed Project is shown on Exhibit 1-2. The Project is proposed to consist of the development of 287 three-story multi-family residential dwelling units. As indicated on Exhibit 1-2, vehicular access will be provided via a driveway on Wilson Avenue (exit only) and a driveway on Murrieta Road (full access). Regional access to the Project site is accommodated from the I-215 Freeway via Redlands Avenue. 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). (2) The Project is anticipated to generate a net total of 1,934 two-way trips per day with 115 AM peak hour trips and 145 PM peak hour trips. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

1.3 ANALYSIS SCENARIOS

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

- Existing (2022) Conditions
- Existing plus Project (E+P) Conditions
- Opening Year Cumulative (2024) Without Project Conditions
- Opening Year Cumulative (2024) With Project Conditions
- Horizon Year (2045) Without Project
- Horizon Year (2045) With Project

1.3.1 EXISTING (2022) CONDITIONS

Information for Existing (2022) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared. Local schools were in session with in-person instruction at the time of the traffic counts. Traffic counts were conducted in February 2022 based on vehicle classification.

1.3.2 EXISTING PLUS PROJECT CONDITIONS

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

EXHIBIT 1-2: PRELIMINARY SITE PLAN



1.3.3 OPENING YEAR CUMULATIVE (2024) CONDITIONS

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

1.3.4 HORIZON YEAR (2045) CONDITIONS

Traffic projections for Horizon Year (2045) conditions were derived from the County of Riverside refined version of the Riverside County Transportation Analysis Model (RIVCOM) using accepted procedures for model forecast refinement and smoothing. The Horizon Year conditions analysis will be utilized to determine if improvements funded through regional transportation mitigation fee programs, such as the Transportation Uniform Mitigation Fee (TUMF) program, can accommodate the long-range cumulative traffic at the target Level of Service (LOS) identified in the City of Perris (lead agency) General Plan. (3) Each of these regional transportation fee programs are discussed in more detail in Section 8 *Local and Regional Funding Mechanisms*.

1.4 STUDY AREA

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

The 9 study area intersections shown on Exhibit 1-3 and listed in Table 1-1 were selected for evaluation in this TA based on consultation with City of Perris staff. At a minimum, the study area includes intersections where the Project is anticipated to contribute 50 or more peak hour trips per the County's traffic study guidelines. (1) The "50 peak hour trip" criterion represents a minimum number of trips at which a typical intersection would have the potential to be affected by a given development proposal. The 50 peak hour trip criterion is a traffic engineering rule of thumb that is accepted and widely used within Riverside County (including the City of Perris) for estimating a potential area of influence (i.e., study area).

The intent of a CMP is to more link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The County of Riverside CMP became effective with the passage of Proposition 111 in 1990 and most recently updated in 2019 as part of the Riverside County Long Range Transportation Study. The Riverside County Transportation Commission (RCTC) adopted the 2019 CMP for the County of Riverside in December 2019. (4) There are no study area intersections identified as a Riverside County CMP intersection.

EXHIBIT 1-3: STUDY AREA

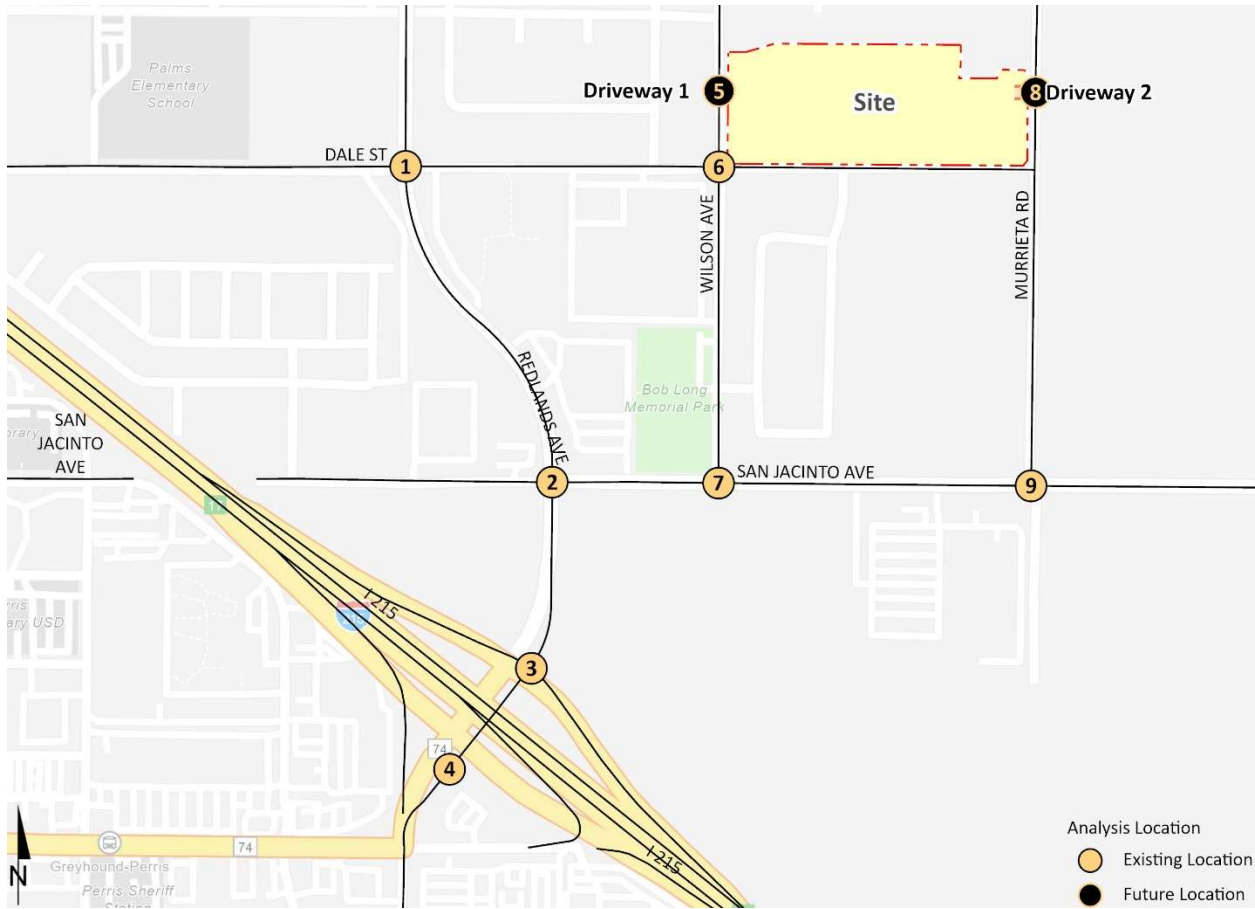


TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

# Intersection	Jurisdiction	CMP?
1 Redlands Av. & Dale St.	City of Perris	No
2 Redlands Av. & San Jacinto Av.	City of Perris	No
3 Redlands Av. & I-215 NB Ramps	City of Perris, Caltrans	No
4 Redlands Av. & I-215 SB Ramps	City of Perris, Caltrans	No
5 Wilson Av. & Driveway 1	City of Perris	No
6 Wilson Av. & Dale St.	City of Perris	No
7 Wilson Av. & San Jacinto Av.	City of Perris	No
8 Murrieta Rd. & Driveway 2	City of Perris	No
9 Murrieta Rd. & San Jacinto Av.	City of Perris	No

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*, Section 6 *Opening Year Cumulative (2024) Traffic Conditions*, and Section 7 *Horizon Year (2045) 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

# Intersection	Existing		E+P		2022 Without Project		2024 With Project		2045 Without Project		2045 With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1 Redlands Av. & Dale St.	●	●	●	●	●	●	●	●	●	●	●	●
2 Redlands Av. & San Jacinto Av.	●	●	●	●	●	●	●	●	●	●	●	●
3 Redlands Av. & I-215 NB Ramps	●	●	●	●	●	●	●	●	●	●	●	●
4 Redlands Av. & I-215 SB Ramps	●	●	●	●	●	●	●	●	●	●	●	●
5 Wilson Av. & Driveway 1	N/A	N/A	●	●	N/A	N/A	●	●	N/A	N/A	●	●
6 Wilson Av. & Dale St.	●	●	●	●	●	●	●	●	●	●	●	●
7 Wilson Av. & San Jacinto Av.	●	●	●	●	●	●	●	●	●	●	●	●
8 Murrieta Rd. & Driveway 2	N/A	N/A	●	●	N/A	N/A	●	●	N/A	N/A	●	●
9 Murrieta Rd. & San Jacinto Av.	●	●	●	●	●	●	●	●	●	●	●	●

● = A - D ● = E ● = F

1.5.1 EXISTING (2022) CONDITIONS

Intersections

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

Queues

There are no movements that currently experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows for Existing (2022) traffic conditions.

1.5.2 E+P CONDITIONS

Intersections

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

Queues

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

1.5.3 OPENING YEAR CUMULATIVE (2024) CONDITIONS

Intersections

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

- Redlands Avenue & San Jacinto Avenue (#2) – LOS F AM and PM peak hours
- Wilson Avenue & San Jacinto Avenue (#7) – LOS F AM and PM peak hours
- Murrieta Road & San Jacinto Avenue (#9) – LOS F AM and PM peak hours

The addition of Project traffic is not anticipated to result in any additional deficiencies.

Queues

There are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows for Opening Year Cumulative (2024) traffic conditions.

1.5.4 HORIZON YEAR (2045) CONDITIONS

Intersections

The following study area intersections are anticipated to operate at an unacceptable LOS under Horizon Year (2045) Without Project traffic conditions:

- Redlands Avenue & San Jacinto Avenue (#2) – LOS F AM and PM peak hours
- Wilson Avenue & San Jacinto Avenue (#7) – LOS F AM and PM peak hours
- Murrieta Road & San Jacinto Avenue (#9) – LOS F AM and PM peak hours

The addition of Project traffic is not anticipated to result in any additional deficiencies.

Queues

There are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows for Horizon Year (2045) traffic conditions.

1.6 RECOMMENDATIONS

1.6.1 SITE ADJACENT AND SITE ACCESS RECOMMENDATIONS

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

Recommendation 1 – Wilson Avenue & Driveway 1 (#5) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the westbound approach. The driveway should be restricted to exiting traffic only.

Recommendation 2 – Murrieta Road & Driveway 2 (#8) – The following improvements are necessary to accommodate site access:

- Project to install a stop control on the eastbound approach. The driveway should allow full-access movement.

Recommendation 3 – Murrieta Road – The following improvements are necessary to accommodate site access:

- Project to construct Murrieta Road at its ultimate width as a Major Collector (78-foot right-of-way) from Dale Street to the northern Project boundary consistent with the City's standards.

Recommendation 4 – Wilson Avenue – the site adjacent roadway appears to be built to its ultimate General Plan curb-to-curb width adjacent to the Project. However, the Project should improve the curb-and-gutter, sidewalks, and landscape along the frontage in addition to accommodating improvements to facilitate site access at the driveway.

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 Caltrans and City of Perris sight distance standards at the time of preparation of final grading, landscape, and street improvement plans.

1.6.2 OFF-SITE RECOMMENDATIONS

The recommended improvements needed to address the cumulative deficiencies identified under Existing (2022), E+P, Opening Year Cumulative (2024), and Horizon Year (2045) traffic conditions are summarized in Table 1-3. For those improvements listed in Table 1-3 and not constructed as part of the Project, the Project Applicant's responsibility for the Project's contributions towards deficient intersections is fulfilled through payment of fair share and/or fees. Table 1-3 also summarizes the applicable cost associated with each of the recommended improvements. The costs have been estimated using the data provided in Appendix "G" of the CMP (2003) for preliminary construction costs. Appendix "G" of the CMP (2003) has been provided in Appendix 1.2.

EXHIBIT 1-4: SITE ACCESS RECOMMENDATIONS



5	Wilson Av. & Dwy. 1	8	Murrieta Rd. & Dwy. 1

-  = Stop Sign Improvement
-  = Existing Lane
-  = Lane Improvement

TABLE 1-3: SUMMARY OF IMPROVEMENTS AND ROUGH ORDER OF MAGNITUDE COSTS

#	Intersection	Jurisdiction	Opening Year Cumulative (2024) With Project	Horizon Year (2040) With Project	Improvements in TUMF? ¹	Project Responsibility ²	Total Cost ⁴	Fair Share % ³	Fair Share Cost ⁶
2	Redlands Av. & San Jacinto Av.	City of Perris	- Add 2nd NB right lane	- Same	No	Fair Share	\$83,700	3.29%	2755.98
			- Modify the TS to implement NB/EB right turn lanes with overlap phasing	- Same	No	Fair Share	\$8,370		\$276
			- Modify signal timing with a 140/150-second cycle length during the peak hours	- Same	No	Fair Share	\$8,370		\$276
							\$100,440		\$3,307
7	Wilson Av. & San Jacinto Av.	City of Perris	- Add 2nd WB through lane by restriping	- Same	No	Fair Share	\$41,850	5.02%	\$2,102
			- Add EB left lane	- Same	No	Fair Share	\$83,700		\$4,204
			- Install a traffic signal	- Same	No	Fair Share	\$600,000		\$30,135
							\$725,550		\$36,441
9	Murrieta Rd. & San Jacinto Av.	City of Perris	- Install a traffic signal	- Same	No	Fair Share	\$600,000	6.94%	\$41,653
			- Add 2nd EB through lane by restriping	- Add 2nd EB through lane by restriping	No	Fair Share	\$25,000		\$1,736
			- Add 2nd WB through lane	- Add 2nd WB through lane	No	Fair Share	\$301,320		\$20,918
							\$926,320		\$64,307
Total Project Fair Share Contribution to the City of Perris ⁵							\$1,752,310		\$104,054

¹ Improvements included in TUMF fee program. Although identified as a TUMF facility, the improvement is not currently identified on the Central Zone 5-Year Transportation Improvement Program Amendment (2021).

² Identifies the Project's responsibility to construct an improvement or contribute fair share or fee payment towards the implementation of the improvements shown. If identified as a Project construct obligation, then no fair share has been identified.

³ Program improvements constructed by Project may be eligible for fee credit, at discretion of the County. The highest peak hour fair share percentage for each intersection, as shown in Table 8-1, has been utilized.

⁴ Costs have been estimated using the data provided in Appendix "G" of the CMP (2003) for preliminary construction costs. A growth factor of 1.674 has been utilized to reflect 2022 costs.

⁵ Total project fair share contribution consists of the improvements which are not already included in a fee program for those intersections wholly or partially within the City of Perris.

⁶ Rough order of magnitude cost estimate.

1.6.3 QUEUING ANALYSIS AT THE PROJECT DRIVEWAYS

A queuing analysis was conducted at the study area intersections for Horizon Year (2045) With Project traffic conditions to determine the turn pocket lengths necessary to accommodate 95th percentile queues. The analysis was conducted for the weekday AM and weekday PM peak hours. The results have been provided in Appendix 1.3.

SimTraffic is designed to model networks of signalized and unsignalized intersections, with the primary purpose of checking and fine-tuning signal operations. SimTraffic uses the input parameters from Synchro to generate random simulations. The 95th percentile queue is derived from the average queue plus 1.65 standard deviations. The 95th percentile queue is not necessarily ever observed; it is simply based on statistical calculations (or Average Queue plus 1.65 standard deviations). Many agencies utilize the 95th percentile queues for design purposes. A vehicle is considered queued whenever it is traveling at less than 10 feet/second. The random simulations generated by SimTraffic have been utilized to determine the 95th percentile queue lengths observed for each turn movement. A SimTraffic simulation has been recorded five (5) times, during the weekday AM and weekday PM peak hours, and has been seeded for 30-minute periods with 60-minute recording intervals.

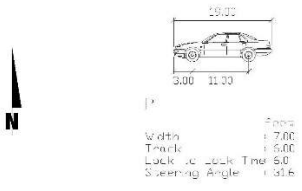
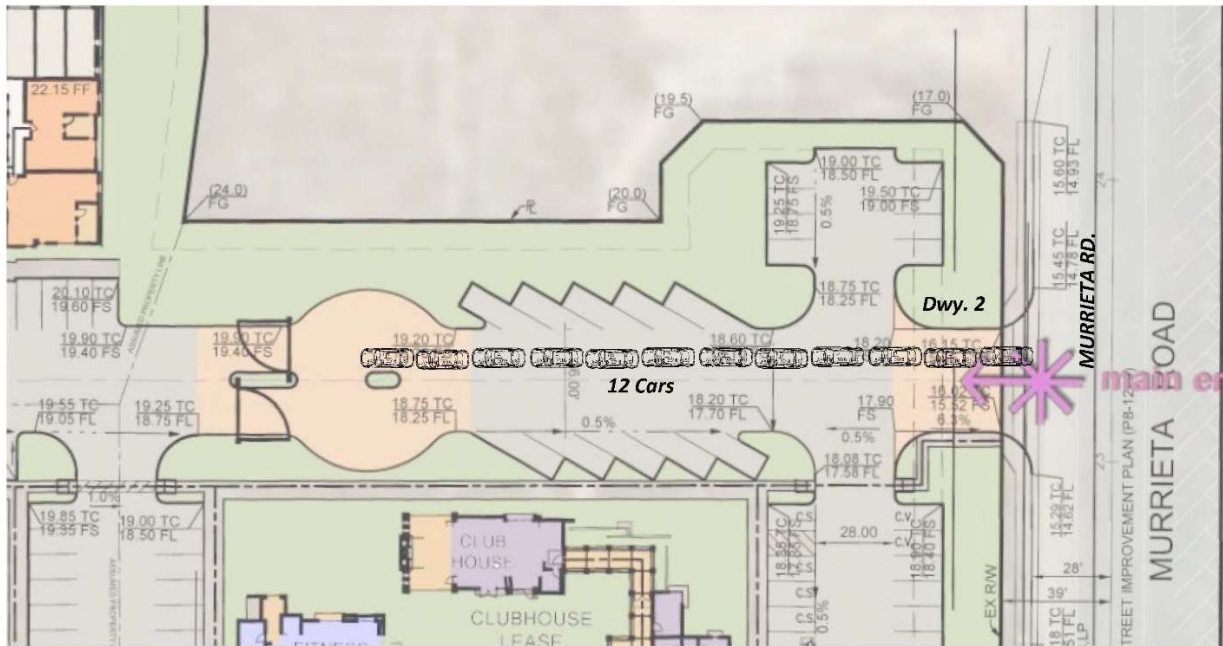
The minimum stacking distance required, based on the anticipated 95th percentile queues, is shown in Table 1-4. The highest queue length during either the AM or PM peak hour is shown in bold. The queue lengths shown in Table 1-4 represent the worst-case queuing lengths for the proposed Project Driveway 2. In other words, any stacking distance greater than the shown queue lengths should accommodate proposed Project vehicles, without backing onto the public streets. The highest queue anticipated is 59-feet which is approximately 2.5 car lengths (assuming 25-feet per vehicle). The gate stacking for Driveway 2 is shown on Exhibit 1-5, which shows Driveway 2 can sufficiently accommodate the anticipated gate queuing. Driveway 1 is restricted to serve exiting traffic only, therefore, no gate stacking queuing analysis has been conducted at this access point.

TABLE 1-4: PROJECT DRIVEWAY PEAK HOUR QUEUING SUMMARY

Intersection	Movement	95th Percentile Queue (Feet)	
		AM Peak Hour	PM Peak Hour
Murrieta Rd. & Driveway 2 (#8)	EB	52	44
	WB	27	59

BOLD = Highest queue length between AM and PM peak hours.

EXHIBIT 1-5: DRIVEWAY 2 GATE STACKING



1.7 VEHICLE MILES TRAVELED (VMT)

1.7.1 BACKGROUND

Changes to the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines) were adopted in December 2018, which requires all lead agencies to adopt VMT as a replacement for automobile delay-based level of service as the new measure for identifying transportation impacts for land use projects. This statewide mandate went into effect July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) (Technical Advisory). Based on OPR's Technical Advisory, the City of Perris adopted their Transportation Impact Analysis Guidelines for CEQA (May 2020) (City Guidelines). The adopted City Guidelines have been utilized to prepare the VMT analysis.

1.7.2 VMT SCREENING

Based on a more detailed review of the applicable VMT screening methods outlined in the City Guidelines, it is determined that the Project is not eligible for screening and further VMT Analysis is required.

1.7.3 VMT ANALYSIS

As noted in the City Guidelines, Projects that do not meet screening criteria and are above 2,500 daily vehicle trips are to utilize the City's scoping form to perform a VMT analysis and subsequent VMT mitigation (if required) to reduce the Project's VMT impact below the City's adopted thresholds. The City's scoping form contains base year data obtained from the RIVTAM base year 2012 traffic model. The RIVTAM base year traffic model was also used to derive the City's impact thresholds.

The Project resides in TAZ 3842 and the VMT per capita for TAZ 3767 is 16.30. Whereas the City of Perris citywide average is 15.05 VMT per employee. The Project's VMT impact is potentially significant. The scoping form results in a mitigation requirement of 7.67% reduction to adequately mitigate the VMT impacts of the Project's TAZ to below the City's impact threshold.

1.7.4 POTENTIAL VMT MITIGATION STRATEGIES

Mitigation may be provided in the form transportation demand management (TDM) measures or participation in a VMT fee program, which is not yet available. Therefore, VMT reduction measures focused on reducing VMT and the anticipated reduction in VMT associated with this measure have been estimated based on the research contained in the California Air Pollution Control Officers Association (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures (CAPCOA, 2010) and are presented below.

LUT-1 Increase Density – Designing the Project with increased densities, where allowed by the General Plan and/or Zoning Ordinance reduces GHG emissions associated with traffic in several ways. Density is usually measured in terms of persons, jobs, or dwellings per unit area. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose. This strategy also provides a foundation for implementation of many other strategies which would benefit

from increased densities. For example, transit ridership increases with density, which justifies enhanced transit service.

Mitigation Method for LUT-1:

% VMT Reduction = A * B [not to exceed 30%]

Formula:

- A: [not to exceed 500% increase]
 - If housing: (Number of housing units per acre – 7.6) / 7.6
- B: 0.07

Application to Project:

The Project is proposing a high-density residential development at 22 dwelling units per acre and based on the CAPCOA method for LUT-1. Based on the calculation method provided by CAPCOA the following calculations for the proposed Project are as follows:

$$(22.0 - 7.6) / 7.6 = 189\%$$

$$189\% \times 0.07 = 13.23\%$$

As a result, the high-density nature of the Project has an inherent effect on VMT that could not be adequately accounted for in the City's scoping form, which requires a mitigation of 7.67%. With the consideration of the higher density the Project is proposing, the VMT per capita is reduced by 13.23%, which would bring the Project VMT per capita below the City's impact threshold. The Project's VMT impact is less than significant.

2 METHODOLOGIES

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

2.1 LEVEL OF SERVICE

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

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The 6th Edition Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (5) The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The City of Perris requires signalized intersection operations analysis based on the methodology described in the HCM. (5) Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is related to the average control delay per vehicle and is correlated to a LOS designation as described on Table 2-1.

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

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

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

Source: HCM, 6th Edition

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

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

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

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Perris requires the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (5) 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 the Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the California Department of Transportation (Caltrans) California Manual on Uniform Traffic Control Devices (CA MUTCD) for all study area intersections. (6)

The signal warrant criteria for Existing conditions are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The Caltrans CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (6) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing study area intersections for all analysis scenarios. Warrant 3 is appropriate to use for this TA because it provides specialized warrant criteria for intersections with rural characteristics (e.g., located in communities with populations of less than 10,000 persons or with adjacent major streets operating above 40 miles per hour). For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection.

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

level ADT-based signal warrant analysis worksheets. Traffic signal warrant analyses were performed for the following study area intersection shown in Table 2-3:

TABLE 2-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

#	Intersection	Jurisdiction
5	Wilson Av. & Driveway 1	City of Perris
6	Wilson Av. & Dale St.	City of Perris
7	Wilson Av. & San Jacinto Av.	City of Perris
8	Murrieta Rd. & Driveway 2	City of Perris
9	Murrieta Rd. & San Jacinto Av.	City of Perris

Traffic signal warrant analyses were performed for all of the full access unsignalized study area intersections. The traffic signal warrant analysis for existing (2022) conditions are presented in Section 3 *Existing (2022) Traffic Analysis*. The traffic signal warrant analyses for future conditions are presented in Section 5 *E+P Traffic Analysis*, Section 6 *Opening Year Cumulative (2024) Traffic Analysis*, and Section 6 *Horizon Year (2045) Traffic Analysis* of this report.

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

2.4 QUEUING ANALYSIS

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

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

2.5 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

The definition of an intersection deficiency has been obtained from the City of Perris' General Plan. LOS D along all City maintained roads (including intersections) and LOS D along I-215 and SR-74 (including intersections with local streets and roads). An exception to the local road standard is LOS E, at intersections of any Arterials and Expressways with SR-74, the Ramona-Cajalco Expressway, or at I-215 Freeway ramps. (7)

LOS E may be allowed within the boundaries of the Downtown Specific Plan Area to the extent that it would support transit-oriented development and walkable communities. Increased congestion in this area will facilitate an increase in transit ridership and encourage development of a complementary mix of land uses within a comfortable walking distance from light rail stations.

For the purposes of this traffic impact analysis, LOS D has also been considered the acceptable threshold for all study area intersections.

2.6 DEFICIENCY CRITERIA

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies. The following deficiency criteria has been utilized for the City of Perris. To determine whether the addition of project-related traffic at a study intersection would result in a deficiency, the following will be utilized:

- A project-related deficiency is considered direct and significant when a study intersection operates at an acceptable LOS for existing conditions (without the project) and the addition of 50 or more AM or PM peak hour project trips causes the intersection to operate at an unacceptable LOS for existing plus project (E+P) traffic conditions.
- A project-related deficiency is considered direct and significant when a study intersection operates at an unacceptable LOS for existing conditions (without the project) and the addition of 50 or more AM or PM peak hour project trips causes the intersection delay to increase by 2 seconds or more.
- A cumulative deficiency is considered significant when a study intersection is forecast to operate at an unacceptable LOS with the addition of cumulative/background traffic and 50 or more AM or PM peak hour project trips.

2.7 PROJECT FAIR SHARE CALCULATION METHODOLOGY

In cases where this TA identifies that the Project would contribute additional traffic volumes to traffic deficiencies, Project fair share costs of improvements necessary to address deficiencies have been identified. The Project's fair share cost of improvements is determined based on the following equation, which is the ratio of Project traffic to new traffic, and new traffic is total future (Horizon Year) traffic less existing baseline traffic:

$$\text{Project Fair Share \%} = \frac{\text{Project AM/PM Traffic}}{(2045 \text{ With Project AM/PM Total Traffic} - \text{Existing (2022) AM/PM Traffic})}$$

The project fair share percentage has been calculated for both the AM peak hour and PM peak hour and the highest of the two has been selected. The Project fair share contribution calculations are presented in Section 8 *Local and Regional Funding Mechanisms* of this TA.

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3 AREA CONDITIONS

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

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the agreement with City of Perris staff (Appendix 1.1), the study area includes a total of 9 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 PERRIS GENERAL PLAN CIRCULATION ELEMENT

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

Secondary Arterials are designed to accommodate four travel lanes with a raised median, within a 94-foot right of way. The following study area roadways within the City of Perris are classified as Secondary Arterials:

- Redlands Avenue
- San Jacinto Road

Major Collectors are designed to accommodate two travel lanes with a painted median, within a 78-foot right of way. The following study area roadways within the City of Perris are classified as Collectors:

- Murrieta Road

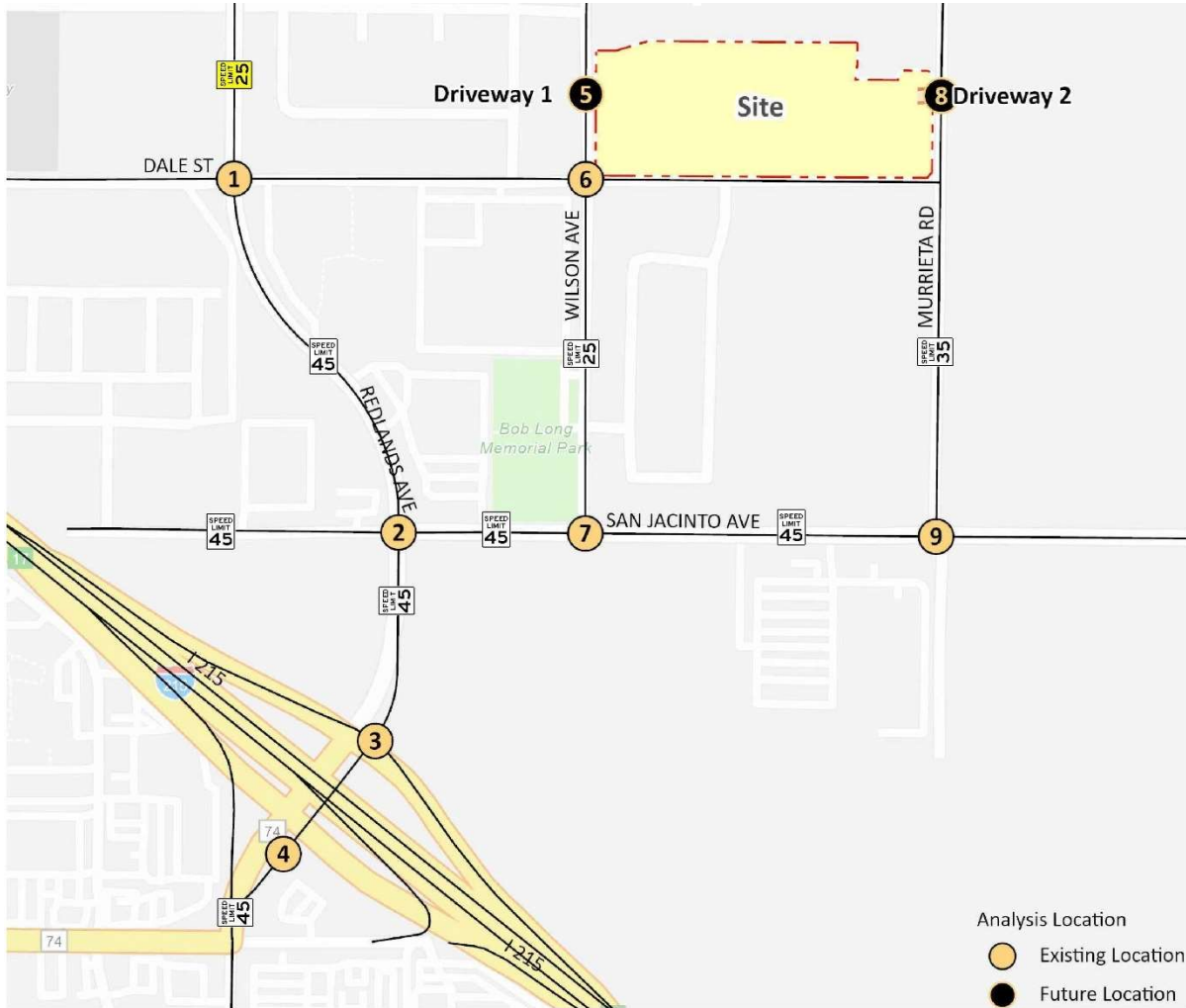
Collectors are designed to accommodate two travel lanes, within a 66-foot right of way. The following study area roadways within the City of Perris are classified as Collectors:

- Wilson Avenue

3.3 BICYCLE, EQUESTRIAN, & PEDESTRIAN FACILITIES

Field observations indicate nominal pedestrian and bicycle activity within the study area. As shown on Exhibit 3-4, pedestrian facilities are built out along Dale Street, Wilson Avenue, Redlands Avenue, and portions of San Jacinto Avenue and Murrieta Road. The City of Perris bike networks are shown on Exhibit 3-5. As shown on Exhibit 3-5, there is a Class II bike lane along portions of Wilson Avenue, a Class I path along Murrieta Road, and a Class IV bikeway along portions of San Jacinto Avenue.

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



1	2	3	4	5
<i>Redlands Av. & Dale St.</i>	<i>Redlands Av. & San Jacinto Av.</i>	<i>Redlands Av. & I-215 NB Ramps</i>	<i>Redlands Av. & I-215 SB Ramps</i>	<i>Wilson Av. & Dwy. 1</i>
				Future Intersection
<i>Wilson Av. & Dale St.</i>	<i>Wilson Av. & San Jacinto Av.</i>	<i>Murrieta Rd. & Dwy. 1</i>	<i>Murrieta Rd. & San Jacinto Av.</i>	
		Future Intersection		

= Traffic Signal
 = Stop Sign
4 = Number of Lanes
D = Divided
U = Undivided
 = Speed Limit (MPH)
 = School Speed Limit (MPH)

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

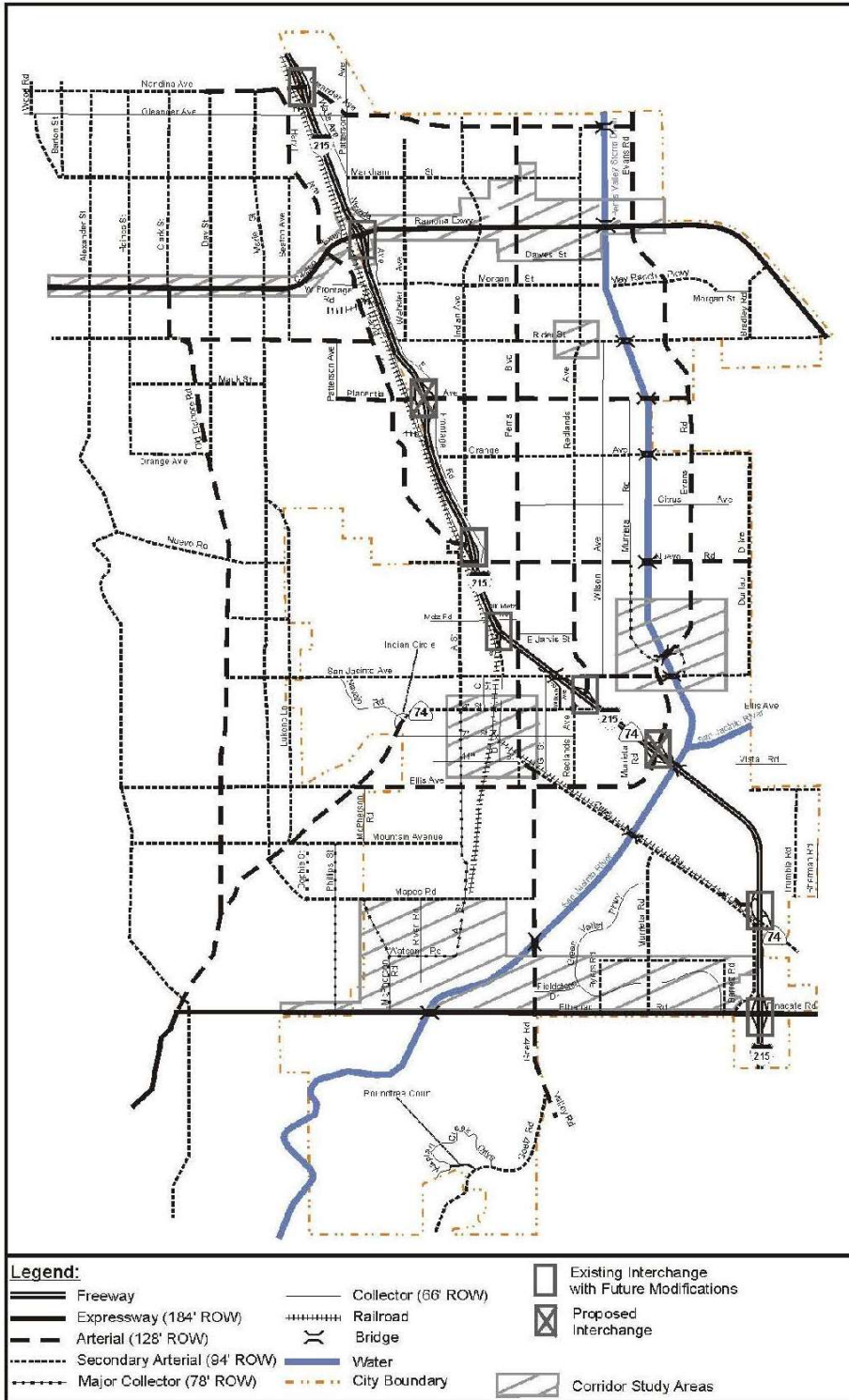
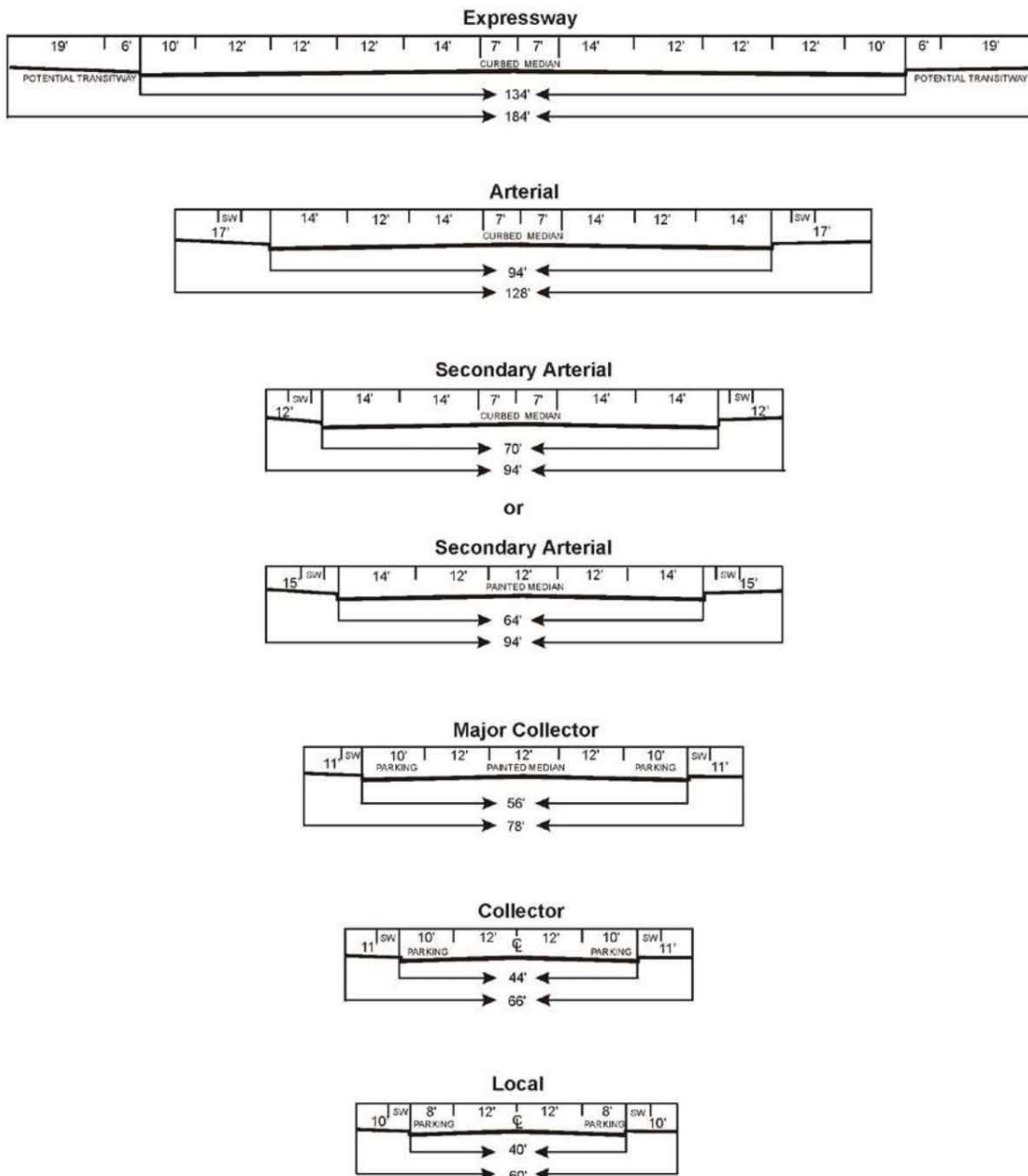


EXHIBIT 3-3: CITY OF PERRIS GENERAL PLAN ROADWAY CROSS-SECTIONS

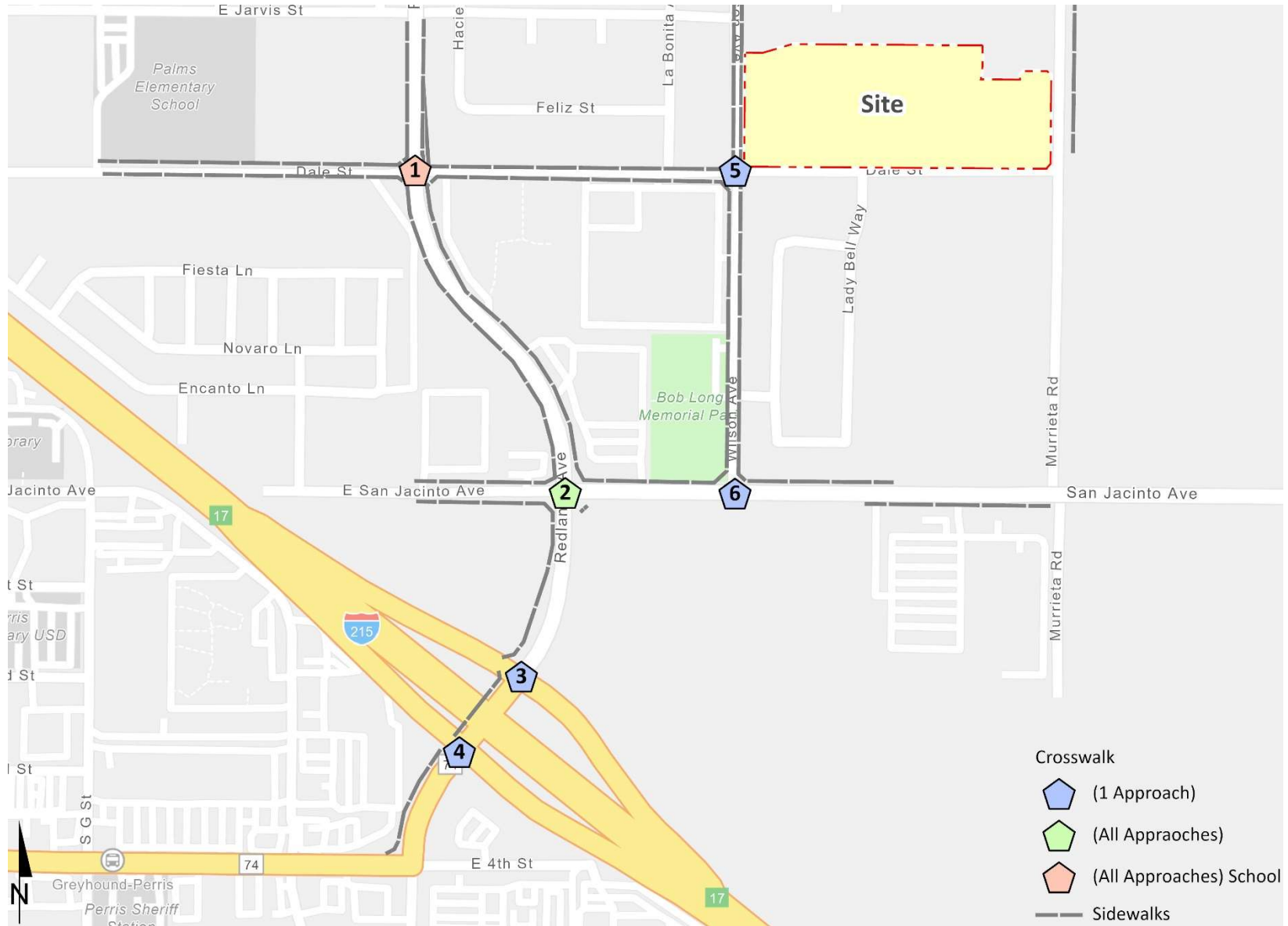


Specific details for each cross-section follow in Figures 4.1 A - 4.1 F

Legend

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

EXHIBIT 3-4: EXISTING PEDESTRIAN FACILITIES



3.4 TRANSIT SERVICE

The study area is currently served by Riverside Transit Agency (RTA). RTA Route 30 runs along Redlands Avenue. The transit route is illustrated on Exhibit 3-5. As shown, there are no existing routes that run immediately adjacent to the Project. Transit service is reviewed and updated by RTA periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

3.5 EXISTING (2022) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in February 2022. The following peak hours were selected for analysis:

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

Local schools are back in session with in-person instruction, as such, no additional adjustments were made to the traffic counts for the purposes of establishing the existing baseline. The 2022 weekday AM and weekday PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and near-by schools were in session and operating on normal schedules. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1.

Existing weekday ADT volumes are shown on Exhibit 3-6. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

$$\text{Weekday PM Peak Hour (Approach Volume + Exit Volume)} \times 13.35 = \text{Leg Volume}$$

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 7.49 percent. As such, the above equation utilizing a factor of 13.35 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 7.49 percent (i.e., $1/0.0749 = 13.35$) and was assumed to sufficiently estimate average daily traffic (ADT) volumes for planning-level analyses. Existing weekday AM and weekday PM peak hour intersection volumes are also shown on Exhibit 3-6.

EXHIBIT 3-5: EXISTING TRANSIT ROUTES

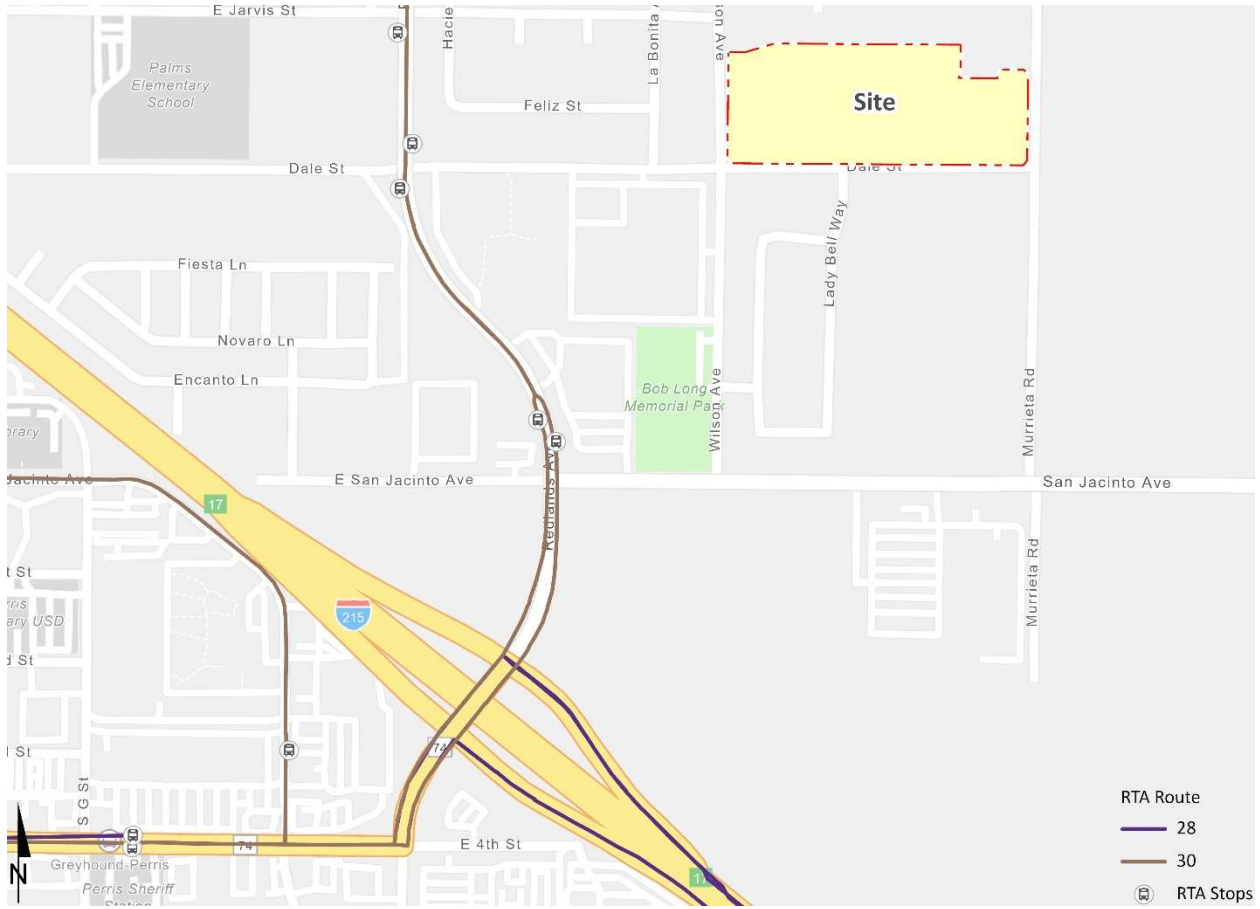
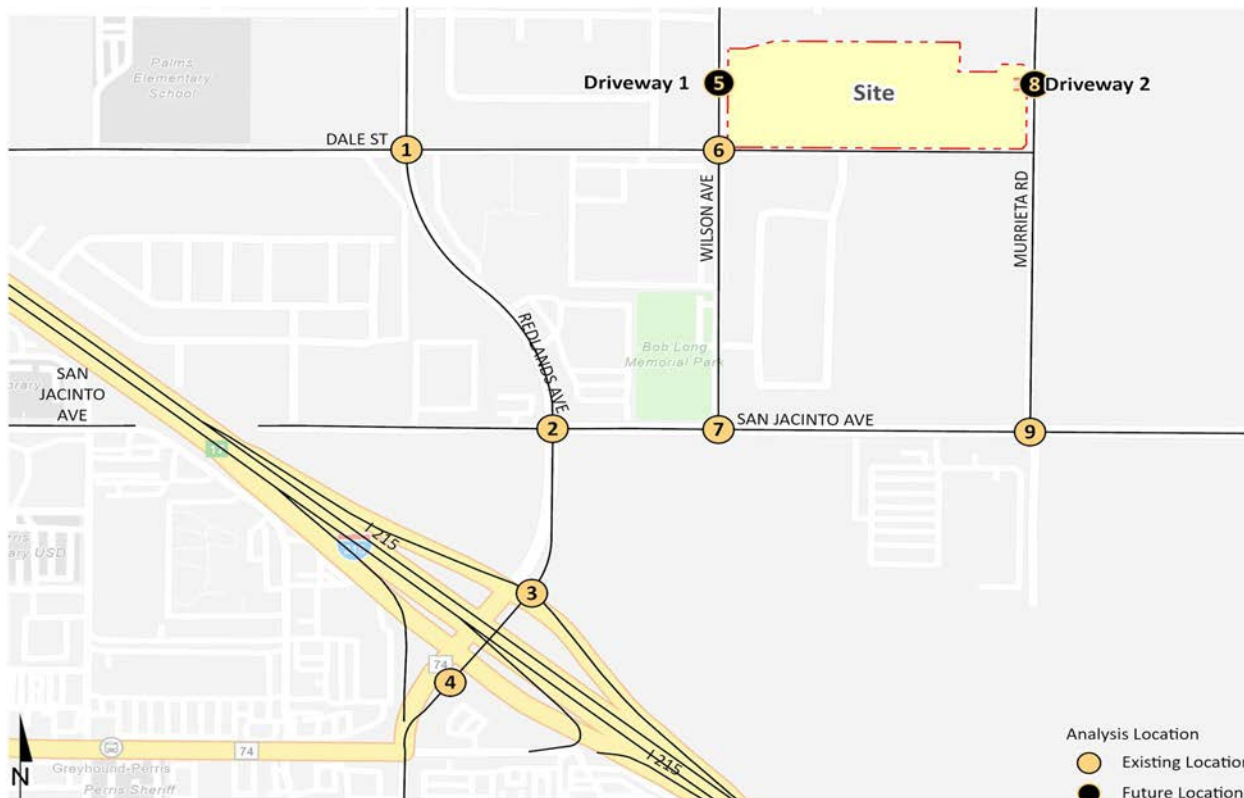


EXHIBIT 3-6: EXISTING (2022) TRAFFIC VOLUMES



1 Redlands Av. & Dale St.	2 Redlands Av. & San Jacinto Av.	3 Redlands Av. & I-215 NB Ramps	4 Redlands Av. & I-215 SB Ramps	5 Wilson Av. & Driveway 1
12,750 142(39) ↓ 449(392) ↓ 29(47) ↓ 40(6) ↓ 6(3) ↓ 53(19) ↓ 1,250	1,700 14,450 59(48) ↓ 456(432) ↓ 52(77) ↓ 77(58) ↓ 18(51) ↓ 108(106) ↓ 12,250	18,450 30,450 205(128) ↓ 975(877) ↓ 142(123) ↓ 668(783) ↓ 3,400	11,050 28,200 843(818) ↓ 431(389) ↓ 120(173) ↓ 0(2) ↓ 134(179) ↓ 4,750	2,450 71(71) ↓ 112(112) ↓ 2,450
6 Wilson Av. & Dale St.	7 Wilson Av. & San Jacinto Av.	8 Murrieta Rd. & Driveway 2	9 Murrieta Rd. & San Jacinto Av.	
2,450 11(11) ↓ 60(60) ↓ 21(21) ↓ 24(24) ↓ 1,100	15,700 3,050 132(90) ↓ 10(13) ↓ 85(120) ↓ 521(685) ↓ 2,650	5,100 242(168) ↓ 210(215) ↓ 4,350	11,000 5,100 222(153) ↓ 20(15) ↓ 180(197) ↓ 276(511) ↓ 15,250	

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

3.6 INTERSECTION OPERATIONS ANALYSIS

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

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

#	Intersection	Traffic Control ¹	Delay ² (secs.)		Level of Service		Acceptable LOS
			AM	PM	AM	PM	
1	Redlands Av. & Dale St.	TS	11.2	8.7	B	A	D
2	Redlands Av. & San Jacinto Av.	TS	27.6	30.8	C	C	D
3	Redlands Av. & I-215 NB Ramps	TS	11.3	12.2	B	B	D
4	Redlands Av. & I-215 SB Ramps	TS	10.2	10.6	B	B	D
5	Wilson Av. & Driveway 1	CSS	Future Intersection				D
6	Wilson Av. & Dale St.	CSS	9.5	11.3	A	B	D
7	Wilson Av. & San Jacinto Av.	CSS	22.0	15.1	C	C	D
8	Murrieta Rd. & Driveway 2	CSS	Future Intersection				D
9	Murrieta Rd. & San Jacinto Av.	CSS	20.2	14.2	C	B	D

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

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

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

3.7 EXISTING (2022) TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. The following unsignalized study area intersections currently meet a traffic signal warrant for Existing (2022) traffic conditions (see Appendix 3.3):

- Wilson Avenue & San Jacinto Avenue (#7)
- Murrieta Road & San Jacinto Avenue (#9)

3.8 EXISTING (2022) QUEUING ANALYSIS

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

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

Intersection	Movement	Available Stacking Distance (Feet)	95th Percentile Queue (Feet) ³		Acceptable? ¹	
			AM Peak Hour	PM Peak Hour	AM	PM
Redlands Av. & I-215 NB Ramps (#3)	WBL	800	172	211 ²	Yes	Yes
	WBL/T/R	1,250	153	87	Yes	Yes
	WBR	400	51	77	Yes	Yes
Redlands Av. & I-215 SB Ramps (#4)	EBL	740	78	101	Yes	Yes
	EBL/T/R	1,100	38	69	Yes	Yes
	EBR	140	33	40	Yes	Yes

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

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

4 PROJECTED FUTURE TRAFFIC

The Project is proposed to consist of the development of 287 multi-family residential dwelling units. Vehicular access will be provided via a driveway on Wilson Avenue (exit only) and a driveway on Murrieta Road (full access). Regional access to the Project site is accommodated from the I-215 Freeway via Redlands Avenue.

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development. In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the ITE Trip Generation Manual (11th Edition, 2021). (2)

Trip generation rates for the proposed uses are summarized on Table 4-1. A summary of the proposed Project trip generation is also shown on Table 4-1. As shown in Table 4-1, the proposed Project is anticipated to generate 1934 two-way trips per day with 115 AM peak hour trips and 146 PM peak hour trips.

TABLE 4-1: PROJECT TRIP GENERATION SUMMARY

Land Use ¹	ITE LU Code	Units ²	AM Peak Hour			PM Peak Hour			
			In	Out	Total	In	Out	Total	
Trip Generation Rates:									
Multifamily (Low-Rise)	220	DU	0.096	0.304	0.400	0.321	0.189	0.510	6.740

Project	Quantity	Units ²	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Trip Generation Summary:									
DPR 20-00008	287	DU	28	87	115	92	54	146	1934

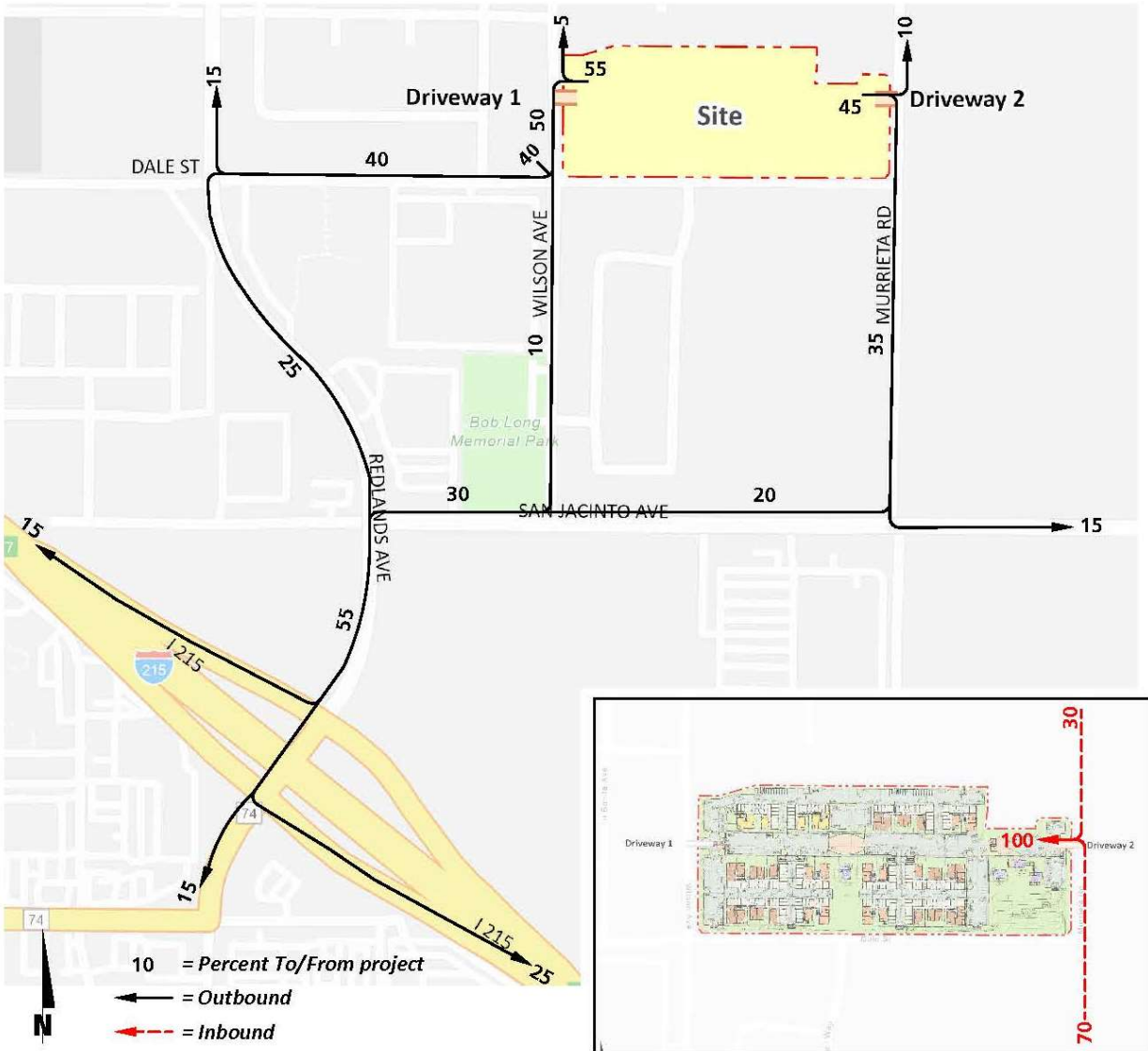
¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

² DU = Dwelling Units

4.2 PROJECT TRIP DISTRIBUTION

The Project trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered to identify the route where the Project traffic would distribute. The Project trip distribution was developed based on anticipated travel patterns to and from the Project site and are consistent with other similar projects that have been reviewed and approved by City of Perris staff. Exhibit 4-1 illustrates the trip distribution patterns for the Project, which is part of the TA scoping process (see Appendix 1.1).

EXHIBIT 4-1: PROJECT TRIP DISTRIBUTION



4.3 MODAL SPLIT

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

4.4 PROJECT TRIP ASSIGNMENT

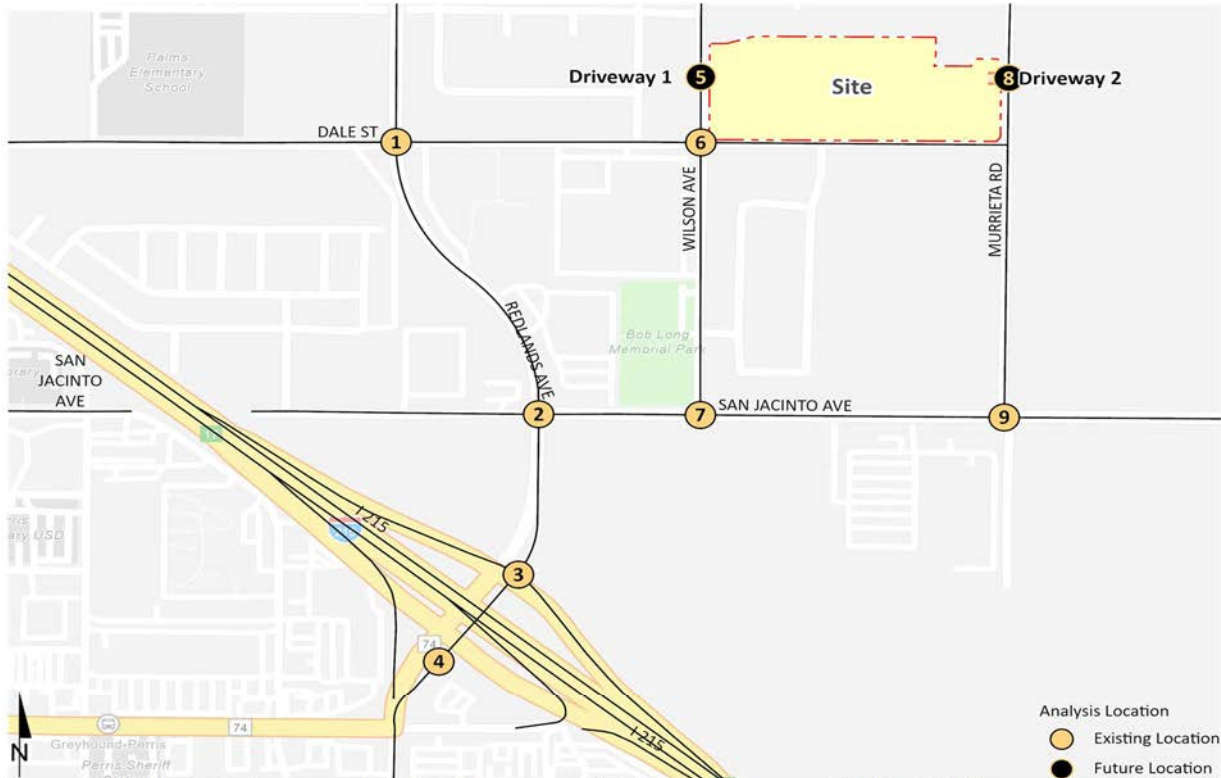
The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project weekday ADT and weekday/weekend peak hour intersection turning movement volumes are shown on Exhibit 4-2.

4.5 BACKGROUND TRAFFIC

Future year traffic forecasts have been based upon background (ambient) growth at 3% per year, compounded annually, for 2024 conditions. The total ambient growth is 6.09% for 2024 traffic conditions (compounded growth of 3 percent per year over 2 years or $1.03^{2 \text{ years}}$). The ambient growth factor is intended to approximate regional traffic growth. This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies.

The currently adopted Southern California Association of Governments (SCAG) 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (September 2020) growth forecasts for the City of Perris identifies projected growth in population of 74,900 in 2016 to 121,000 in 2045, or a 61.6 percent increase over the 29-year period. (9) The change in population equates to roughly a 1.67 percent growth rate, compounded annually. Similarly, growth over the same 29-year period in households is projected to increase by 96.5 percent, or 2.36 percent annual growth rate. Finally, growth in employment over the same 29-year period is projected to increase by 64.0 percent, or a 1.72 percent annual growth rate. This results in an average of 1.91 percent annual growth rate. As such, the 2.0 percent per year ambient growth rate utilized in this TA would appear to conservatively estimate annual traffic growth and overstate as opposed to understate future traffic forecasts.

EXHIBIT 4-2: PROJECT ONLY TRAFFIC VOLUMES



1	2	3	4	5
Redlands Av. & Dale St.	Redlands Av. & San Jacinto Av.	Redlands Av. & I-215 NB Ramps	Redlands Av. & I-215 SB Ramps	Wilson Av. & Driveway 1
150 400 250 800 1,050 150 700 150 300 500 400	250 800 1,050 150 700 150 300 500	1,050 250 700 150 300 500	250 700 150 300 500	550 500
13(8) 22(14)	22(14) 26(16) 15(51)	13(8) 35(22) 7(23) 8(28)	13(8) 22(14) 4(14) 4(14)	4(3) 44(27)
6	7	8	9	
Wilson Av. & Dale St.	Wilson Av. & San Jacinto Av.	Murrieta Rd. & Driveway 2	Murrieta Rd. & San Jacinto Av.	
500 400	100 750 1,400	400 1,000 750	1,000 300	
35(22) 9(5)	9(5) 17(11) 15(51)	8(28) 9(5) 30(19) 20(64)	17(11) 13(8) 15(51) 4(14)	

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

4.6 CUMULATIVE DEVELOPMENT TRAFFIC

A cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the County of Riverside and City of Perris. The cumulative project list includes known and foreseeable projects that are anticipated to contribute traffic to the study area intersections.

Where applicable, cumulative projects anticipated to contribute measurable traffic (i.e., 50 or more peak hour trips) to study area intersections have been manually added to the study area network to generate Opening Year Cumulative forecasts. In other words, this list of cumulative development projects has been reviewed to determine which projects would likely contribute measurable traffic through the study area intersections (e.g., those cumulative projects in close proximity to the proposed Project). For the purposes of this analysis, the cumulative projects that were determined to affect one or more of the study area intersections are shown on Exhibit 4-3, listed in Table 4-3, and have been considered for inclusion. Any additional traffic generated by other projects not on the cumulative projects list is likely accounted for through background ambient growth factors that have been applied to the peak hour volumes at study area intersections as discussed in Section 4.5 *Background Traffic*. Cumulative development projects shown in Exhibit 4-3 and listed in Table 4-2. Cumulative Only ADT and peak hour intersection turning movement volumes are shown on Exhibit 4-4.

4.7 HORIZON YEAR (2045) CONDITIONS

“Buildout” traffic projections for Horizon Year conditions are based on traffic model forecasts and were derived from the Riverside County Transportation Analysis Model (RivCOM) using accepted procedures for model forecast refinement and smoothing for study area intersections located within the County of Riverside. The Horizon Year traffic conditions analyses was utilized to determine if improvements funded through regional transportation mitigation fee programs, such as the TUMF, can accommodate the long-range traffic at the target LOS identified in the City of Perris General Plan.

The traffic forecasts reflect the area-wide growth anticipated between Existing (2022) conditions and Horizon Year (2045) traffic conditions. In most instances the traffic model zone structure is not designed to provide accurate turning movements along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the Horizon Year peak hour forecasts were refined using the model derived long range forecasts, base (validation) year model forecasts, along with existing peak hour traffic count data collected at each analysis location. The RivCOM has a base (validation) year of 2018 and a horizon (future forecast) year of 2045. The RivCOM 2045 model utilized for the purposes of this analysis assumes buildout of the City of Perris.

The refined future peak hour approach and departure volumes obtained from the model output data are then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program (NCHRP Report 765), along with initial estimates of turning movement proportions. A linear programming algorithm is used to calculate individual turning movements which match the known directional roadway segment forecast volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

The future Horizon Year (2045) Without Project peak hour turning movements were then reviewed by Urban Crossroads, Inc. for reasonableness, and in some cases, were adjusted to achieve flow conservation, reasonable growth, and reasonable diversion between parallel routes. Flow conservation checks ensure that traffic flow between two closely spaced intersections, such as two adjacent driveway locations, is verified in order to make certain that vehicles leaving one intersection are entering the adjacent intersection and that there is no unexplained loss of vehicles. The result of this traffic forecasting procedure is a series of traffic volumes which are suitable for traffic operations analysis. Post-processing worksheets for Horizon Year (2045) Without Project traffic conditions are provided in Appendix 4.1.

TABLE 4-2: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

No.	Project Name / Case Number	Jurisdiction	Land Use ¹	Quantity Units ²
P1	Canyon Steel (CS)	Perris	Industrial	25.000 TSF
P2	Duke 2 / DPR 16-00008	Perris	High-Cube Warehouse	669.000 TSF
P3	First Perry / DPR 16-00013	Perris	High-Cube Warehouse	240.000 TSF
P4	Gateway / DPR 16-00003	Perris	High-Cube Warehouse	400.000 TSF
P5	Marijuana Manufacturing (MM)	Perris	Industrial	1.000 TSF
P6	Perris Plaza - Build-out	Perris	Commercial	173.000 TSF
P7	OLC2 / DPR 14-01-0015	Perris	High-Cube Warehouse	1,037.000 TSF
P8	Arco Expansion	Perris	Commercial	3.869 TSF
P9	Markham Industrial / DPR 16-00015	Perris	Warehousing	170.000 TSF
P10	Rados / DPR 07-0119	Perris	High-Cube Warehouse	1,200.000 TSF
P11	Rider 1 / DPR 16-0365	Perris	High-Cube Warehouse	350.000 TSF
P12	Indian/Ramona Warehouse / DPR 18-	Perris	High-Cube Warehouse	428.730 TSF
P13	Rider 3 / DPR 06-0432	Perris	High-Cube Warehouse	640.000 TSF
P14	Westcoast Textile / DPR 16-00001	Perris	Warehousing	180.000 TSF
P15	Duke at Patterson / DPR 17-00001	Perris	High-Cube Warehouse	811.000 TSF
P16	Harley Knox Commerce Park / DPR 16-004	Perris	High-Cube Warehouse	386.278 TSF
P17	Perris Marketplace / DPR 05-0341	Perris	Commercial Retail	520.000 TSF
P18	Stratford Ranch Residential / TTM 36648	Perris	SFDR	90 DU
P19	Pulte Residential / TTM 30850	Perris	SFDR	496 DU
P20	Circle Industrial III	Perris	Warehousing	211.000 TSF
P21	Duke @ Perris Blvd.	Perris	High-Cube Warehouse	1,070.000 TSF
P22	Weinerschnitzel / CUP 17-05083	Perris	Fast-Food Restaurant	2.000 TSF
P23	March Plaza / CUP16-05165	Perris	Commercial Retail	47.253 TSF
P24	Cali Express Carwash / CUP 16-05258	Perris	Carwash	5.600 TSF
P25	Wilson Industrial / DPR 19-00007	Perris	High-Cube Warehouse	303.000 TSF
P26	Integra Expansion / MMOD 17-05075	Perris	High-Cube Warehouse	273.000 TSF
P27	Western Industrial / DPR 19-00003	Perris	High-Cube Warehouse	250.000 TSF
P28	Rider 2/4	Perris	High-Cube Warehouse	1,373.449 TSF
P29	Pacific Heritage I	Perris	SFDR	82.000 DU
P30	Sunwest Enterprises	Perris	SFDR	61.000 DU
P31	Pacific Ave	Perris	PUD	131.000 DU
P32	Sunwest Enterprises	Perris	SFDR	57.000 DU
P33	Jason Keller/John Ford	Perris	SFDR	189.000 DU
P34	Jason Keller/John Ford	Perris	SFDR	122.000 DU

No.	Project Name / Case Number	Jurisdiction	Land Use ¹	Quantity Units ²
P35	Rastogi Family LTD / John Ford	Perris	SFDR	75.000 DU
P36	Sterling Villa Senior Housing	Perris	Senior Adult Housing - Attach	429.000 DU
P37	AAA	Perris	Industrial	2.000 TSF
P38	Pulliam Indus	Perris	Industrial	16.000 TSF
P39	Burge Indus 1	Perris	Industrial	18.000 TSF
P40	Burge Indus 2	Perris	Industrial	19.000 TSF
P41	Phelan Indus	Perris	Industrial	81.000 TSF
P42	Dedeaux Walnut Warehouse	Perris	Industrial	205.830 TSF
P43	Perris and Ramona Warehouse	Perris	Industrial	347.919 TSF
P44	Perris Valley Town Center (West Side)	Perris	Retail	28.000 TSF
			Fast-Food w/ Drive-Thru	2.200 TSF
P45	Perris Valley Town Center (East Side)	Perris	Shopping Center	644.866 TSF
			Fast-Food w/ Drive-Thru	10.500 TSF
			High Turnover Restaurant	15.120 TSF
			Gas Station	16 VFP
P46	South Perris Industrial Project	Perris	High-Cube Warehouse	7,394.048 TSF
P47	Perez Indus	Perris	Warehousing	2.500 TSF
P48	Malbert Cultivation	Perris	Cultivation	33.000 TSF
P49	Marijuana Manufacturing	Perris	Manufacturing	61.050 TSF
P50	Perris Airport Center	Perris	High-Cube Warehouse	704.480 TSF
			Truck Trailer Yard	371 Spaces
RC1	McCanna Hills / TTM 33978	County	SFDR	63 DU
RC2	Stoneridge	County	High-Cube Cold Storage	1,695.355 TSF
			High-Cube Fulfillment	2,966.872 TSF
			High-Cube Warehouse	2,966.872 TSF
			Manufacturing	847.678 TSF
			Warehousing	427.759 TSF
			Industrial Park	641.639 TSF
			Free-Standing Discount Store	100.000 TSF
Commercial Retail	21.968 TSF			
RC3	TR36712	County	Single Family Lots	74 DU
RC4	TTM37728	County	228 Lot Schedule a TTM	228 DU
RC5	TR36635	County	Residential, 6.0 Acres Park/	283 DU
RC6	TR36665	County	Residential lots	587 DU
RC7	TR37134	County	Single Family Residential	73 DU
RC8	PAR220005	County	High-Cube Fulfillment Center	1,374.688 TSF
			High-Cube Cold Storage	242.592 TSF

¹ SFDR = Single Family Detached Residential

² DU = Dwelling Units; TSF = Thousand Square Feet

EXHIBIT 4-4: CUMULATIVE DEVELOPMENT LOCATION MAP

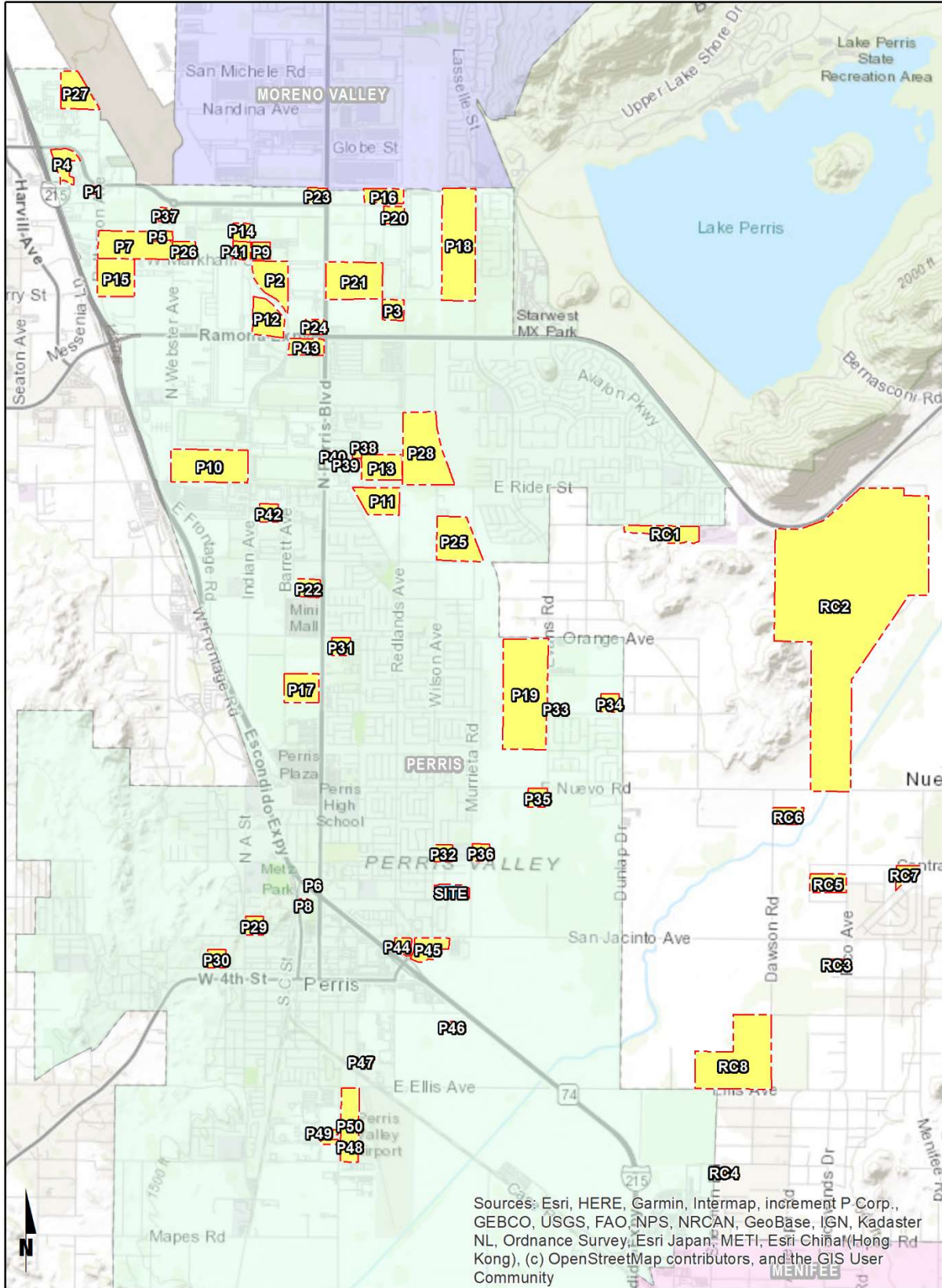
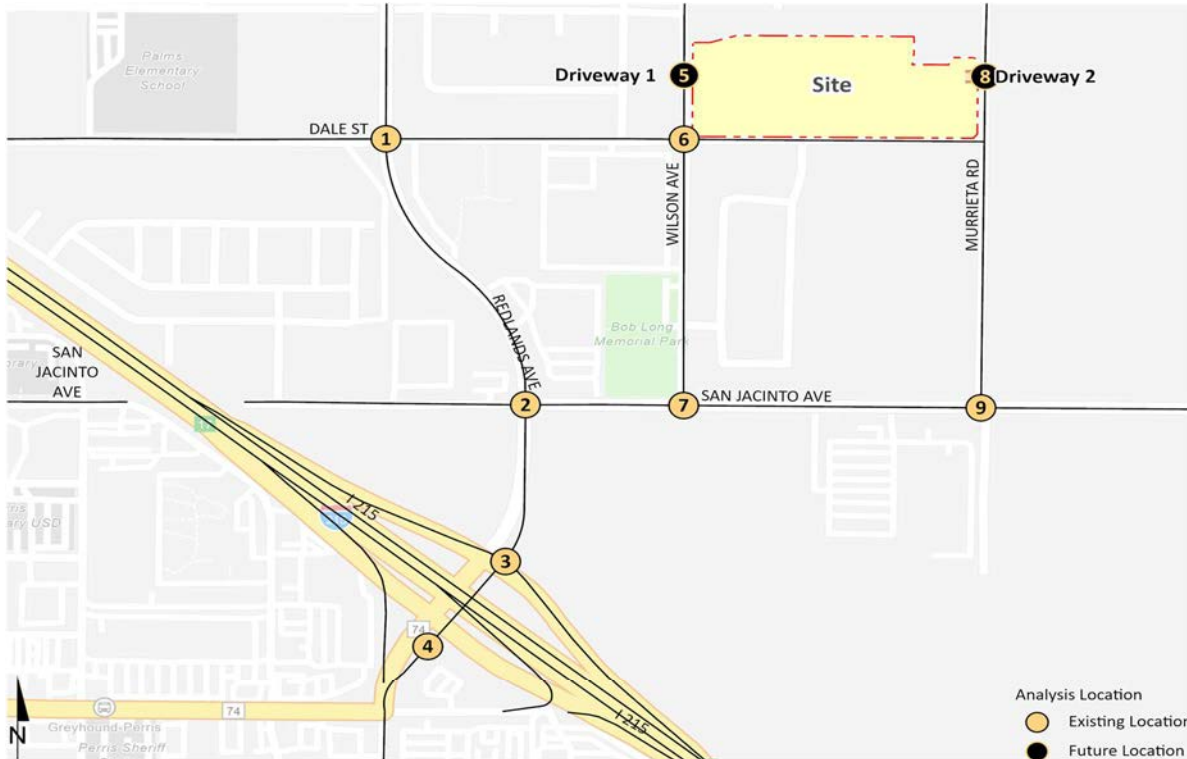


EXHIBIT 4-5: CUMULATIVE ONLY TRAFFIC VOLUMES



1	2	3	4	5
Redlands Av. & Dale St.	Redlands Av. & San Jacinto Av.	Redlands Av. & I-215 NB Ramps	Redlands Av. & I-215 SB Ramps	Wilson Av. & Driveway 1
3,350 ← 111(167) ↓ 2(5) ↑ 1(1) ↑ 5(4) → 115(153) → 6(19)	400 3,550 4,050 12,400 13,000 2,950 9,100 5,350 450	12,300 ↓ 149(201) ← 282(372) ↑ 200(222) ↑ 14(11) ↓ 41(57) → 297(353)	9,550 ↓ 127(164) ↓ 169(220) ↓ 48(40) ↓ 177(211) ↓ 12(16)	450 ← 8(6) → 9(29)
Wilson Av. & Dale St.	Wilson Av. & San Jacinto Av.	Murrieta Rd. & Driveway 2	Murrieta Rd. & San Jacinto Av.	
450 ↓ 6(5) ↓ 1(1) → 7(24) → 2(5)	100 8,250 ↓ 1(1) ↓ 2(5) ↓ 450(567) → 277(368)	650 ↓ 58(70) → 37(102)	650 ↓ 38(28) ↓ 20(23) ↓ 19(43) ↓ 259(305)	8,400 ↓ 18(28) ↓ 259(347)
400	100	650	8,250	

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

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5 E+P TRAFFIC CONDITIONS

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

5.1 ROADWAY IMPROVEMENTS

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

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

5.2 EXISTING PLUS PROJECT TRAFFIC VOLUME FORECASTS

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

5.3 INTERSECTION OPERATIONS ANALYSIS

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

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

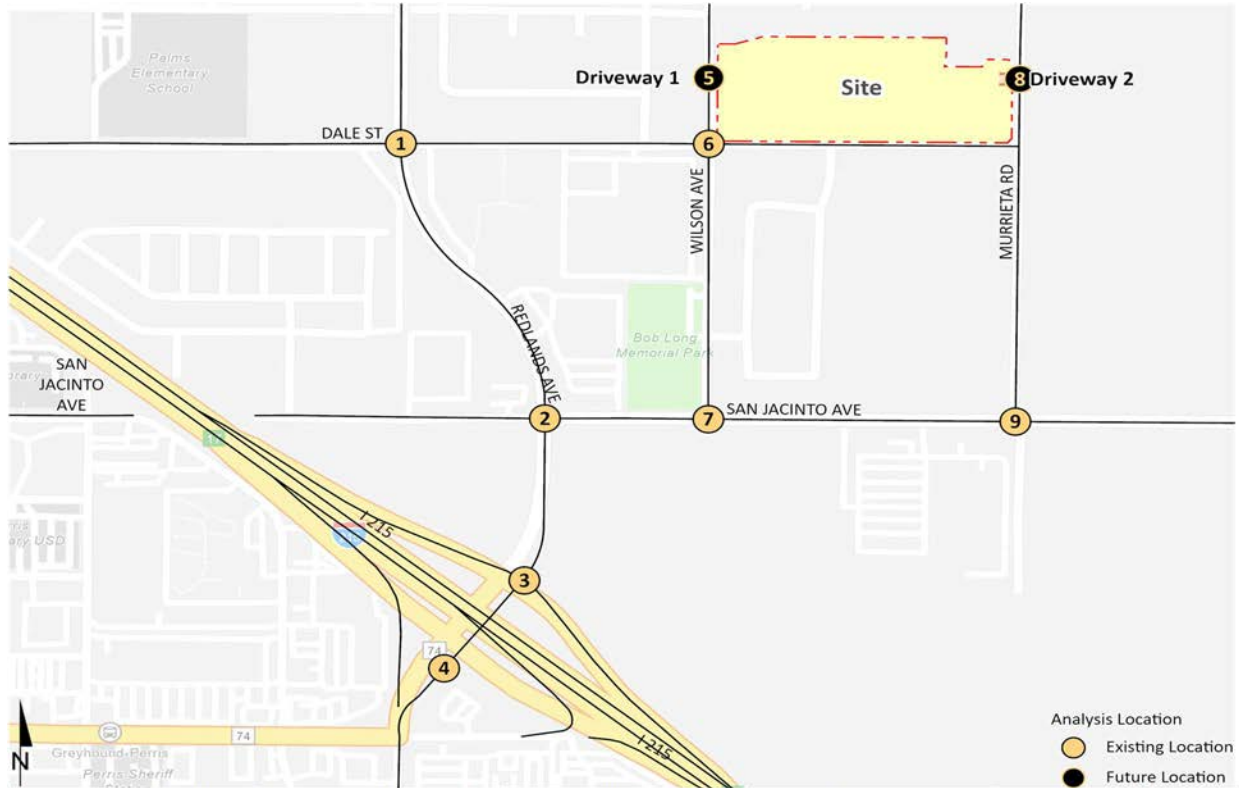
#	Intersection	Traffic Control ²	Existing (2022)				E + P				Acceptable LOS
			Delay ¹ (secs.)		Level of Service		Delay ¹ (secs.)		Level of Service		
			AM	PM	AM	PM	AM	PM	AM	PM	
1	Redlands Av. & Dale St.	TS	11.2	8.7	B	A	12.0	9.0	B	A	D
2	Redlands Av. & San Jacinto Av.	TS	27.6	30.8	C	C	28.8	35.7	C	D	D
3	Redlands Av. & I-215 NB Ramps	TS	11.3	12.2	B	B	11.4	12.4	B	B	D
4	Redlands Av. & I-215 SB Ramps	TS	10.2	10.6	B	B	10.4	10.8	B	B	D
5	Wilson Av. & Driveway 1	CSS	Future Intersection				9.6	9.5	A	A	D
6	Wilson Av. & Dale St.	CSS	9.5	11.3	A	B	9.6	11.6	A	B	D
7	Wilson Av. & San Jacinto Av.	CSS	22.0	15.1	C	C	23.8	15.5	C	C	D
8	Murrieta Rd. & Driveway 2	CSS	Future Intersection				10.6	10.2	B	B	D
9	Murrieta Rd. & San Jacinto Av.	CSS	20.2	14.2	C	B	26.0	17.3	D	C	D

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

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

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

EXHIBIT 5-1: E+P TRAFFIC VOLUMES



1	2	3	4	5
Redlands Av. & Dale St.	Redlands Av. & San Jacinto Av.	Redlands Av. & I-215 NB Ramps	Redlands Av. & I-215 SB Ramps	Wilson Av. & Driveway 1
12,900 142(39) 449(392) 29(47) 64(39) 23(4) 68(29) 40(6) 6(3) 53(19) 78(22) 319(441) 18(28) 2,100 12,500	14,700 59(48) 478(446) 52(77) 41(26) 61(59) 642(483) 77(58) 18(51) 108(106) 91(130) 363(443) 496(754) 19,300 31,500	31,500 218(136) 1010(899) 274(516) 2(4) 299(330) 142(123) 676(811) 11,300 28,900	28,900 856(826) 453(403) 124(187) 0(2) 134(179) 694(747) 249(419) 11,050 29,000	2,500 71(71) 4(3) 44(27) 112(112) 550 2,950
Wilson Av. & Dale St.	Wilson Av. & San Jacinto Av.	Murrieta Rd. & Driveway 2	Murrieta Rd. & San Jacinto Av.	
2,950 46(33) 69(65) 21(21) 24(24) 25(25) 91(91) 1,450 2,750	3,150 141(95) 10(13) 9(5) 656(484) 85(120) 536(736) 16,400 19,100	5,500 8(28) 242(168) 9(5) 30(19) 20(64) 210(215) 1,400 5,350	6,150 239(164) 33(23) 34(32) 396(281) 195(248) 276(511) 11,300 15,950	

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

5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants have been performed for E+P traffic conditions based on peak hour intersection turning movements volumes or planning level (ADT) volumes. There are no additional unsignalized study area intersections anticipated to meet a traffic signal warrant under E+P traffic conditions, in addition to the intersections identified previously under Existing traffic conditions (see Appendices 5.2).

5.5 QUEUING ANALYSIS

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

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

Intersection	Movement	Available Stacking Distance (Feet) ³	Existing (2022)				E+P			
			95th Percentile Queue (Feet) ³		Acceptable? ¹		95th Percentile Queue (Feet) ³		Acceptable? ¹	
			AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
Redlands Av. & I-215 NB Ramps (#3)	WBL	800	172	211 ²	Yes	Yes	180	232 ²	Yes	Yes
	WBL/T/R	1,250	153	87	Yes	Yes	158	98	Yes	Yes
	WBR	400	51	77	Yes	Yes	51	89	Yes	Yes
Redlands Av. & I-215 SB Ramps (#4)	EBL	740	78	101	Yes	Yes	78	104	Yes	Yes
	EBL/T/R	1,100	38	69	Yes	Yes	39	75	Yes	Yes
	EBR	140	33	40	Yes	Yes	35	41	Yes	Yes

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

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

6 OPENING YEAR CUMULATIVE (2024) TRAFFIC CONDITIONS

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

6.1 ROADWAY IMPROVEMENTS

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

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

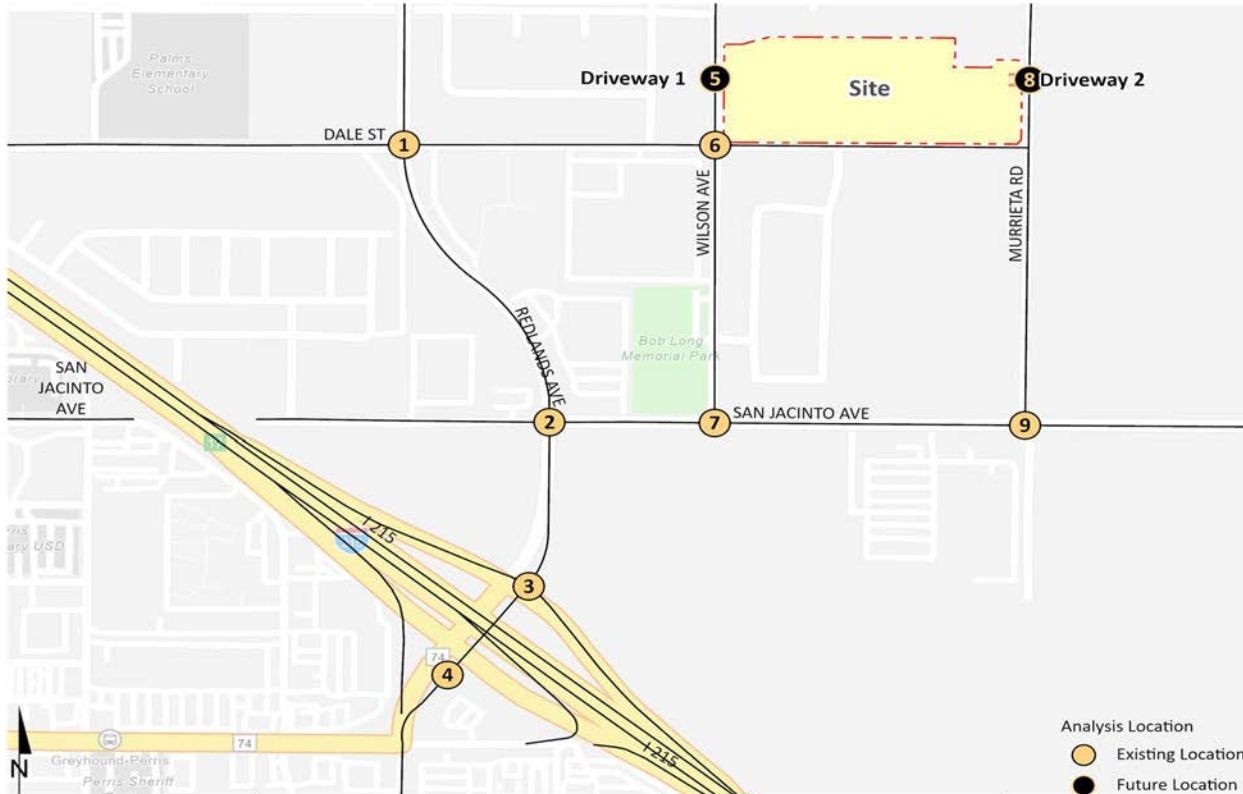
6.2 WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

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

6.3 WITH PROJECT TRAFFIC VOLUME FORECASTS

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

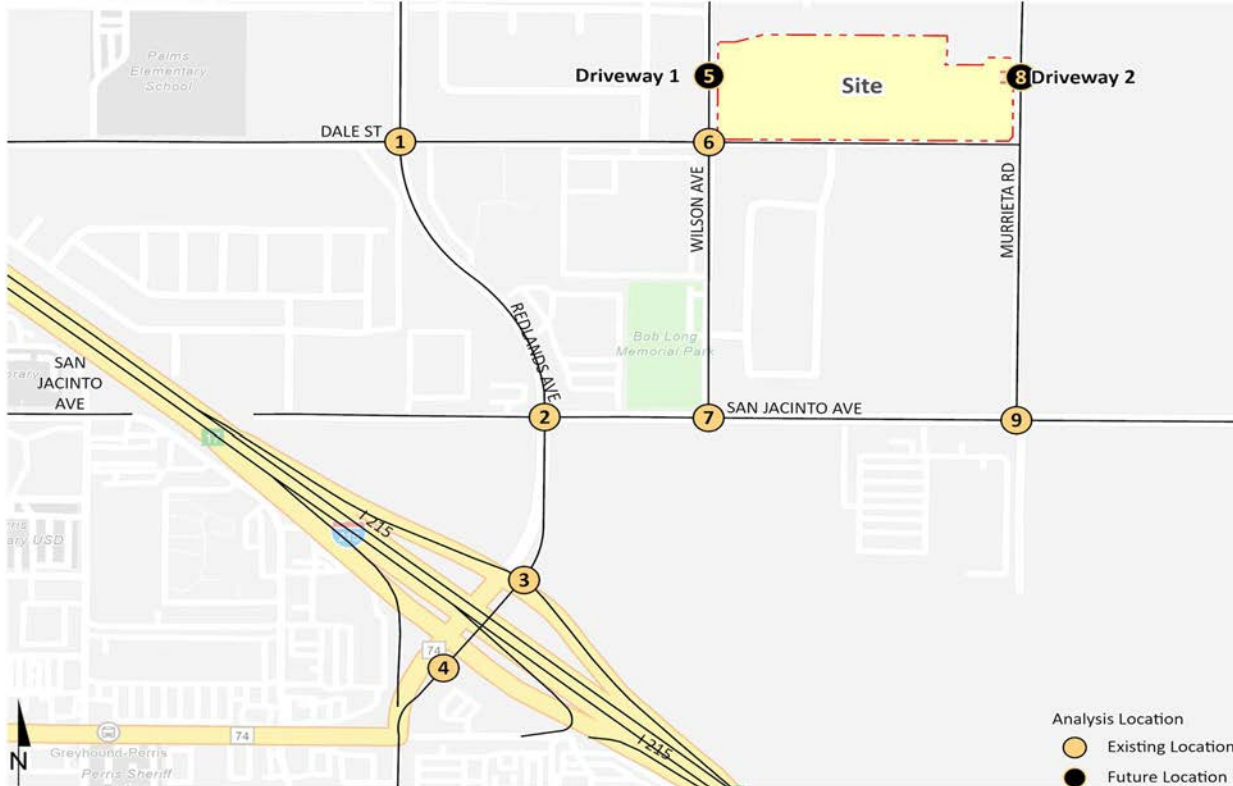
EXHIBIT 6-1: OPENING YEAR CUMULATIVE (2024) WITHOUT PROJECT TRAFFIC VOLUMES



1	2	3	4	5
Redlands Av. & Dale St. 16,900 151(41) 587(583) 33(55) 55(34) 24(4) 54(20) 42(6) 6(3) 56(20) 83(23) 453(621) 25(49) 2,200 16,550 1,300	Redlands Av. & San Jacinto Av. 18,900 88(91) 503(495) 127(165) 108(103) 85(95) 1019(942) 103(103) 36(87) 161(203) 153(227) 420(509) 917(1192) 31,950 45,350 10,450	Redlands Av. & I-215 NB Ramps 44,600 366(337) 1316(1302) 483(745) 2(4) 331(361) 192(187) 1006(1184) 14,500 39,000 6,600	Redlands Av. & I-215 SB Ramps 39,450 1021(1032) 626(633) 288(383) 0(2) 190(230) 909(989) 276(461) 14,450 35,750 8,150	Wilson Av. & Driveway 1 3,050 83(81) 128(148) 3,050
6	7	8	9	
Wilson Av. & Dale St. 3,050 18(17) 65(65) 29(46) 25(25) 27(27) 99(102) 1,500 2,900	Wilson Av. & San Jacinto Av. 3,250 140(95) 12(15) 12(10) 1128(1069) 90(127) 830(1095) 16,650 19,350	Murrieta Rd. & Driveway 2 5,400 315(248) 260(330) 4,600	Murrieta Rd. & San Jacinto Av. 5,400 274(190) 41(39) 50(47) 679(645) 210(252) 552(847) 11,700 16,150	

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

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



Analysis Location
 ● Existing Location
 ● Future Location

1	2	3	4	5
Redlands Av. & Dale St.	Redlands Av. & San Jacinto Av.	Redlands Av. & I-215 NB Ramps	Redlands Av. & I-215 SB Ramps	Wilson Av. & Driveway 1
17,050 151(41) 587(583) 33(55) 68(42) 24(4) 76(34) 42(6) 6(3) 56(20) 83(23) 453(621) 25(49)	2,600	32,800	14,750	550
1,300	19,150 88(91) 525(509) 127(165) 108(103) 85(95) 1045(958) 153(227) 420(509) 932(1243) 46,400	45,700 379(945) 1351(1324) 490(768) 2(4) 331(361) 192(187) 1014(1212)	40,150 1034(1040) 648(647) 292(397) 0(2) 190(230) 913(1003) 276(461) 36,050	3,100 83(81) 4(3) 44(27) 128(148)
16,800	6,750	39,700	8,250	3,550
Wilson Av. & Dale St.	Wilson Av. & San Jacinto Av.	Murrieta Rd. & Driveway 2	Murrieta Rd. & San Jacinto Av.	
3,550 53(39) 74(70) 29(46) 25(25) 27(27) 99(102)	17,400 149(100) 12(15) 12(10) 1145(1080) 90(127) 845(1146)	5,800 8(28) 315(248) 9(5) 30(19) 20(64) 260(330)	6,450 291(201) 54(47) 54(61) 679(645) 225(303) 552(847)	
1,900	20,200	1,400	16,900	

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

6.4 INTERSECTION OPERATIONS ANALYSIS

6.4.1 OPENING YEAR CUMULATIVE (2024) WITHOUT PROJECT TRAFFIC CONDITIONS

LOS calculations were conducted for the study intersections to evaluate their operations under Opening Year Cumulative (2024) Without Project conditions with roadway and intersection geometrics consistent with Section 6.1 *Roadway Improvements*. As shown on Table 6-1, the following study area intersections are anticipated to operate at an unacceptable LOS under Opening Year Cumulative (2024) Without Project traffic conditions:

- Redlands Avenue & San Jacinto Avenue (#2) – LOS F AM and PM peak hours
- Wilson Avenue & San Jacinto Avenue (#7) – LOS F AM and PM peak hours
- Murrieta Road & San Jacinto Avenue (#9) – LOS F AM and PM peak hours

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

6.4.2 OPENING YEAR CUMULATIVE (2024) WITH PROJECT TRAFFIC CONDITIONS

As shown on Table 6-1, the addition of Project traffic is not anticipated to result in any new deficiencies from those identified under Opening Year Cumulative (2024) Without Project traffic conditions. The intersection operations analysis worksheets for Opening Year Cumulative (2024) With Project traffic conditions are included in Appendix 6.2 of this TA

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

# Intersection	Traffic Control ²	2024 Without Project				2024 With Project				Acceptable LOS
		Delay ¹ (secs.)		Level of Service		Delay ¹ (secs.)		Level of Service		
		AM	PM	AM	PM	AM	PM	AM	PM	
1 Redlands Av. & Dale St.	TS	11.9	9.0	B	A	12.8	9.3	B	A	D
2 Redlands Av. & San Jacinto Av.	TS	150.9	189.4	F	F	158.8	>200.0	F	F	D
3 Redlands Av. & I-215 NB Ramps	TS	14.7	18.0	B	B	14.9	18.7	B	B	D
4 Redlands Av. & I-215 SB Ramps	TS	14.7	15.7	B	B	15.0	16.2	B	B	D
5 Wilson Av. & Driveway 1	CSS	Future Intersection				9.7	9.7	A	A	D
6 Wilson Av. & Dale St.	CSS	9.7	13.5	A	B	9.9	14.0	A	B	D
7 Wilson Av. & San Jacinto Av.	CSS	156.2	59.1	F	F	189.7	82.6	F	F	D
8 Murrieta Rd. & Driveway 2	CSS	Future Intersection				11.5	11.3	B	B	D
9 Murrieta Rd. & San Jacinto Av.	CSS	>200.0	129.0	F	F	>200.0	>200.0	F	F	D

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

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

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

6.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants have been performed for Opening Year Cumulative (2024) traffic conditions based on peak hour intersection turning movements volumes or planning level (ADT) volumes. There is no additional unsignalized study area intersection anticipated to meet a traffic signal warrant under Opening Year Cumulative (2024) Without Project or With Project traffic conditions, in addition to the intersections identified previously under previous analysis scenarios (see Appendices 6.3 and 6.4).

6.6 QUEUING ANALYSIS

Queuing analysis findings for Opening Year Cumulative (2024) are presented on Table 6-2. As shown on Table 6-2, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under Opening Year Cumulative (2024) traffic conditions. Worksheets for Opening Year Cumulative (2024) traffic conditions queuing analysis are provided in Appendices 6.5 and 6.6.

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

Intersection	Movement	Available Stacking Distance (Feet) ³	OYC (2024) Without Project				OYC (2024) With Project			
			95th Percentile Queue (Feet) ³		Acceptable? ¹		95th Percentile Queue (Feet) ³		Acceptable? ¹	
			AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
Redlands Av. & I-215 NB Ramps (#3)	WBL	800	320 ²	348 ²	Yes	Yes	330 ²	348 ²	Yes	Yes
	WBL/T/R	1,250	227 ²	408 ²	Yes	Yes	231 ²	429 ²	Yes	Yes
	WBR	400	210 ²	371 ²	Yes	Yes	210 ²	393 ²	Yes	Yes
Redlands Av. & I-215 SB Ramps (#4)	EBL	740	141	165	Yes	Yes	143	170	Yes	Yes
	EBL/T/R	1,100	97	167	Yes	Yes	100	171	Yes	Yes
	EBR	140	84	105	Yes	Yes	84	105	Yes	Yes

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

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

6.7 DEFICIENCIES AND IMPROVEMENTS

This section provides a summary of deficiencies, based on the City of Perris’s deficiency criteria discussed in Section 2.6 *Deficiency Criteria*, and improvements needed to improve operations back to acceptable levels.

6.7.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

The effectiveness of the recommended improvement strategies to address Opening Year Cumulative (2024) traffic deficiencies are presented in Table 6-3. Worksheets for Opening Year Cumulative (2024) With Project conditions, with improvements, HCM calculation worksheets are provided in Appendix 6.7.

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

# Intersection	Traffic Control ³	Intersection Approach Lanes ¹												OYC (2024)			
		Northbound			Southbound			Eastbound			Westbound			Delay ² (secs.)		Level of Service	
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
2 Redlands Av. & San Jacinto Av.																	
- Without Improvements	TS	1	2	1	1	2	0	2	1	1	2	1	1	158.8	>200.0	F	F
- With Improvements	TS	1	2	2>	1	2	0	2	1	1>	2	1	1	36.2	31.7	D	C
7 Wilson Av. & San Jacinto Av.																	
- Without Improvements	CSS	0	0	0	0	1	0	0	1	0	0	1	1	189.7	103.7	F	F
- With Improvements	CSS	0	0	0	0	1	0	1	1	0	0	2	0	33.1	25.5	D	D
9 Murrieta Rd. & San Jacinto Av.																	
- Without Improvements	CSS	0	1	0	0	1	0	1	1	0	0	1	0	>200.0	>200.0	F	F
- With Improvements	TS	0	1	0	0	1	0	1	1	0	0	1	0	53.5	31.3	D	C

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

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

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

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

³ TS = Traffic Signal; **TS** = Improvement

6.7.2 IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

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

7 HORIZON YEAR (2045) TRAFFIC CONDITIONS

This section discusses the methods used to develop Horizon Year (2045) Without and With Project traffic forecasts, and the resulting intersection operations, traffic signal warrant, and off-ramp queuing analyses.

7.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Horizon Year (2045) 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 Horizon Year conditions only (e.g., intersection and roadway improvements along the Project's frontage and driveways).
- If applicable, driveways and those facilities assumed to be constructed by cumulative developments to provide site access are also assumed to be in place for Horizon Year conditions only.
- This scenario also includes other roadway infrastructure that is contemplated by the City's General Plan and are anticipated to be in place under long-range traffic conditions. Such roadways include Evans Road/Ellis Avenue and the future planned interchange at the I-215 Freeway. These roadway connections, while not evaluated for the purposes of this analysis would affect regional traffic as there may be potential volume reductions to existing study area intersections due to this (and other similar) future connections that provide alternative connections to the I-215 Freeway or other routes.

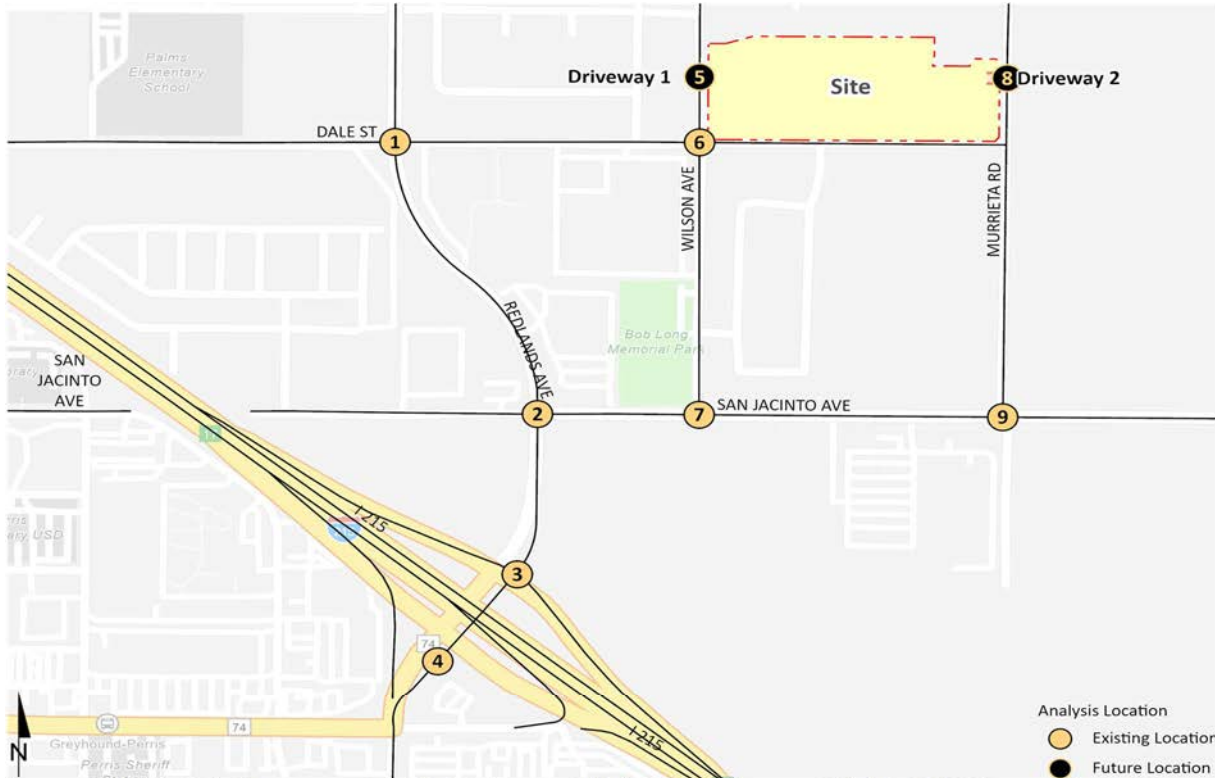
7.2 WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-process volumes obtained from the RivCOM (see Section 4.8 *Horizon Year (2045) Volume Development* of this TA for a detailed discussion on the post-processing methodology). The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Horizon Year (2045) Without Project traffic conditions are shown on Exhibit 7-1.

7.3 WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-process volumes obtained from the RivCOM, plus the traffic generated by the proposed Project (Project Buildout). The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Horizon Year (2045) With Project traffic conditions are shown on Exhibit 7-2.

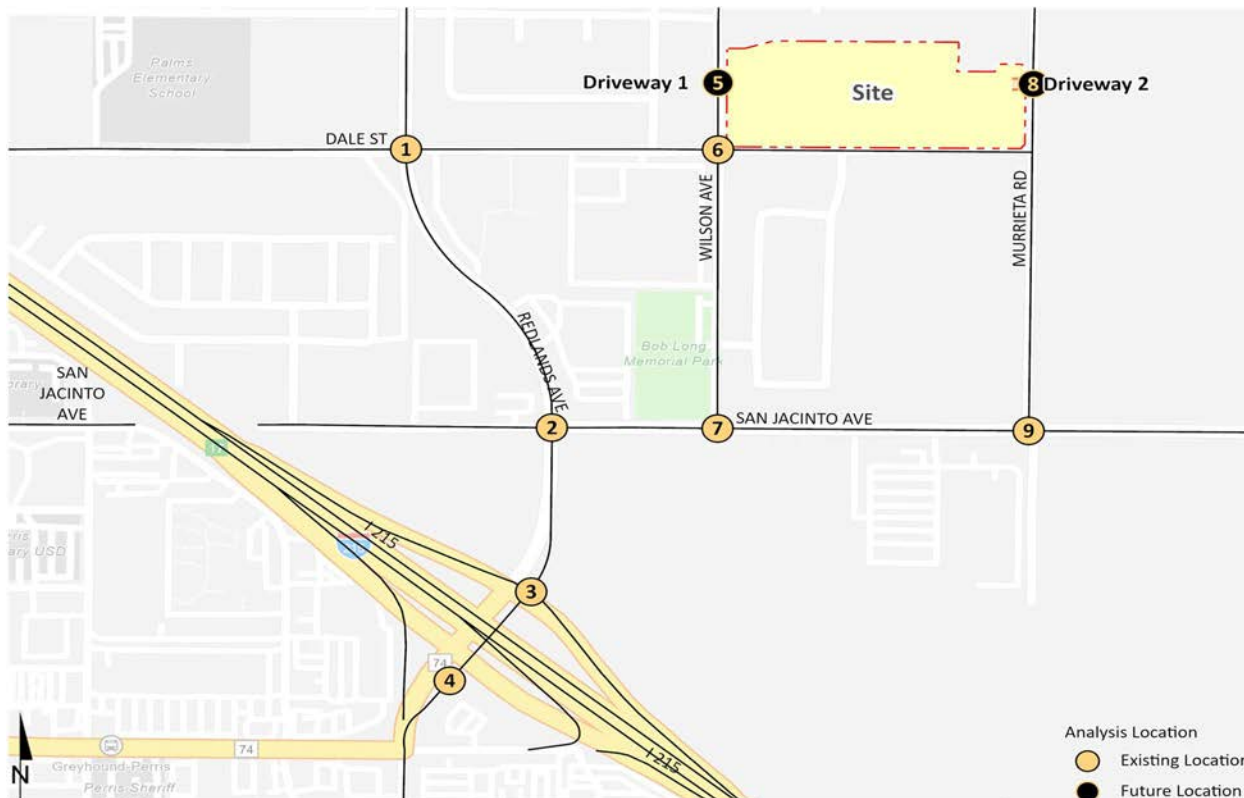
EXHIBIT 7-1: HORIZON YEAR (2045) WITHOUT PROJECT TRAFFIC VOLUMES



1	2	3	4	5
Redlands Av. & Dale St.	Redlands Av. & San Jacinto Av.	Redlands Av. & I-215 NB Ramps	Redlands Av. & I-215 SB Ramps	Wilson Av. & Driveway 1
20,000 195(80) 646(641) 36(60) 61(37) 27(5) 59(22) 106(7) 9(4) 105(22) 91(45) 499(683) 28(54) 2,400 19,100 2,300	25,900 200(120) 553(545) 140(181) 119(113) 350(197) 1120(1037) 254(175) 109(182) 270(243) 210(284) 462(591) 1009(1311) 35,150 56,150 24,400	54,500 403(370) 1448(1433) 532(820) 3(7) 394(397) 595(268) 1135(1302) 15,950 52,050 13,800	52,050 1165(1261) 689(696) 317(421) 0(3) 209(439) 1515(1204) 324(507) 15,900 56,900 15,600	3,350 92(89) 141(163) 3,350
6	7	8	9	
Wilson Av. & Dale St.	Wilson Av. & San Jacinto Av.	Murrieta Rd. & Driveway 2	Murrieta Rd. & San Jacinto Av.	
3,350 19(18) 71(71) 32(51) 28(28) 29(29) 108(112) 3,200 21,300	3,550 154(105) 13(16) 13(11) 1241(1176) 99(140) 913(1204) 18,300	5,950 346(273) 286(363) 5,050	8,750 339(209) 84(43) 63(60) 981(710) 231(323) 736(956) 50,100 42,300	

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

EXHIBIT 7-2: HORIZON YEAR (2045) WITH PROJECT TRAFFIC VOLUMES



Analysis Location
 ● Existing Location
 ● Future Location

1	2	3	4	5
Redlands Av. & Dale St.	Redlands Av. & San Jacinto Av.	Redlands Av. & I-215 NB Ramps	Redlands Av. & I-215 SB Ramps	Wilson Av. & Driveway 1
20,150 195(80) ↓ 646(641) ↓ 36(60) ↓ 74(45) ↑ 27(5) ↑ 81(36) ↑ 106(7) ↓ 9(4) ↓ 105(22) ↓ 91(45) ↑ 499(683) ↑ 28(54) ↑ 2,800 19,350	26,150 200(120) ↓ 575(559) ↓ 140(181) ↓ 119(113) ↑ 350(197) ↑ 1146(1053) ↑ 254(175) ↓ 109(182) ↓ 270(243) ↓ 210(284) ↑ 462(591) ↑ 1024(1362) ↑ 36,000 57,250	55,550 416(378) ↓ 1483(1455) ↓ 539(843) ↑ 3(7) ↑ 394(397) ↑ 595(268) ↓ 1143(1330) ↓ 16,200 52,700	52,700 1178(1269) ↓ 711(710) ↓ 321(435) ↓ 0(3) ↓ 209(439) ↓ 1519(1218) ↑ 324(507) ↑ 16,100 57,200	3,400 92(89) ↓ 4(3) ↑ 44(27) ↑ 141(163) ↑ 550 3,850
2,300	24,400	13,900	15,750	
6	7	8	9	
Wilson Av. & Dale St.	Wilson Av. & San Jacinto Av.	Murrieta Rd. & Driveway 2	Murrieta Rd. & San Jacinto Av.	
3,850 54(40) ↓ 80(76) ↓ 32(51) ↓ 28(28) ↓ 29(29) ↑ 108(112) ↑ 2,050	3,650 163(110) ↓ 13(16) ↓ 13(11) ↑ 1258(1187) ↑ 99(140) ↓ 928(1255) ↓ 3,300 22,150	6,350 8(28) ↓ 346(273) ↓ 9(5) ↓ 30(19) ↓ 20(64) ↑ 286(363) ↑ 1,400	9,750 356(220) ↓ 97(51) ↓ 67(74) ↑ 981(710) ↑ 246(374) ↓ 736(956) ↓ 6,100 43,050	50,400

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

7.4 INTERSECTION OPERATIONS ANALYSIS

7.4.1 HORIZON YEAR (2045) WITHOUT PROJECT TRAFFIC CONDITIONS

LOS calculations were conducted for the study intersections to evaluate their operations under Horizon Year (2045) Without Project conditions with roadway and intersection geometrics consistent with Section 7.1 *Roadway Improvements*. As shown on Table 7-1, the following study area intersections are anticipated to operate at an unacceptable LOS during one or more peak hours:

- Redlands Avenue & San Jacinto Avenue (#2) – LOS F AM and PM peak hours
- Wilson Avenue & San Jacinto Avenue (#7) – LOS F AM and PM peak hours
- Murrieta Road & San Jacinto Avenue (#9) – LOS F AM and PM peak hours

The intersection operations analysis worksheets for Horizon Year (2045) Without Project traffic conditions are included in Appendix 7.1 of this TA.

7.4.2 HORIZON YEAR (2045) WITH PROJECT TRAFFIC CONDITIONS

As shown on Table 7-1, the addition of Project traffic is not anticipated to result in any new deficiencies from those identified under Horizon Year (2045) Without Project traffic conditions. The intersection operations analysis worksheets for Horizon Year (2045) With Project traffic conditions are included in Appendix 7.2 of this TA.

TABLE 7-1: INTERSECTION ANALYSIS FOR HORIZON YEAR (2045) CONDITIONS

#	Intersection	Traffic Control ²	2045 Without Project				2045 With Project				Acceptable LOS
			Delay ¹ (secs.)		Level of Service		Delay ¹ (secs.)		Level of Service		
			AM	PM	AM	PM	AM	PM	AM	PM	
1	Redlands Av. & Dale St.	TS	15.9	9.6	B	A	16.1	9.9	B	A	D
2	Redlands Av. & San Jacinto Av.	TS	>200.0	>200.0	F	F	>200.0	>200.0	F	F	D
3	Redlands Av. & I-215 NB Ramps	TS	25.0	25.4	C	C	25.5	27.6	C	C	D
4	Redlands Av. & I-215 SB Ramps	TS	19.2	19.7	B	B	19.9	20.2	B	C	D
5	Wilson Av. & Driveway 1	CSS	Future Intersection				9.8	9.7	A	A	D
6	Wilson Av. & Dale St.	CSS	9.8	14.5	A	B	10.0	15.1	B	C	D
7	Wilson Av. & San Jacinto Av.	CSS	>200.0	53.4	F	F	>200.0	58.3	F	F	D
8	Murrieta Rd. & Driveway 2	CSS	Future Intersection				11.9	11.7	B	B	D
9	Murrieta Rd. & San Jacinto Av.	CSS	>200.0	>200.0	F	F	>200.0	>200.0	F	F	D

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

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

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

7.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants have been performed (based on CA MUTCD) for Horizon Year (2045) traffic conditions based on peak hour intersection turning movements volumes or planning level (ADT) volumes. There are no additional unsignalized study area intersections anticipated to meet a traffic signal warrant under Horizon Year (2045) Without Project or With Project traffic conditions, in addition to the intersections identified previously under previous analysis scenarios (see Appendices 7.3 and 7.4).

7.6 QUEUING ANALYSIS

Queuing analysis findings for Horizon Year (2045) are presented on Table 7-2. As shown on Table 7-2, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows with the addition of Project (Project Buildout) traffic. Worksheets for Horizon Year (2045) traffic conditions queuing analysis are provided in Appendices 7.5 and 7.6.

TABLE 7-2: PEAK HOUR QUEUING SUMMARY FOR HORIZON YEAR (2045) CONDITIONS

Intersection	Movement	Available Stacking Distance (Feet) ³	HY (2045) Without Project				HY (2045) With Project			
			95th Percentile Queue (Feet) ³		Acceptable? ¹		95th Percentile Queue (Feet) ³		Acceptable? ¹	
			AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
Redlands Av. & I-215 NB Ramps (#3)	WBL	800	416 ²	409 ²	Yes	Yes	425 ²	409 ²	Yes	Yes
	WBL/T/R	1,250	347 ²	498 ²	Yes	Yes	347 ²	532 ²	Yes	Yes
	WBR	400	307 ²	458 ^{2,3}	Yes	Yes	314 ²	464 ^{2,3}	Yes	Yes
Redlands Av. & I-215 SB Ramps (#4)	EBL	740	154	232	Yes	Yes	156	236	Yes	Yes
	EBL/T/R	1,100	110	209	Yes	Yes	113	213	Yes	Yes
	EBR	140	96	167 ³	Yes	Yes	95	170 ³	Yes	Yes

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

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

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

7.7 DEFICIENCIES AND IMPROVEMENTS

This section provides a summary of deficiencies, based on the City of Perris’s deficiency criteria discussed in Section 2.6 *Deficiency Criteria*, and improvements needed to improve operations back to acceptable levels.

7.7.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

The effectiveness of the recommended improvement strategies to address Horizon Year (2045) traffic deficiencies are presented in Table 7-3. Worksheets for Horizon Year (2045) With Project conditions, with improvements, HCM calculation worksheets are provided in Appendix 7.7.

TABLE 7-3: INTERSECTION ANALYSIS FOR HORIZON YEAR (2045) CONDITIONS WITH IMPROVEMENTS

# Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Horizon Year (2045)				
		Northbound			Southbound			Eastbound			Westbound			Delay ² (secs.)		Level of Service		
		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	
2 Redlands Av. & San Jacinto Av.																		
- Without Improvements	TS	1	2	1	1	2	0	2	1	1	2	1	1	>200.0	>200.0	F	F	
- With Improvements	TS	1	2	<u>2</u>	1	2	0	2	1	<u>1</u>	2	1	1	48.1	40.0	D	D	
7 Wilson Av. & San Jacinto Av.																		
- Without Improvements	CSS	0	0	0	0	1	0	0	1	0	0	1	1	>200.0	58.3	F	F	
- With Improvements	TS	0	0	0	0	1	0	<u>1</u>	1	0	0	<u>2</u>	0	10.1	7.7	B	A	
9 Murrieta Rd. & San Jacinto Av.																		
- Without Improvements	CSS	0	0	0	0	1	0	1	1	0	0	1	0	>200.0	>200.0	F	F	
- With Improvements	TS	0	0	0	0	1	0	1	<u>2</u>	0	0	<u>2</u>	0	46.8	18.7	D	B	

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

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

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free Right Turn Lane; 1 = Improvement

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

³ TS = Traffic Signal; **TS** = Improvement

7.7.2 IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

As shown previously in Table 7-2, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows for Horizon Year (2045) traffic conditions. As such, no improvements have been identified.

8 LOCAL AND REGIONAL FUNDING MECHANISMS

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

8.1 TRANSPORTATION UNIFORM MITIGATION FEE (TUMF) PROGRAM

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

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

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

8.2 CITY OF PERRIS DEVELOPMENT IMPACT FEE (DIF) PROGRAM

In 1991, the City of Perris created a Development Impact Fee program to impose and collect fees from new residential, commercial and industrial development for the purpose of funding roadways and intersections necessary to accommodate City growth as identified in the City's General Plan Circulation Element. This DIF program has been successfully implemented by the City since 1991 and was updated in 2014. The City updated the DIF program to add new roadway segments and intersections necessary to accommodate future growth and to ensure that the identified street improvements would operate at or above the City's LOS performance threshold. The City's DIF program includes facilities that are not part of, or which may exceed improvements identified and covered by the TUMF program. As a result, the pairing of the regional and local fee programs provides a more comprehensive funding and implementation plan to ensure an adequate and interconnected transportation system. 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.

Similar to the TUMF Program, after the City's DIF fees are collected, they are placed in a separate interest-bearing 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 Public Works 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.

The City has an established, proven track record with respect to implementing the City's DIF Program. Many of the roadway segments and intersections included within the study area for this Traffic Impact Analysis are at various stages of widening and improvement based on the City's collection of DIF fees. Under this Program, as a result of the City's continual monitoring of the local circulation system, the City ensures that DIF improvements are constructed prior to when the LOS would otherwise fall below the City's established performance criteria.

8.3 FAIR SHARE CONTRIBUTION

Project improvements may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the City's discretion). When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. Detailed fair share calculations, for each peak hour, for the applicable deficient study area intersection are provided in Table 8-1. These fees are collected with the proceeds solely used as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population increases.

TABLE 8-1: PROJECT FAIR SHARE CALCULATIONS FOR INTERSECTIONS

#	Intersection	Existing	Project	2045 With Project	Total New Traffic	Project % of New Traffic ¹
2	Redlands Av. & San Jacinto Av.					
	AM:	2423	63	4860	2437	2.59%
	PM:	2600	81	5060	2460	3.29%
7	Wilson Av. & San Jacinto Av.					
	AM:	1396	41	2473	1077	3.8%
	PM:	1386	67	2720	1334	5.0%
9	Murrieta Rd. & San Jacinto Av.					
	AM:	1124	49	2483	1359	3.6%
	PM:	1175	84	2385	1210	6.9%

¹ **BOLD** = Highest fair share percentage is highlighted.

9 REFERENCES

1. **County of Riverside Transportation Department.** *Transportation Analysis Guidelines for Level of Service and Vehicle Miles Traveled.* County of Riverside : s.n., December 2020.
2. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.
3. **Western Riverside Council of Governments.** *TUMF Nexus Study, 2016 Program Update.* July 2017.
4. **VRPA Technologies, Inc. for Riverside County Transportation Commission.** *Riverside County Long Range Transportation Study.* County of Riverside : VRPA Technologies, Inc., December 2019.
5. **Transportation Research Board.** *Highway Capacity Manual (HCM).* 6th Edition. s.l. : National Academy of Sciences, 2016.
6. **Caltrans.** California Manual on Uniform Traffic Control Devices (MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CAMUTCD).* 2017.
7. **City of Perris.** *General Plan Circulation Element.* City of Perris : s.n., August 26, 2008.
8. **Southern California Association of Governments (SCAG).** *2020 Regional Transportation Plan / Sustainable Communities Strategy.* Adopted September 2020.

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APPENDIX 1.1: TRAFFIC STUDY SCOPING AGREEMENT

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February 8, 2022

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135 North "D" Street
Perris, CA 92570

**Subject: Perris Multi-Family Project (DPR #20-00008) Scoping Agreement and
VMT Analysis Review #2, City of Perris**

Introduction

RK ENGINEERING GROUP, INC. (RK) has reviewed the scoping agreement and VMT analysis #2 for the proposed Perris Multi-Family Project (DPR #20 – 00008) in the City of Perris. The project is located within the north side of Dale Street between Wilson Avenue and Murrieta Road in the City of Perris. The project would include 287 multi-family dwelling units. The proposed project is consistent with the R – 6000 zoning for the property according to the applicant's traffic engineer.

RK has reviewed the scoping agreement and VMT analysis which were prepared by Urban Crossroads, Inc. and were dated February 8, 2022 and February 7, 2022. The scoping agreement and VMT analysis follows the requirements of the city of the Perris with respect to the preparation of a scoping agreement and VMT analysis. RK has reviewed the revisions based upon our comments in our January 12, 2022 letter. The documents meet the technical requirements of the city of Perris and are acceptable from a traffic engineering standpoint.

Comments

RK has the following comments for the project:

Scoping Agreement/VMT Analysis

1. The Scoping Agreement and VMT Analysis are acceptable as currently written from a traffic engineering standpoint.
2. Please add a small section in the traffic impact analysis that describes the specific reasoning of reducing the VMT expect based upon the increase in project density.

Conclusions

RK Engineering Group, Inc. has reviewed the traffic scoping agreement dated February 8, 2022 and VMT analysis dated February 7, 2022 prepared by Urban Crossroads. The scoping agreement and VMT analysis are acceptable as currently written from a technical standpoint. Please have the traffic consultant proceed with preparing the traffic impact analysis for the project.

RK appreciates this opportunity to work with the City of Perris and if you have any questions, please call me at (949) 293-9639.

Sincerely,
RK ENGINEERING GROUP, INC.



Robert Kahn, P.E.
Founding Principal

Registered Civil Engineer 20285
Registered Traffic Engineer 0555

XC: Kenneth Phung, City of Perris
Stuart McKibben, City of Perris
John Pourkazemi, City of Perris

RK17161.DOC
JN: 2126-2021-01





**CITY OF PERRIS
VMT SCOPING FORM FOR LAND USE PROJECTS**

This Scoping Form acknowledges the City of Perris requirements for the evaluation of transportation impacts under CEQA. The analysis provided in this form should follow the City of Perris TIA Guidelines, dated May 12, 2020.

I. Project Description

Tract/Case No.

Project Name:

Project Location:

Project Description:

(Please attach a copy of the project Site Plan)

Current GP Land Use:

Proposed GP Land Use:

Current Zoning:

Proposed Zoning:

If a project requires a General Plan Amendment or Zone change, then additional information and analysis should be provided to ensure the project is consistent with RHNA and RTP/SCS Strategies.

II. VMT Screening Criteria

- A. Is the Project 100% affordable housing?

YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
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 Attachments:
- B. Is the Project within 1/2 mile of qualifying transit?

YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
-----	--------------------------	----	-------------------------------------

 Attachments:
- C. Is the Project a local serving land use?

YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
-----	--------------------------	----	-------------------------------------

 Attachments:
- D. Is the Project in a low VMT area?

YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
-----	--------------------------	----	-------------------------------------

 Attachments:
- E. Are the Project's Net Daily Trips less than 500 ADT?

YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
-----	--------------------------	----	-------------------------------------

 Attachments:

Low VMT Area Evaluation:

Citywide VMT Averages ¹		
Citywide Home-Based VMT =	15.05	VMT/Capita
Citywide Employment-Based VMT =	11.62	VMT/Employee

[WRCOG VMT MAP](#)

Project TAZ	VMT Rate for Project TAZ ¹	Type of Project	
3842	16.30	VMT/Capita	Residential: <input checked="" type="checkbox"/>
	6.74	VMT/Employee	Non-Residential: <input type="checkbox"/>

¹ Base year (2012) projections from RIVTAM.

Trip Generation Evaluation:

Source of Trip Generation:

Project Trip Generation:

1,304	Average Daily Trips (ADT)
-------	---------------------------

Internal Trip Credit:	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>	% Trip Credit:	<input type="text"/>
Pass-By Trip Credit:	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>	% Trip Credit:	<input type="text"/>
Affordable Housing Credit:	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>	% Trip Credit:	<input type="text"/>
Existing Land Use Trip Credit:	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>	Trip Credit:	<input type="text"/>

Net Project Daily Trips:

1,304	Average Daily Trips (ADT)
-------	---------------------------

 Attachments:

Does project trip generation warrant an LOS evaluation outside of CEQA?

YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>
-----	-------------------------------------	----	--------------------------

III. VMT Screening Summary

A. Is the Project presumed to have a less than significant impact on VMT?

A Project is presumed to have a less than significant impact on VMT if the Project satisfies at least one (1) of the VMT screening criteria.

Potentially Significant

B. Is mitigation required?

If the Project does not satisfy at least one (1) of the VMT screening criteria, then mitigation is required to reduce the Project's impact on VMT.

Mitigation Required

C. Is additional VMT modeling required to evaluate Project impacts?

YES		NO	X
-----	--	----	---

If the Project requires a zone change and/or General Plan Amendment AND generates 2,500 or more net daily trips, then additional VMT modeling using RIVTAM/RIVCOM is required. If the project generates less than 2,500 net daily trips, the Project TAZ VMT Rate can be used for mitigation purposes.

IV. MITIGATION

A. Citywide Average VMT Rate (Threshold of Significance) for Mitigation Purposes:

15.05	VMT/Capita
-------	------------

B. Unmitigated Project TAZ VMT Rate:

16.3	VMT/Capita
------	------------

C. Percentage Reduction Required to Achieve the Citywide Average VMT:

7.67%

D. VMT Reduction Mitigation Measures:

Source of VMT Reduction Estimates:	CAPCOA
---	--------

Project Location Setting	Suburban
---------------------------------	----------

VMT Reduction Mitigation Measure:		Estimated VMT Reduction (%)
1.	LUT-1 Increase Diversity of Land Uses	13.13%
2.		0.00%
3.		0.00%
4.		0.00%
5.		0.00%
6.		0.00%
7.		0.00%
8.		0.00%
9.		0.00%
10.		0.00%
Total VMT Reduction (%)		13.13%

(Attach additional pages, if necessary, and a copy of all mitigation calculations.)

E. Mitigated Project TAZ VMT Rate:

14.16	VMT/Capita
-------	------------

F. Is the project presumed to have a less than significant impact with mitigation?

Impact Adequately Mitigated

If the mitigated Project VMT rate is below the Citywide Average Rate, then the Project is presumed to have a less than significant impact with mitigation. If the answer is no, then additional VMT modeling may be required and a potentially significant and unavoidable impact may occur. All mitigation measures identified in Section IV.D. are subject to become Conditions of Approval of the project. Development review and processing fees should be submitted with, or prior to the submittal of this Form. The Planning Department staff will not process the Form prior to fees being paid to the City.

Prepared By			Developer/Applicant		
Company:	Urban Crossroads, Inc.		Company:	ACAA Limited Partnership	
Contact:	Charlene So		Contact:	Alex Mucino	
Address:	1133 Camelback St. #8329, Newport Beach, CA		Address:	422 Wier Road, San Bernardino, CA 92408	
Phone:	(949) 861-0177		Phone:		
Email:	cso@urbanxroads.com		Email:	alexmmu@gmail.com	
Date:	2/7/2022		Date:	2/7/2022	
Approved by:					
Perris Planning Division	Date	1.1-4	Perris City Engineer	Date	

% VMT Reduction per CAPCOA Mitigation Measure LUT-1

(21.85 housing units per acre)

$$= (22.0 - 7.6) / 7.6 = 1.89 \text{ or } 187.5\%$$

$$= 189\% \times 0.07 = 0.13 \text{ or } 13.13\%$$

February 8, 2022

Ms. Chantal Power
City of Perris
135 N. D Street
Perris, CA 92570

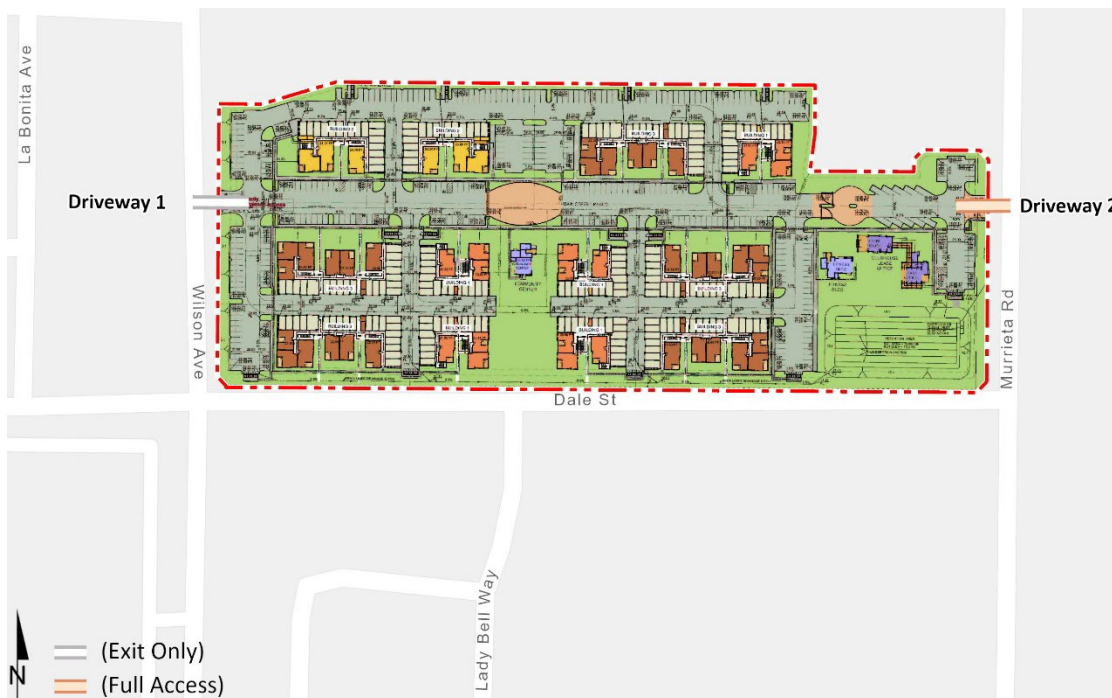
SUBJECT: PRAIRIE VIEW APARTMENTS SCOPING AGREEMENT

Dear Ms. Chantal Power:

Urban Crossroads, Inc. is pleased to submit this scoping agreement to the City of Perris for the proposed Prairie View Apartments development (“Project”), which is located on the north side of Dale Street between Wilson Avenue and Murrieta Road, within the City of Perris. It is our understanding that the Project is to consist of 287 multi-family residential dwelling units. The Project is anticipated to be constructed in one phase by the year 2024. A preliminary site plan, of which the traffic study will be based on, is shown on Exhibit 1. The following describes the access proposed for the site:

- Wilson Avenue & Driveway 1 – exit only
- Murrieta Road & Driveway 2 – full access/main entry

EXHIBIT 1: PRELIMINARY SITE PLAN

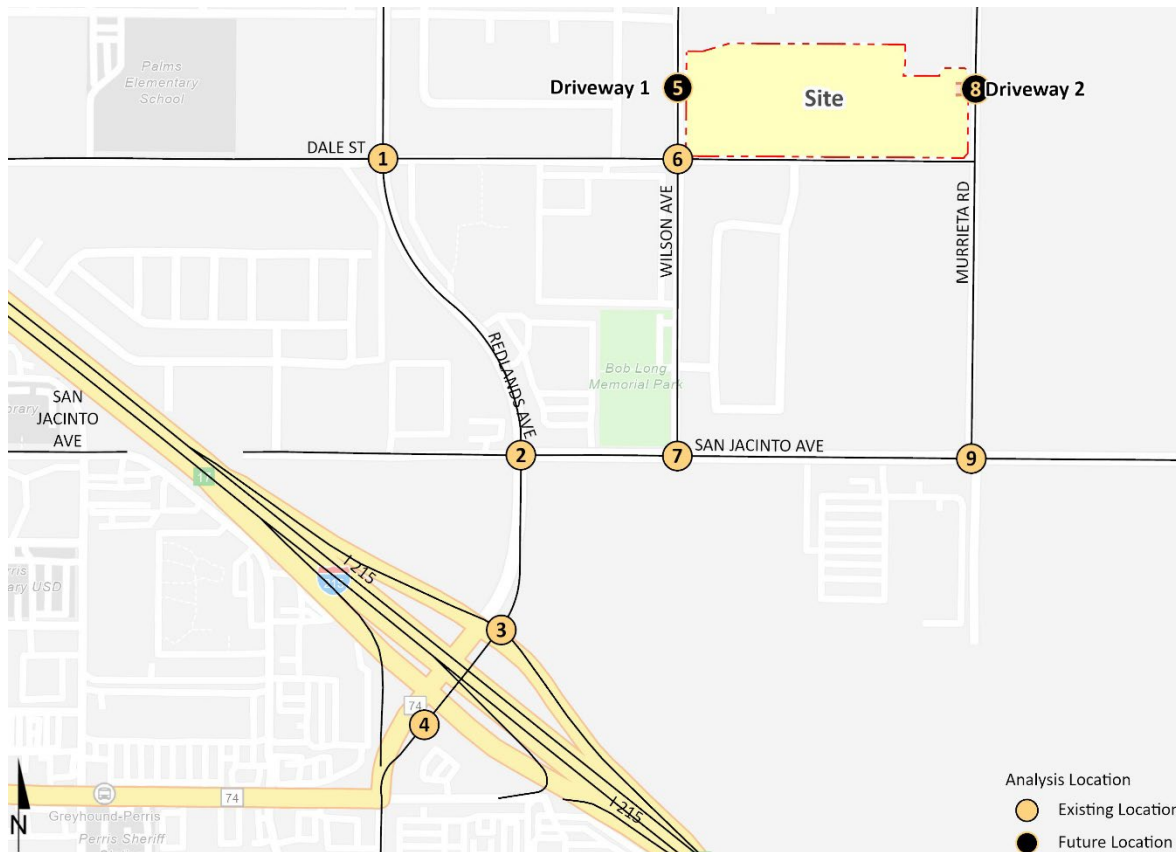


The purpose of this agreement is to obtain comments from City of Perris on the proposed traffic study scope of work. The remainder of this agreement describes the proposed analysis methodology, trip generation, trip distribution, and traffic assignment/project trips on the surrounding roadway network, which have been used to establish the proposed project study area and analysis locations.

STUDY AREA

The study area limits have been set based upon a threshold of 50 peak hour project trips. In other words, the study area includes any intersection of Collector roadway or higher classification street with another Collector roadway or higher classification street, at which the proposed Project will add 50 or more peak hour trips. This methodology is also utilized in other near-by agencies, such as the County of Riverside. The proposed intersection analysis locations have been identified on Exhibit 2. It should be noted that the Project is anticipated to contribute fewer than 50 peak hours trips to the intersections of Wilson Avenue & San Jacinto Avenue (#7), Murrieta Road & Driveway 2 (#8), and Murrieta Road & San Jacinto Avenue (#9).

EXHIBIT 2: STUDY AREA



ANALYSIS SCENARIOS

The following analysis scenarios will be analyzed for this traffic study:

- Existing (2022)
- Existing Plus Project (E+P)
- Opening Year Cumulative (2024) Without Project
- Opening Year Cumulative (2024) With Project
- Horizon Year (2045) Without Project (to be based on RIVCOM, once available)
- Horizon Year (2045) With Project

EXISTING TRAFFIC COUNTS

As local schools are back in session with in-person instruction and operating on normal bell schedules, new traffic counts will be conducted for the study area intersections. Urban Crossroads is not proposing any additional adjustments for the baseline condition aside from the standard flow conservation/volume balancing.

AMBIENT GROWTH RATE

Consistent with other City of Perris traffic studies performed by Urban Crossroads, an ambient growth rate of 3 percent per year (compounded annually) will be used for this analysis. As such, the ambient growth for 2024 will be 6.09% (3 percent per year, compounded over 2 years).

METHODOLOGY

The methodology used to evaluate peak hour intersection performance is based on the Transportation Research Board's Highway Capacity Manual (HCM), 6th Edition. This methodology rates operations based on peak hour delay and associated level of service (LOS).

LEVEL OF SERVICE (LOS) CRITERIA

Required LOS for roadway segments and intersections within the City of Perris is LOS D. An exception to the local road standard is LOS E, at intersections of any Arterials and Expressways with SR-74, the Ramona-Cajalco Expressway or at I-215 Freeway ramps. For the purposes of this traffic analysis, LOS D has also been considered the acceptable threshold for freeway facilities within the study area, consistent with Caltrans guidelines.

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. Trip generation rates for the Project are shown in Table 1 illustrating daily and peak hour trip generation estimates based on the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021). The Project is estimated to generate a total of 1,304 trip-ends per day on a typical weekday with approximately 106 AM peak hour trips and 112 PM peak hour trips, as shown in Table 1.

TABLE 1: PROJECT TRIP GENERATION SUMMARY

Land Use ¹	ITE LU Code	Units ²	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Trip Generation Rates:									
Multifamily (Mid-Rise) 3-10 Floors	221	DU	0.085	0.285	0.370	0.238	0.152	0.390	4.540

Project	Quantity Units ²	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Trip Generation Summary:								
DPR 20-00008	287 DU	24	82	106	68	44	112	1,304

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

² DU = Dwelling Units

PROJECT TRIP DISTRIBUTIONS

The project trip distribution patterns have been developed based on recent experience on other studies for similar land uses in the vicinity and comments provided by City of Perris staff. Distribution patterns will be based on existing and planned land uses and roadway infrastructure in the area. The Project trip distribution is illustrated on Exhibit 3.

EXHIBIT 3: PROJECT TRIP DISTRIBUTION



SPECIAL ISSUES

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

- Traffic signal warrant analyses will be conducted for all unsignalized study area intersections for all applicable analysis scenarios.
- Queuing analyses will be conducted for all Project access points. The analysis will identify the necessary lengths of turn pockets with storage and appropriate turn pocket transitions which adheres to the General Plan roadway classifications for the site adjacent roadways.
- Queuing analysis will also be conducted for the proposed gated entry on Murrieta Road. Although there is a gated access on Wilson Avenue, it is proposed to be exit only and will not be evaluated for queues as no off-site vehicles will be entering at this location.

Ms. Chantal Power
City of Perris
February 8, 2022
Page 6 of 8

CUMULATIVE DEVELOPMENT PROJECTS

A list of cumulative development projects and their proposed land uses are shown in Table 2. Exhibit 4 illustrates the locations of these cumulative development projects. Urban Crossroads will coordinate with the City's Planning Department to obtain updated information on any additions or deletions to the cumulative project list shown.

If you have any questions, please contact me directly at (949) 861-0177.

Respectfully submitted,

URBAN CROSSROADS, INC.



Charlene So, PE
Associate Principal

EXHIBIT 4: CUMULATIVE DEVELOPMENT PROJECT LOCATION MAP

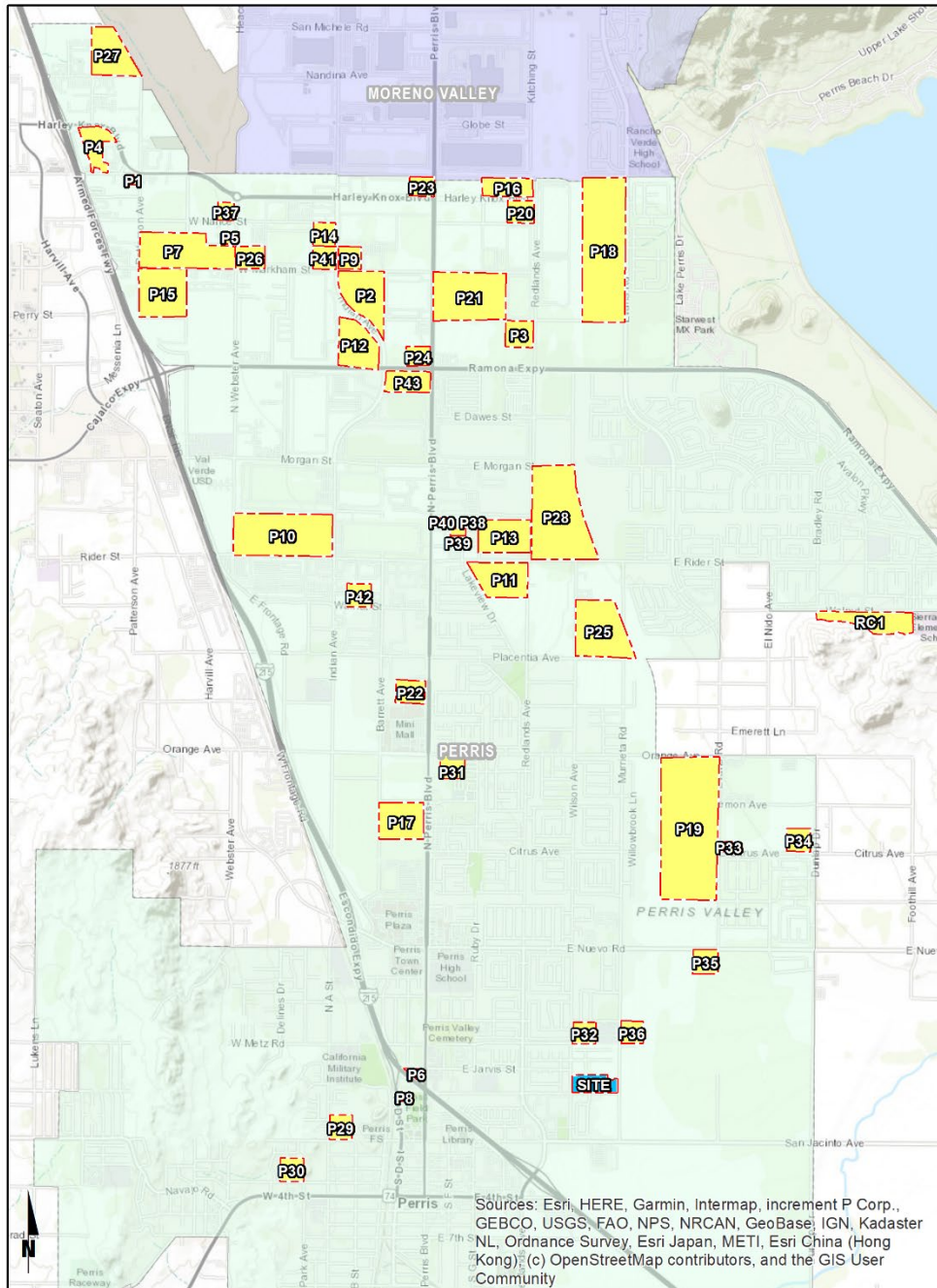


TABLE 2: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

No.	Project Name / Case Number	Jurisdiction	Land Use ¹	Quantity Units ²	Location
P1	Canyon Steel (CS)	Perris	Industrial	25.000 TSF	NWC OF PATTERSON AVE. & CALIFORNIA AVE.
P2	Duke 2 / DPR 16-00008	Perris	High-Cube Warehouse	669.000 TSF	NEC OF INDIAN AVE. & MARKHAM ST.
P3	First Perry / DPR 16-00013	Perris	High-Cube Warehouse	240.000 TSF	SWC OF REDLANDS AVE. & PERRY ST.
P4	Gateway / DPR 16-00003	Perris	High-Cube Warehouse	400.000 TSF	SOUTH OF HARLEY KNOX BLVD. EAST OF HWY. 215
P5	Marijuana Manufacturing (MM)	Perris	Industrial	1.000 TSF	NW CORNER OF WEBSTER AVE. & WASHINGTON ST.
P6	Perris Plaza - Build-out	Perris	Commercial	173.000 TSF	NE OF NUEVO RD. & I-215 FRONTAGE RD.
P7	OLC2 / DPR 14-01-0015	Perris	High-Cube Warehouse	1,037.000 TSF	WEST OF WEBSTER AVE. NORTH OF MARKHAM ST.
P8	Arco Expansion	Perris	Commercial	3.869 TSF	NW CORNER OF RAMONA EXWY. & PERRIS BL.
P9	Markham Industrial / DPR 16-00015	Perris	Warehousing	170.000 TSF	NEC OF INDIAN AVE. & MARKHAM ST.
P10	Rados / DPR 07-0119	Perris	High-Cube Warehouse	1,200.000 TSF	NWC OF INDIAN AVE. & RIDER ST.
P11	Rider 1 / DPR 16-0365	Perris	High-Cube Warehouse	350.000 TSF	SWC OF REDLANDS AVE. & RIDER ST.
P12	Indian/Ramona Warehouse / DPR 18-00002	Perris	High-Cube Warehouse	428.730 TSF	NORTH OF RAMONA EXWY. WEST OF INDIAN AVE.
P13	Rider 3 / DPR 06-0432	Perris	High-Cube Warehouse	640.000 TSF	NORTH OF RIDER ST. WEST OF REDLANDS AVE.
P14	Westcoast Textile / DPR 16-00001	Perris	Warehousing	180.000 TSF	SWC OF INDIAN ST. & NANCE ST.
P15	Duke at Patterson / DPR 17-00001	Perris	High-Cube Warehouse	811.000 TSF	SEC OF PATTERSON AVE. & MARKHAM ST.
P16	Harley Knox Commerce Park / DPR 16-004	Perris	High-Cube Warehouse	386.278 TSF	NWC OF HARLEY KNOX BLVD. & REDLANDS AVE.
P17	Perris Marketplace / DPR 05-0341	Perris	Commercial Retail	520.000 TSF	WEST OF PERRIS BLVD. AT AVOCADO AVE.
P18	Stratford Ranch Residential / TTM 36648	Perris	SFDR	90 DU	WEST OF EVANS RD. AT MARKHAM ST.
P19	Pulte Residential / TTM 30850	Perris	SFDR	496 DU	WEST OF EVANS RD. AT CITRUS AVE.
P20	Circle Industrial III	Perris	Warehousing	211.000 TSF	NWC OF REDLANDS AVE. AND NANCE AVE.
P21	Duke @ Perris Blvd.	Perris	High-Cube Warehouse	1,070.000 TSF	SEC OF PERRIS BL. AND MARKHAM ST.
P22	Weinerschnitzel / CUP 17-05083	Perris	Fast-Food Restaurant	2.000 TSF	WEST OF PERRIS BL., SOUTH OF PLACENTIA AVE.
P23	March Plaza / CUP16-05165	Perris	Commercial Retail	47.253 TSF	NWC OF PERRIS BL. AND HARLEY KNOX BL.
P24	Cali Express Carwash / CUP 16-05258	Perris	Carwash	5.600 TSF	NWC OF PERRIS BL. AND RAMONA EXWY.
P25	Wilson Industrial / DPR 19-00007	Perris	High-Cube Warehouse	303.000 TSF	SEC OF WILSON AVE. AND RIDER ST.
P26	Integra Expansion / MMOD 17-05075	Perris	High-Cube Warehouse	273.000 TSF	NCE OF MARKHAM ST. AND WEBSTER AVE.
P27	Western Industrial / DRP 19-00003	Perris	High-Cube Warehouse	250.000 TSF	NEC OF WESTERN WY. AND NANDINA AVE.
P28	Rider 2/4	Perris	High-Cube Warehouse	1,373.449 TSF	NEC OF REDLANDS AV. AND RIDER ST.
P29	Pacific Heritage I	Perris	SFDR	82.000 DU	SW OF NUEVO RD. & MCKIMBALL RD.
P30	Sunwest Enterprises	Perris	SFDR	61.000 DU	SW OF VAN WY. & DELINES DR.
P31	Pacific Ave	Perris	PUD	131.000 DU	SW OF ORANGE AVE. & MEDICAL CENTER DR.
P32	Sunwest Enterprises	Perris	SFDR	57.000 DU	SEC OF NUEVO RD. & WILSON AVE.
P33	Jason Keller/John Ford	Perris	SFDR	189.000 DU	NEC OF CITRUS RD. & EVANS RD.
P34	Jason Keller/John Ford	Perris	SFDR	122.000 DU	NWC OF CITRUS AVE. & DUNLAP DR.
P35	Rastogi Family LTD / John Ford	Perris	SFDR	75.000 DU	NWC OF NUEVO RD. & EVANS RD.
P36	Sterling Villa Senior Housing	Perris	Senior Adult Housing - Attached	429.000 DU	SE CORNER OF NUEVO RD. & MURRIETA RD.
P37	AAA	Perris	Industrial	2.000 TSF	SE CORNER OF HARLEY KNOX BL. & WEBSTER AVE.
P38	Pulliam Indus	Perris	Industrial	16.000 TSF	LOTS 10 & 12 ON COMMERCE DR., E OF PERRIS
P39	Burge Indus 1	Perris	Industrial	18.000 TSF	E OF PERRIS BL. & N OF COMMERCE DR.
P40	Burge Indus 2	Perris	Industrial	19.000 TSF	E OF PERRIS BL. & S OF COMMERCE DR.
P41	Phelan Indus	Perris	Industrial	81.000 TSF	N SIDE OF MARKHAM BTW WEBSTER AVE. & PERRIS BLVD.
P42	Dedeaux Walnut Warehouse	Perris	Industrial	205.830 TSF	N SIDE OF WALNUT AVE. BTW INDIAN AVE. & BARRETT AVE.
P43	Perris and Ramona Warehouse	Perris	Industrial	347.919 TSF	SEC OF INDIANA AVE. AND RAMONA EXWY.
RC1	McCanna Hills / TTM 33978	County of Riverside	SFDR	63 DU	SWC OF SHERMAN AVE. & WALNUT AVE.

¹ SFDR = Single Family Detached Residential
² DU = Dwelling Units; TSF = Thousand Square Feet

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APPENDIX 1.2: PRELIMINARY CONSTRUCTION COSTS

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APPENDIX G

PRELIMINARY CONSTRUCTION COST ESTIMATES FOR CONGESTION MANAGEMENT PLAN

**PRELIMINARY CONSTRUCTION COST ESTIMATES
FOR
CONGESTION MANAGEMENT PLAN**

Add One Lane Each Direction on Freeway			
Asphalt Concrete Pavement	\$2,300,000 Per Mile		
Portland Cement Concrete Pavement	\$2,800,000 Per Mile		
Includes: Excavation Paving Section Barrier Shoulder Upgrade Drainage System Traffic Control Mobilization @10% Design @11% Construction Mgt. @12.5%	Excludes: Environmental Costs Right of Way Widening of Bridge Structures Added Retaining Walls Added Sound Walls		
Widen Existing UC Structures			
Total Cost =	\$160 Per Square Foot		
Includes: Structure Mobilization @10% Design @11% Construction Mgt. @12.5%	Excludes: Environmental Costs Right of Way Traffic Control Ramp Modifications Signal/Lighting Up Grades Drainage Upgrades Added Retaining Walls Added Sound Walls		
Diamond Interchanges			
\$10,000,000	EACH	NEW IC	Minimal Row/Environmental
\$15,000,000	EACH	NEW IC	Includes Row/Environmental
\$20,000,000	EACH	EXISTING	Minimal Row/Environmental
\$25,000,000	EACH	EXISTING	Includes Row/ Environmental
Includes: Structure Retaining Walls Soil Nail Walls Drainage System Ramps Mobilization @ 10% Design @ 11% Construction Mgt. @ 12.5%	Excludes: As listed		

Retaining Walls			
Height Feet	Structure Cost \$/LF	Mobilization Design Constr. Mgt. \$/LF	Total \$/LF
4	\$190	\$70	\$260
6	\$260	\$90	\$350
8	\$380	\$140	\$520
10	\$430	\$150	\$580
12	\$480	\$170	\$650
14	\$590	\$210	\$800
16	\$660	\$240	\$900
	Excludes: Environmental Costs Right of Way		
12' High Sound Walls (Masonry Block on Footing)			
	Structure Cost \$/Mile	Mobilization Design Constr. Mgt. \$/Mile	Total \$/Mile
	\$800,000	\$300,000	\$1,100,000
Widen Conventional Highway			
1.	Add one outside lane (Work includes earthwork, modify existing drainage system and construct AC shoulder section.) Asphalt Concrete Pavement		\$1,000,000/Mile
2.	Add one outside lane each direction (Work includes earthwork, modify existing drainage system and construct AC shoulder section) Asphalt Concrete Pavement With Median Concrete Barrier With Median Double Thrie Beam Barrier		\$2,000,000/Mile \$2,200,000/Mile \$2,300,000/Mile
Local Interchange Improvements			
1.	New Interchange Urban Interchange Partial – Cloverleaf Interchange (Work includes new OC structure, earthwork, signal) Diamond Interchange (Work includes new OC structure, earthwork, signal)		\$10,000,000 to \$17,000,000 \$6,000,000 \$5,000,000

Local Interchange Improvements CONT...		
2.	Reconstruct Existing Interchange	
	Realign and widen existing ramps (to 2 lanes)	\$750,000/Each Ramp
	Construct Loop on – ramps (Does not include realigning existing ramp)	\$700,000/Each Ramp
	Upgrade existing Diamond IC to Partial – Cloverleaf	\$6,000,000
3.	Improve Existing Interchange	
	Widen ramps (From one to two lanes)	\$350,000/Each Ramp
	Widen existing OC structure	\$110/Sq. Ft.
	Signalize ramp intersection	\$90,000/Location
	Upgrade existing signal at ramp terminal	\$75,000/Intersection
	Upgrade existing signal at ramp terminal (Add lights only)	\$25,000/Each
4.	Ramp Metering System	\$60,000/Each location
Intersection Improvements		
1.	Signalization of local intersection (with some roadwork)	\$250,000
2.	Upgrade existing intersection signalization	\$75,000
3.	Upgrade existing Traffic Controller/Assembles	\$40,000/Each
4.	Install new signal	\$90,000/location
5.	Add signal heads	\$25,000/Intersection
6.	Construct left – turn lane (240' long)	\$50,000/Each Location
7.	Street widening (12' wide) (Pavement only)	\$180,000/Mile
8.	Curb and gutter (Type A2-8)	\$15/LF

Other Improvements	
1. Construct new OC structure (Does not include roadway work)	\$100/Sq. Ft.
2. Construct Retaining Walls (Type 1)	\$285/LF (H=8') \$360/LF (H=10') \$460/LF (H=12') \$560/LF (H=14')
3. Construct Soundwall	\$1,000,000/Mile (H=12')
4. Traffic Management Plan	10% of total construction costs
NOTE:	This cost estimate does not include the following items: <ul style="list-style-type: none"> 1. R/W engineering, appraisal, acquisition and utilities relocation costs. 2. Minor items and supplemental work (10%). 3. Mobilization (10%). 4. Contingencies (25%). 5. Landscaping costs.
General Note:	When adding a through lane, the minimum distance is 600' approach and 600' departure to the next intersection.

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APPENDIX 1.3: SITE ADJACENT QUEUES

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Intersection: 5: Wilson Av & Dwy 1

Movement	WB
Directions Served	LR
Maximum Queue (ft)	50
Average Queue (ft)	24
95th Queue (ft)	49
Link Distance (ft)	489
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Murrieta Rd & Dwy 2

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	63	49
Average Queue (ft)	23	5
95th Queue (ft)	52	27
Link Distance (ft)	447	1781
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Intersection: 5: Wilson Av & Dwy 1

Movement	WB
Directions Served	LR
Maximum Queue (ft)	49
Average Queue (ft)	21
95th Queue (ft)	49
Link Distance (ft)	489
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Murrieta Rd & Dwy 2

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	44	70
Average Queue (ft)	19	20
95th Queue (ft)	44	59
Link Distance (ft)	447	1781
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

APPENDIX 3.1: TRAFFIC COUNTS – FEBRUARY 2022

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City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

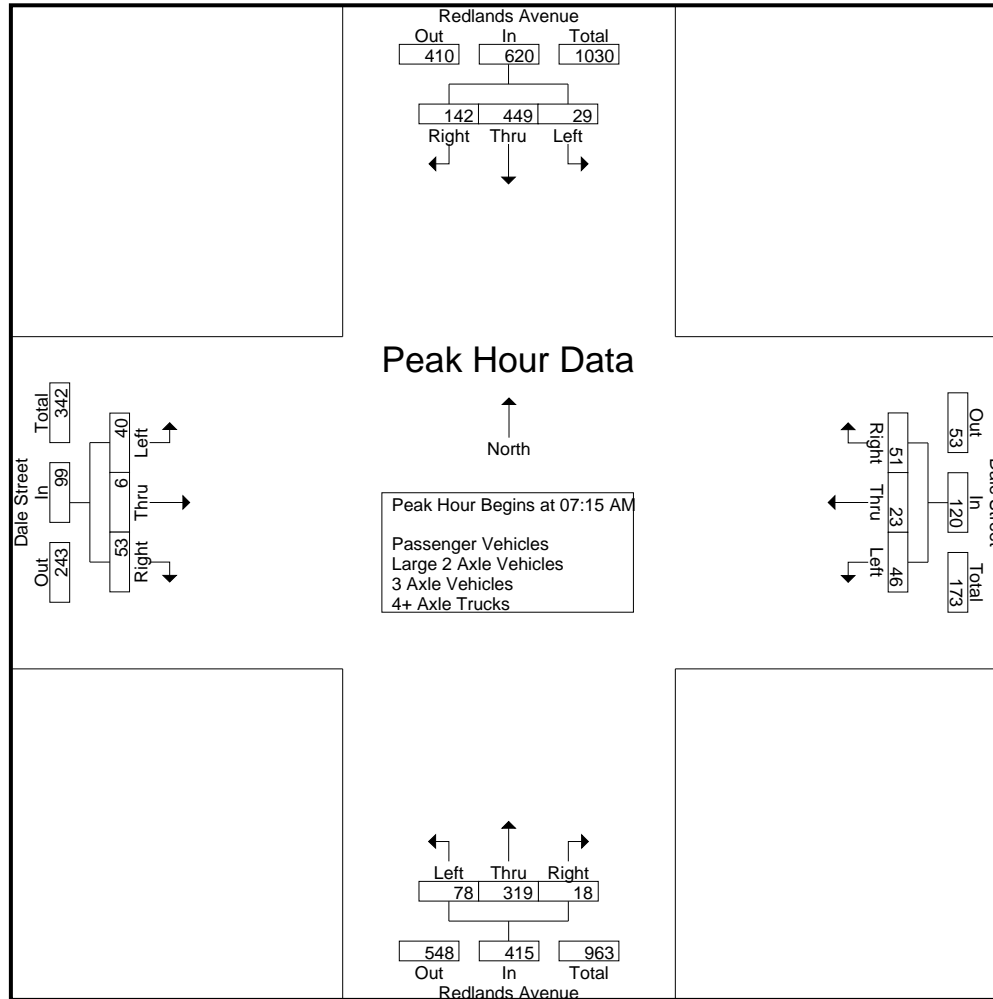
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Redlands Avenue Southbound					Dale Street Westbound					Redlands Avenue Northbound					Dale Street Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	2	92	5	1	99	5	1	3	3	9	11	65	2	0	78	2	3	7	4	12	8	198	206
07:15 AM	4	93	19	3	116	11	1	10	6	22	10	83	3	0	96	4	1	7	6	12	15	246	261
07:30 AM	6	135	47	9	188	13	9	20	14	42	31	87	5	0	123	13	2	22	11	37	34	390	424
07:45 AM	10	127	63	8	200	14	11	15	7	40	29	76	3	0	108	16	2	17	8	35	23	383	406
Total	22	447	134	21	603	43	22	48	30	113	81	311	13	0	405	35	8	53	29	96	80	1217	1297
08:00 AM	9	94	13	2	116	8	2	6	5	16	8	73	7	0	88	7	1	7	6	15	13	235	248
08:15 AM	3	88	7	1	98	9	0	1	1	10	6	70	2	0	78	3	0	5	4	8	6	194	200
08:30 AM	6	71	6	0	83	6	0	4	2	10	6	47	2	0	55	2	1	4	4	7	6	155	161
08:45 AM	5	79	3	0	87	4	0	5	5	9	1	48	3	0	52	0	0	6	5	6	10	154	164
Total	23	332	29	3	384	27	2	16	13	45	21	238	14	0	273	12	2	22	19	36	35	738	773
Grand Total	45	779	163	24	987	70	24	64	43	158	102	549	27	0	678	47	10	75	48	132	115	1955	2070
Apprch %	4.6	78.9	16.5			44.3	15.2	40.5			15	81	4			35.6	7.6	56.8					
Total %	2.3	39.8	8.3		50.5	3.6	1.2	3.3		8.1	5.2	28.1	1.4		34.7	2.4	0.5	3.8		6.8	5.6	94.4	
Passenger Vehicles	45	773	160		1002	68	22	62		193	96	537	26		659	46	10	73		176	0	0	2030
% Passenger Vehicles	100	99.2	98.2	100	99.1	97.1	91.7	96.9	95.3	96	94.1	97.8	96.3	0	97.2	97.9	100	97.3	97.9	97.8	0	0	98.1
Large 2 Axle Vehicles	0	5	3		8	2	2	1		6	6	10	1		17	1	0	2		4	0	0	35
% Large 2 Axle Vehicles	0	0.6	1.8	0	0.8	2.9	8.3	1.6	2.3	3	5.9	1.8	3.7	0	2.5	2.1	0	2.7	2.1	2.2	0	0	1.7
3 Axle Vehicles	0	0	0		0	0	0	1		2	0	1	0		1	0	0	0		0	0	0	3
% 3 Axle Vehicles	0	0	0	0	0	0	0	1.6	2.3	1	0	0.2	0	0	0.1	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	0	1	0		1	0	0	0		0	0	1	0		1	0	0	0		0	0	0	2
% 4+ Axle Trucks	0	0.1	0	0	0.1	0	0	0	0	0	0	0.2	0	0	0.1	0	0	0	0	0	0	0	0.1

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	4	93	19	116	11	1	10	22	10	83	3	96	4	1	7	12	246
07:30 AM	6	135	47	188	13	9	20	42	31	87	5	123	13	2	22	37	390
07:45 AM	10	127	63	200	14	11	15	40	29	76	3	108	16	2	17	35	383
08:00 AM	9	94	13	116	8	2	6	16	8	73	7	88	7	1	7	15	235
Total Volume	29	449	142	620	46	23	51	120	78	319	18	415	40	6	53	99	1254
% App. Total	4.7	72.4	22.9		38.3	19.2	42.5		18.8	76.9	4.3		40.4	6.1	53.5		
PHF	.725	.831	.563	.775	.821	.523	.638	.714	.629	.917	.643	.843	.625	.750	.602	.669	.804

City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale AM
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City of Perris
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 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	4	93	19	116	11	1	10	22	10	83	3	96	4	1	7	12	
+15 mins.	6	135	47	188	13	9	20	42	31	87	5	123	13	2	22	37	
+30 mins.	10	127	63	200	14	11	15	40	29	76	3	108	16	2	17	35	
+45 mins.	9	94	13	116	8	2	6	16	8	73	7	88	7	1	7	15	
Total Volume	29	449	142	620	46	23	51	120	78	319	18	415	40	6	53	99	
% App. Total	4.7	72.4	22.9		38.3	19.2	42.5		18.8	76.9	4.3		40.4	6.1	53.5		
PHF	.725	.831	.563	.775	.821	.523	.638	.714	.629	.917	.643	.843	.625	.750	.602	.669	

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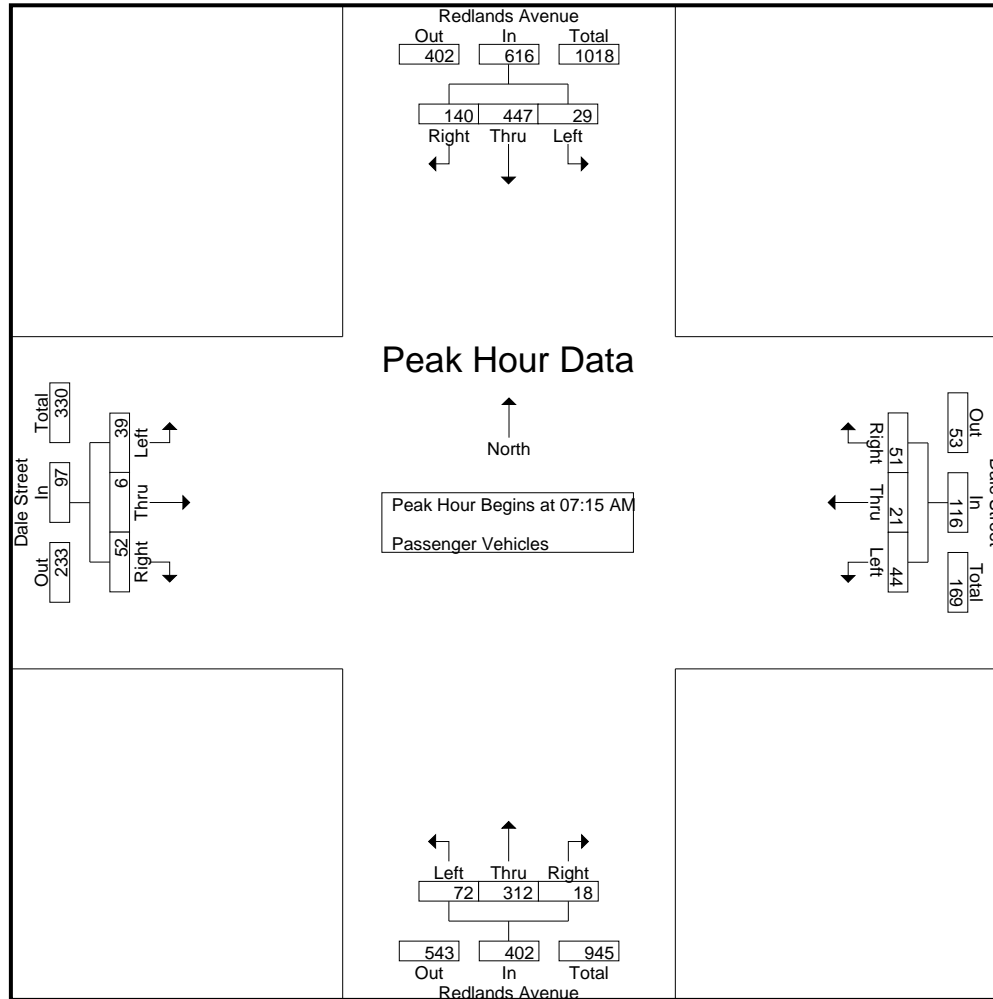
Groups Printed- Passenger Vehicles

Start Time	Redlands Avenue Southbound					Dale Street Westbound					Redlands Avenue Northbound					Dale Street Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	2	92	5	1	99	5	1	2	2	8	11	63	1	0	75	2	3	7	4	12	7	194	201
07:15 AM	4	92	19	3	115	11	0	10	6	21	10	77	3	0	90	3	1	7	6	11	15	237	252
07:30 AM	6	134	46	9	186	11	8	20	14	39	29	87	5	0	121	13	2	21	11	36	34	382	416
07:45 AM	10	127	62	8	199	14	11	15	7	40	26	75	3	0	104	16	2	17	8	35	23	378	401
Total	22	445	132	21	599	41	20	47	29	108	76	302	12	0	390	34	8	52	29	94	79	1191	1270
08:00 AM	9	94	13	2	116	8	2	6	5	16	7	73	7	0	87	7	1	7	6	15	13	234	247
08:15 AM	3	85	6	1	94	9	0	1	1	10	6	70	2	0	78	3	0	4	3	7	5	189	194
08:30 AM	6	71	6	0	83	6	0	3	1	9	6	46	2	0	54	2	1	4	4	7	5	153	158
08:45 AM	5	78	3	0	86	4	0	5	5	9	1	46	3	0	50	0	0	6	5	6	10	151	161
Total	23	328	28	3	379	27	2	15	12	44	20	235	14	0	269	12	2	21	18	35	33	727	760
Grand Total	45	773	160	24	978	68	22	62	41	152	96	537	26	0	659	46	10	73	47	129	112	1918	2030
Apprch %	4.6	79	16.4			44.7	14.5	40.8			14.6	81.5	3.9			35.7	7.8	56.6					
Total %	2.3	40.3	8.3		51	3.5	1.1	3.2		7.9	5	28	1.4		34.4	2.4	0.5	3.8		6.7	5.5	94.5	

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	4	92	19	115	11	0	10	21	10	77	3	90	3	1	7	11	237
07:30 AM	6	134	46	186	11	8	20	39	29	87	5	121	13	2	21	36	382
07:45 AM	10	127	62	199	14	11	15	40	26	75	3	104	16	2	17	35	378
08:00 AM	9	94	13	116	8	2	6	16	7	73	7	87	7	1	7	15	234
Total Volume	29	447	140	616	44	21	51	116	72	312	18	402	39	6	52	97	1231
% App. Total	4.7	72.6	22.7		37.9	18.1	44		17.9	77.6	4.5		40.2	6.2	53.6		
PHF	.725	.834	.565	.774	.786	.477	.638	.725	.621	.897	.643	.831	.609	.750	.619	.674	.806

City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale AM
 Site Code : 05122121
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City of Perris
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 Page No : 3

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	4	92	19	115	11	0	10	21	10	77	3	90	3	1	7	11	
+15 mins.	6	134	46	186	11	8	20	39	29	87	5	121	13	2	21	36	
+30 mins.	10	127	62	199	14	11	15	40	26	75	3	104	16	2	17	35	
+45 mins.	9	94	13	116	8	2	6	16	7	73	7	87	7	1	7	15	
Total Volume	29	447	140	616	44	21	51	116	72	312	18	402	39	6	52	97	
% App. Total	4.7	72.6	22.7		37.9	18.1	44		17.9	77.6	4.5		40.2	6.2	53.6		
PHF	.725	.834	.565	.774	.786	.477	.638	.725	.621	.897	.643	.831	.609	.750	.619	.674	

City of Perris
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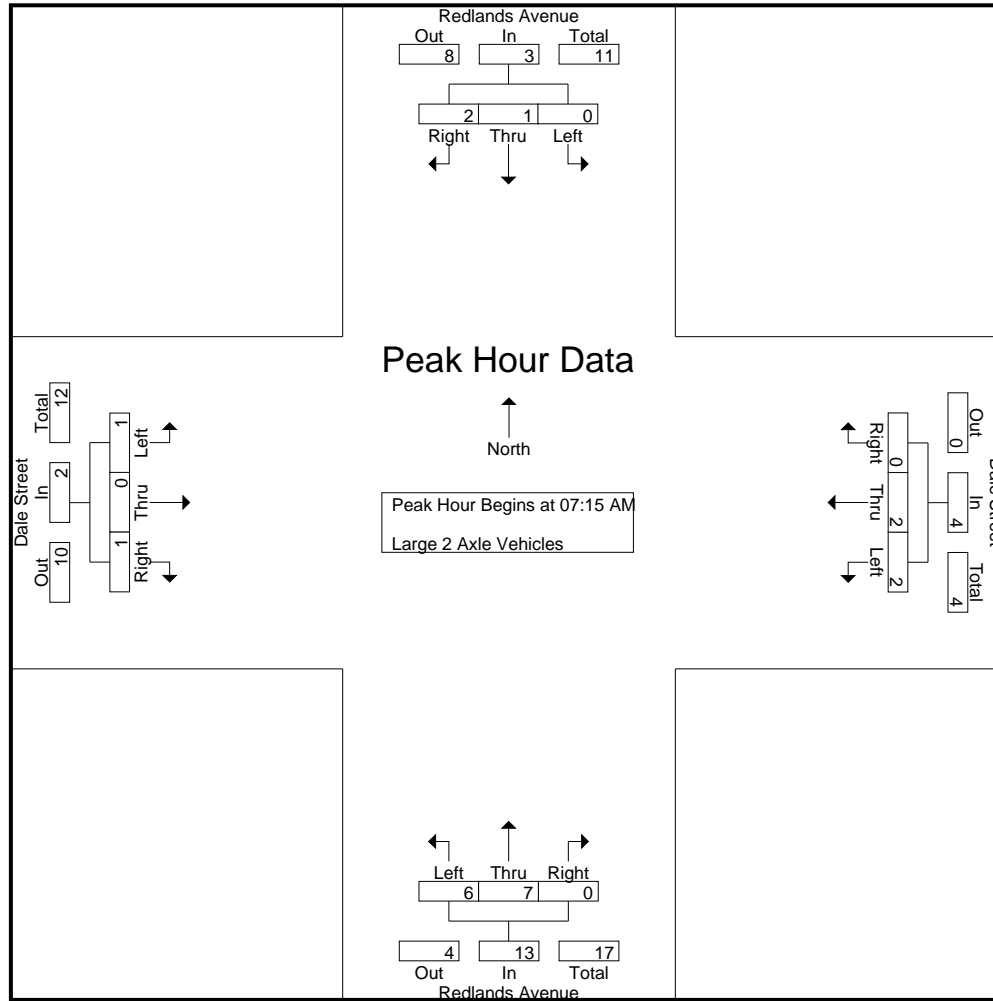
Groups Printed- Large 2 Axle Vehicles

Start Time	Redlands Avenue Southbound					Dale Street Westbound					Redlands Avenue Northbound					Dale Street Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	0	1	1	1	0	0	1	0	1	0	0	0	0	0	0	1	2	3
07:15 AM	0	1	0	0	1	0	1	0	0	1	0	6	0	0	6	1	0	0	0	1	0	9	9	9
07:30 AM	0	0	1	0	1	2	1	0	0	3	2	0	0	0	2	0	0	1	0	1	0	7	7	7
07:45 AM	0	0	1	0	1	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0	0	5	5	5
Total	0	1	2	0	3	2	2	1	1	5	5	7	1	0	13	1	0	1	0	2	1	23	24	24
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	1	1
08:15 AM	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	5	6	6
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	1
08:45 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	3	3
Total	0	4	1	0	5	0	0	0	0	0	1	3	0	0	4	0	0	1	1	1	1	10	11	11
Grand Total	0	5	3	0	8	2	2	1	1	5	6	10	1	0	17	1	0	2	1	3	2	33	35	35
Apprch %	0	62.5	37.5			40	40	20			35.3	58.8	5.9			33.3	0	66.7						
Total %	0	15.2	9.1		24.2	6.1	6.1	3		15.2	18.2	30.3	3		51.5	3	0	6.1		9.1	5.7	94.3		

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	0	1	0	1	0	1	0	6	0	6	1	0	0	1	9
07:30 AM	0	0	1	1	2	1	0	3	2	0	0	2	0	0	1	1	7
07:45 AM	0	0	1	1	0	0	0	0	3	1	0	4	0	0	0	0	5
08:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Total Volume	0	1	2	3	2	2	0	4	6	7	0	13	1	0	1	2	22
% App. Total	0	33.3	66.7		50	50	0		46.2	53.8	0		50	0	50		
PHF	.000	.250	.500	.750	.250	.500	.000	.333	.500	.292	.000	.542	.250	.000	.250	.500	.611

City of Perris
 N/S: Redlands Avenue
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Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	1	0	1	0	1	0	1	0	6	0	6	1	0	0	1	
+15 mins.	0	0	1	1	2	1	0	3	2	0	0	2	0	0	1	1	
+30 mins.	0	0	1	1	0	0	0	0	3	1	0	4	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	
Total Volume	0	1	2	3	2	2	0	4	6	7	0	13	1	0	1	2	
% App. Total	0	33.3	66.7		50	50	0		46.2	53.8	0		50	0	50		
PHF	.000	.250	.500	.750	.250	.500	.000	.333	.500	.292	.000	.542	.250	.000	.250	.500	

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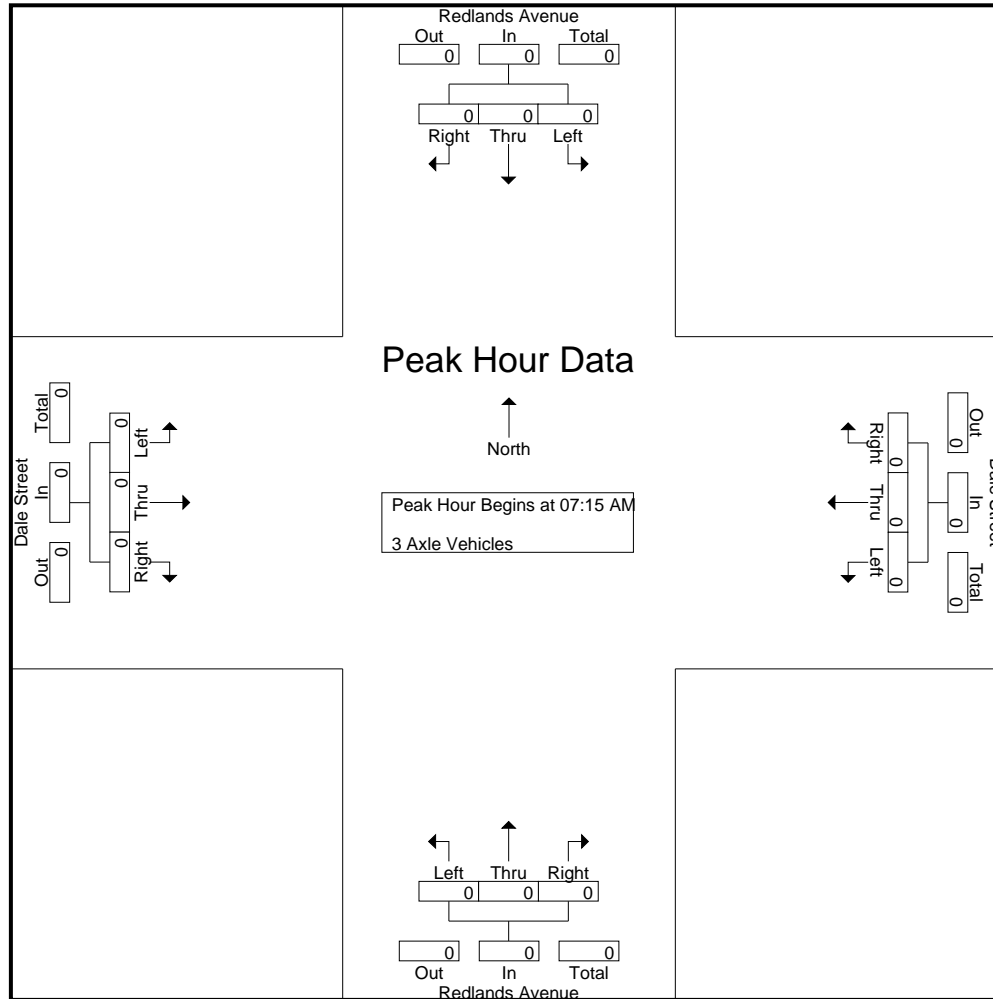
Groups Printed- 3 Axle Vehicles

Start Time	Redlands Avenue Southbound					Dale Street Westbound					Redlands Avenue Northbound					Dale Street Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2	2
Grand Total	0	0	0	0	0	0	0	1	1	1	0	1	0	0	1	0	0	0	0	0	1	2	3	3
Apprch %	0	0	0			0	0	100			0	100	0			0	0	0						
Total %	0	0	0			0	0	50		50	0	50	0		50	0	0	0		0	33.3	66.7		

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

City of Perris
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File Name : 01_PER_Red_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

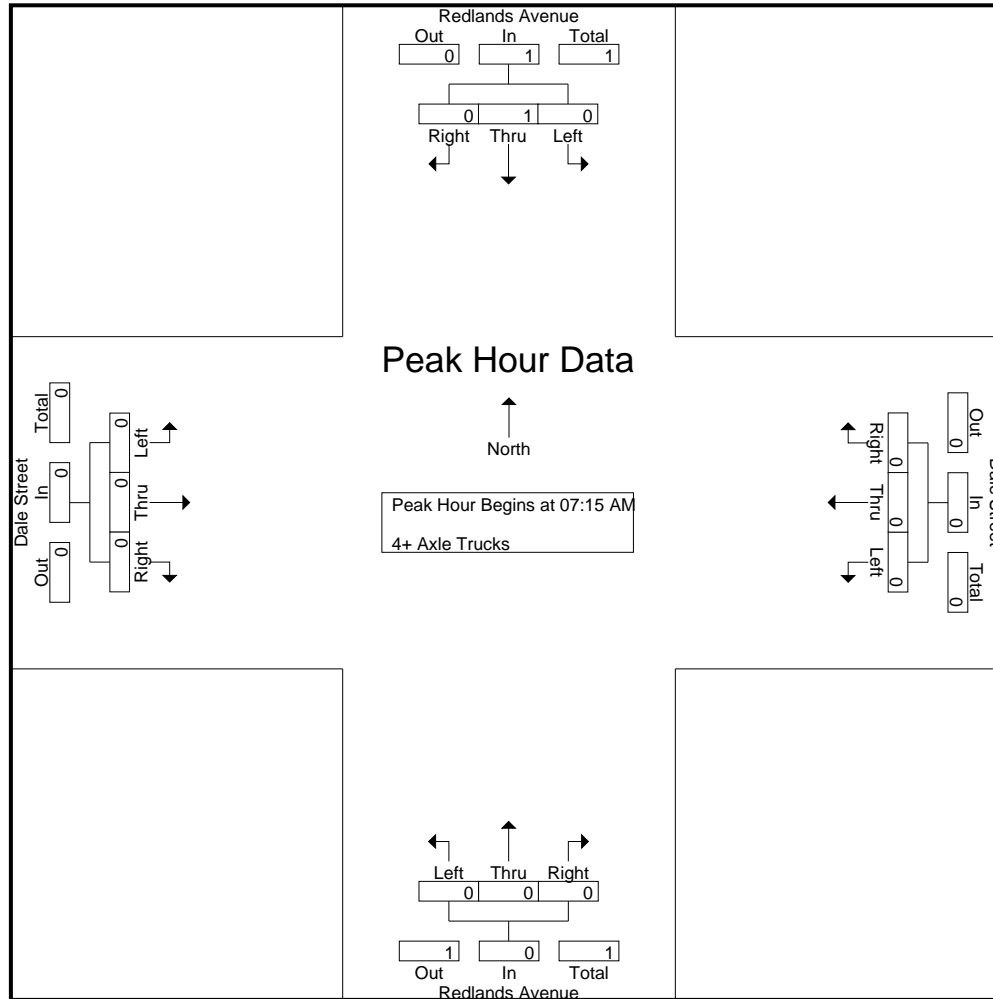
Groups Printed- 4+ Axle Trucks

Start Time	Redlands Avenue Southbound					Dale Street Westbound					Redlands Avenue Northbound					Dale Street Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
Apprch %	0	100	0			0	0	0			0	100	0			0	0	0			0	0	0			0		
Total %	0	50	0		50	0	0	0		0	0	50	0		50	0	0	0		0	0	0	0		0	0	100	

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

City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
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City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

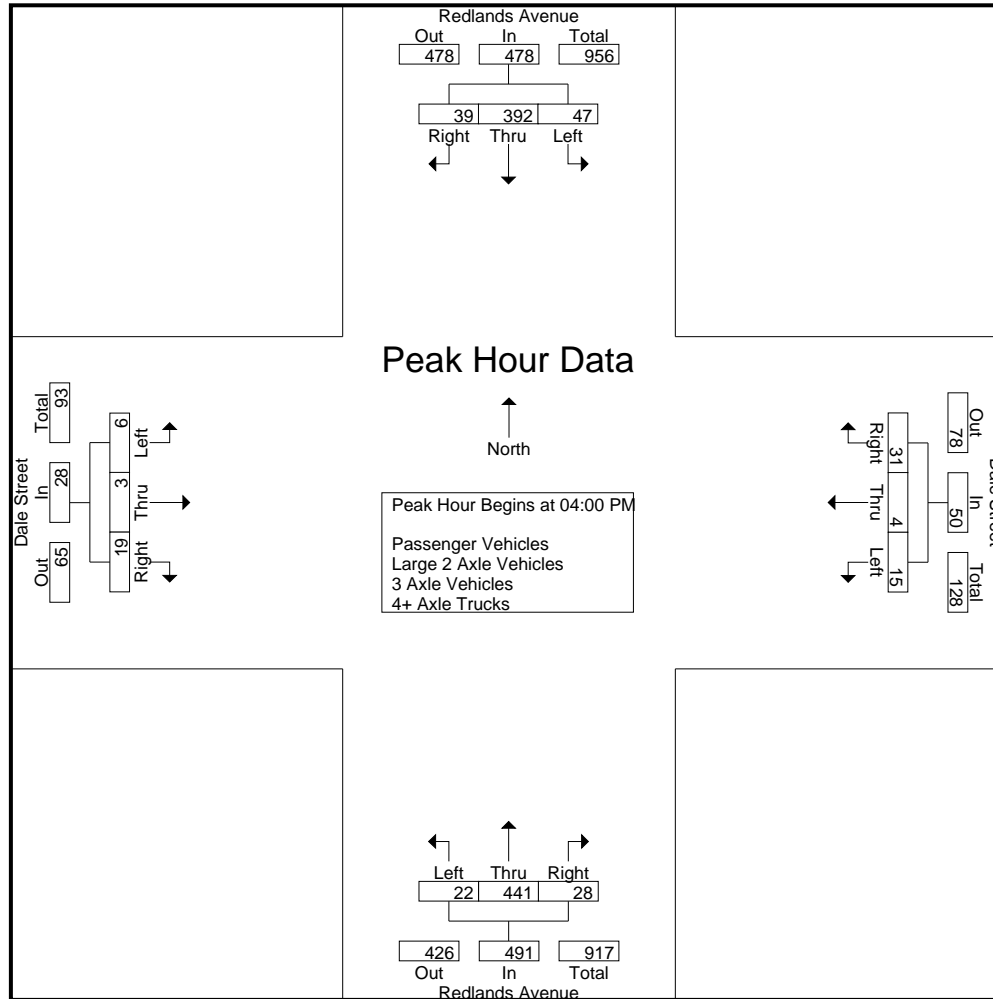
Start Time	Redlands Avenue Southbound					Dale Street Westbound					Redlands Avenue Northbound					Dale Street Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	17	109	8	0	134	5	0	5	3	10	9	119	5	0	133	2	1	5	4	8	7	285	292
04:15 PM	6	79	9	0	94	4	2	9	9	15	5	103	9	3	117	1	2	1	1	4	13	230	243
04:30 PM	16	103	12	2	131	4	0	11	9	15	4	104	6	1	114	3	0	5	4	8	16	268	284
04:45 PM	8	101	10	0	119	2	2	6	4	10	4	115	8	1	127	0	0	8	7	8	12	264	276
Total	47	392	39	2	478	15	4	31	25	50	22	441	28	5	491	6	3	19	16	28	48	1047	1095
05:00 PM	14	107	10	2	131	4	0	13	9	17	10	101	6	2	117	3	0	1	1	4	14	269	283
05:15 PM	10	87	8	1	105	2	0	11	11	13	8	92	3	1	103	3	2	3	3	8	16	229	245
05:30 PM	10	95	6	1	111	3	2	10	8	15	4	106	7	0	117	4	1	4	3	9	12	252	264
05:45 PM	10	90	8	0	108	6	0	5	3	11	5	102	8	1	115	1	3	5	5	9	9	243	252
Total	44	379	32	4	455	15	2	39	31	56	27	401	24	4	452	11	6	13	12	30	51	993	1044
Grand Total	91	771	71	6	933	30	6	70	56	106	49	842	52	9	943	17	9	32	28	58	99	2040	2139
Apprch %	9.8	82.6	7.6			28.3	5.7	66			5.2	89.3	5.5			29.3	15.5	55.2					
Total %	4.5	37.8	3.5		45.7	1.5	0.3	3.4		5.2	2.4	41.3	2.5		46.2	0.8	0.4	1.6		2.8	4.6	95.4	
Passenger Vehicles	90	763	71		930	30	6	67		159	49	840	52		950	17	9	32		86	0	0	2125
% Passenger Vehicles	98.9	99	100	100	99	100	100	95.7	100	98.1	100	99.8	100	100	99.8	100	100	100	100	100	0	0	99.3
Large 2 Axle Vehicles	1	5	0		6	0	0	1		1	0	2	0		2	0	0	0		0	0	0	9
% Large 2 Axle Vehicles	1.1	0.6	0	0	0.6	0	0	1.4	0	0.6	0	0.2	0	0	0.2	0	0	0	0	0	0	0	0.4
3 Axle Vehicles	0	3	0		3	0	0	1		1	0	0	0		0	0	0	0		0	0	0	4
% 3 Axle Vehicles	0	0.4	0	0	0.3	0	0	1.4	0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0.2
4+ Axle Trucks	0	0	0		0	0	0	1		1	0	0	0		0	0	0	0		0	0	0	1
% 4+ Axle Trucks	0	0	0	0	0	0	0	1.4	0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	17	109	8	134	5	0	5	10	9	119	5	133	2	1	5	8	285
04:15 PM	6	79	9	94	4	2	9	15	5	103	9	117	1	2	1	4	230
04:30 PM	16	103	12	131	4	0	11	15	4	104	6	114	3	0	5	8	268
04:45 PM	8	101	10	119	2	2	6	10	4	115	8	127	0	0	8	8	264
Total Volume	47	392	39	478	15	4	31	50	22	441	28	491	6	3	19	28	1047
% App. Total	9.8	82	8.2		30	8	62		4.5	89.8	5.7		21.4	10.7	67.9		
PHF	.691	.899	.813	.892	.750	.500	.705	.833	.611	.926	.778	.923	.500	.375	.594	.875	.918

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

City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
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City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:15 PM				04:00 PM				05:00 PM				
+0 mins.	16	103	12	131	4	2	9	15	9	119	5	133	3	0	1	4	
+15 mins.	8	101	10	119	4	0	11	15	5	103	9	117	3	2	3	8	
+30 mins.	14	107	10	131	2	2	6	10	4	104	6	114	4	1	4	9	
+45 mins.	10	87	8	105	4	0	13	17	4	115	8	127	1	3	5	9	
Total Volume	48	398	40	486	14	4	39	57	22	441	28	491	11	6	13	30	
% App. Total	9.9	81.9	8.2		24.6	7	68.4		4.5	89.8	5.7		36.7	20	43.3		
PHF	.750	.930	.833	.927	.875	.500	.750	.838	.611	.926	.778	.923	.688	.500	.650	.833	

City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
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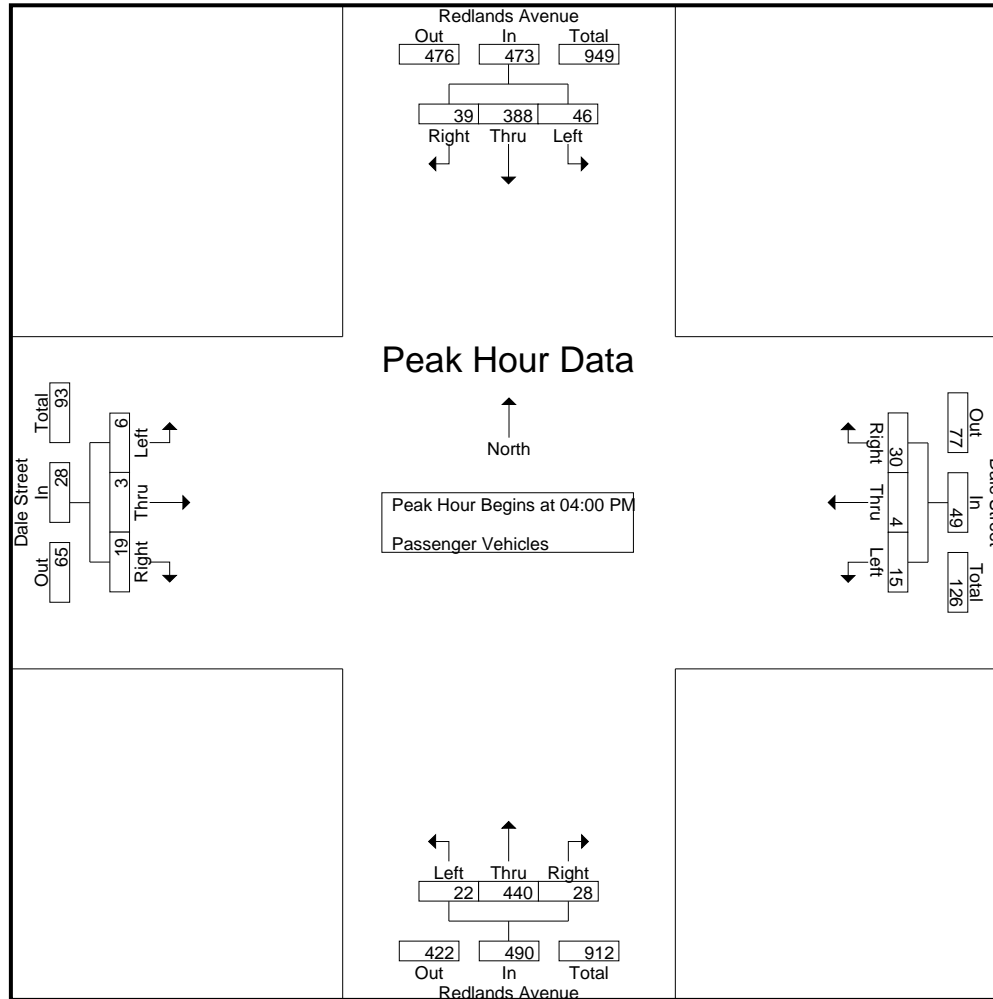
Groups Printed- Passenger Vehicles

Start Time	Redlands Avenue Southbound					Dale Street Westbound					Redlands Avenue Northbound					Dale Street Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	16	108	8	0	132	5	0	5	3	10	9	119	5	0	133	2	1	5	4	8	7	283	290
04:15 PM	6	78	9	0	93	4	2	9	9	15	5	103	9	3	117	1	2	1	1	4	13	229	242
04:30 PM	16	102	12	2	130	4	0	10	9	14	4	104	6	1	114	3	0	5	4	8	16	266	282
04:45 PM	8	100	10	0	118	2	2	6	4	10	4	114	8	1	126	0	0	8	7	8	12	262	274
Total	46	388	39	2	473	15	4	30	25	49	22	440	28	5	490	6	3	19	16	28	48	1040	1088
05:00 PM	14	107	10	2	131	4	0	11	9	15	10	100	6	2	116	3	0	1	1	4	14	266	280
05:15 PM	10	86	8	1	104	2	0	11	11	13	8	92	3	1	103	3	2	3	3	8	16	228	244
05:30 PM	10	94	6	1	110	3	2	10	8	15	4	106	7	0	117	4	1	4	3	9	12	251	263
05:45 PM	10	88	8	0	106	6	0	5	3	11	5	102	8	1	115	1	3	5	5	9	9	241	250
Total	44	375	32	4	451	15	2	37	31	54	27	400	24	4	451	11	6	13	12	30	51	986	1037
Grand Total	90	763	71	6	924	30	6	67	56	103	49	840	52	9	941	17	9	32	28	58	99	2026	2125
Apprch %	9.7	82.6	7.7			29.1	5.8	65			5.2	89.3	5.5			29.3	15.5	55.2					
Total %	4.4	37.7	3.5		45.6	1.5	0.3	3.3		5.1	2.4	41.5	2.6		46.4	0.8	0.4	1.6		2.9	4.7	95.3	

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	16	108	8	132	5	0	5	10	9	119	5	133	2	1	5	8	283
04:15 PM	6	78	9	93	4	2	9	15	5	103	9	117	1	2	1	4	229
04:30 PM	16	102	12	130	4	0	10	14	4	104	6	114	3	0	5	8	266
04:45 PM	8	100	10	118	2	2	6	10	4	114	8	126	0	0	8	8	262
Total Volume	46	388	39	473	15	4	30	49	22	440	28	490	6	3	19	28	1040
% App. Total	9.7	82	8.2		30.6	8.2	61.2		4.5	89.8	5.7		21.4	10.7	67.9		
PHF	.719	.898	.813	.896	.750	.500	.750	.817	.611	.924	.778	.921	.500	.375	.594	.875	.919

City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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.	16	108	8	132	5	0	5	10	9	119	5	133	2	1	5	8	
+15 mins.	6	78	9	93	4	2	9	15	5	103	9	117	1	2	1	4	
+30 mins.	16	102	12	130	4	0	10	14	4	104	6	114	3	0	5	8	
+45 mins.	8	100	10	118	2	2	6	10	4	114	8	126	0	0	8	8	
Total Volume	46	388	39	473	15	4	30	49	22	440	28	490	6	3	19	28	
% App. Total	9.7	82	8.2		30.6	8.2	61.2		4.5	89.8	5.7		21.4	10.7	67.9		
PHF	.719	.898	.813	.896	.750	.500	.750	.817	.611	.924	.778	.921	.500	.375	.594	.875	

City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

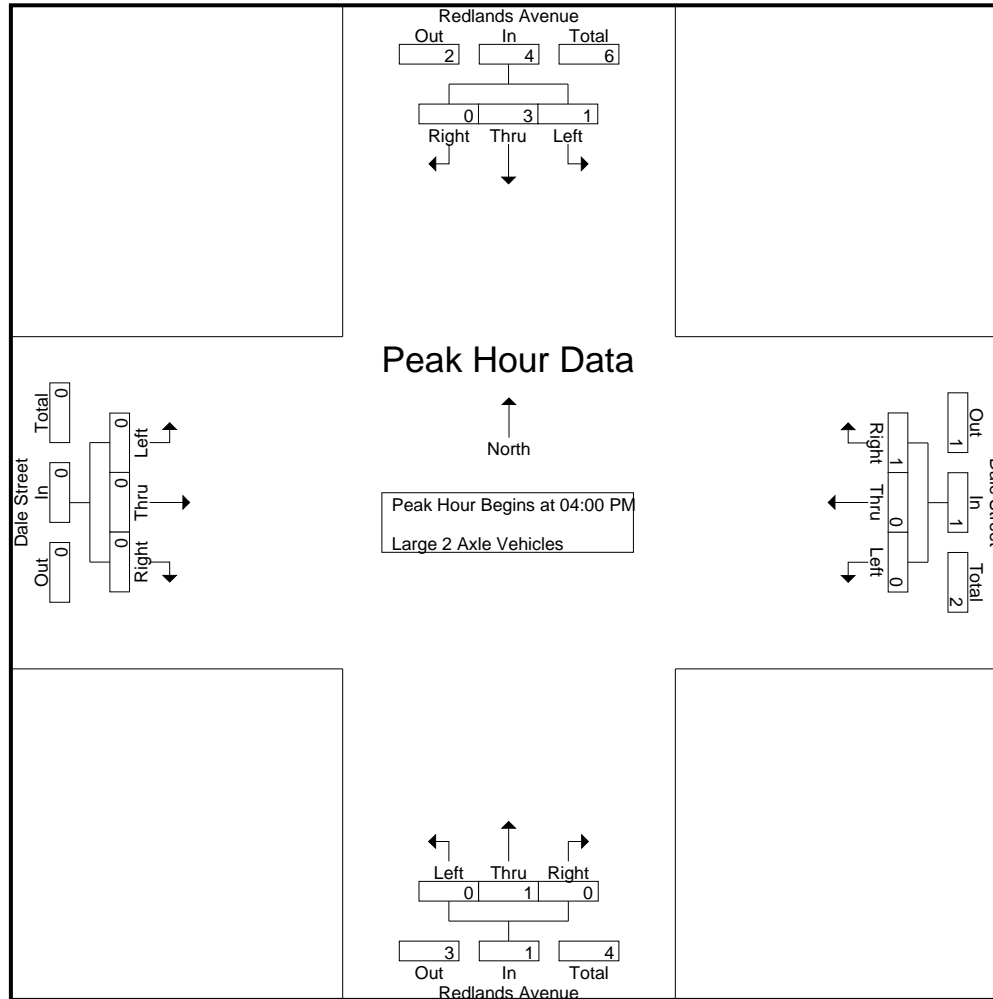
Groups Printed- Large 2 Axle Vehicles

Start Time	Redlands Avenue Southbound					Dale Street Westbound					Redlands Avenue Northbound					Dale Street Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	1	3	0	0	4	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	6
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	3
Grand Total	1	5	0	0	6	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	9	9
Apprch %	16.7	83.3	0			0	0	100			0	100	0			0	0	0			0	0	0			0		
Total %	11.1	55.6	0		66.7	0	0	11.1		11.1	0	22.2	0		22.2	0	0	0		0	0	0	0		0	0	100	

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:00 PM																		
04:00 PM	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	2
Total Volume	1	3	0	4	0	0	1	1	0	1	0	1	0	0	0	0	0	6
% App. Total	25	75	0		0	0	100		0	100	0		0	0	0			
PHF	.250	.750	.000	.500	.000	.000	.250	.250	.000	.250	.000	.250	.000	.000	.000	.000		.750

City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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.	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	
Total Volume	1	3	0	4	0	0	1	1	0	1	0	1	0	0	0	0	
% App. Total	25	75	0		0	0	100		0	100	0		0	0	0		
PHF	.250	.750	.000	.500	.000	.000	.250	.250	.000	.250	.000	.250	.000	.000	.000	.000	

City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

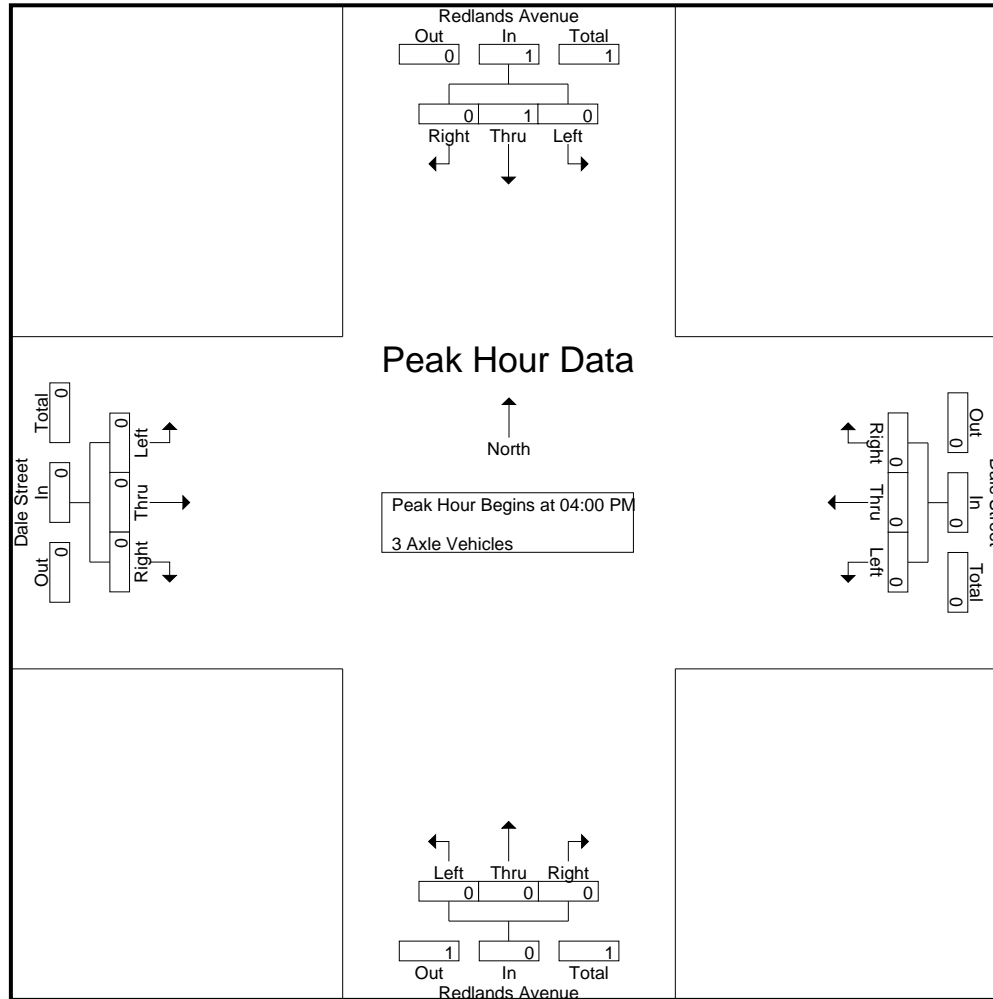
Groups Printed- 3 Axle Vehicles

Start Time	Redlands Avenue Southbound					Dale Street Westbound					Redlands Avenue Northbound					Dale Street Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:00 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Grand Total	0	3	0	0	3	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Apprch %	0	100	0			0	0	100			0	0	0			0	0	0			0	0	0			0		
Total %	0	75	0		75	0	0	25		25	0	0	0		0	0	0	0		0	0	0	0		0	0	100	

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

City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

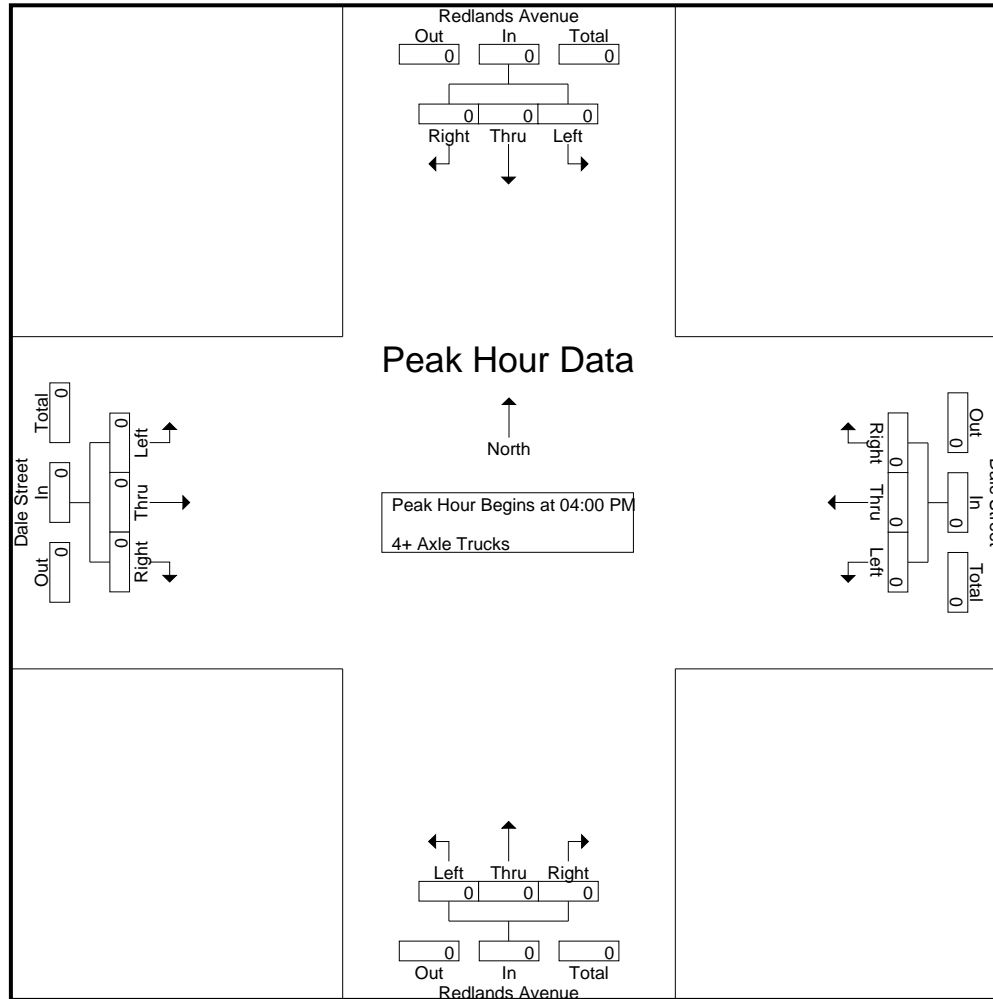
Groups Printed- 4+ Axle Trucks

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

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:00 PM																		
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Perris
N/S: Redlands Avenue
E/W: Dale Street
Weather: Clear

File Name : 01_PER_Red_Dale PM
Site Code : 05122121
Start Date : 2/10/2022
Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 01_PER_Red_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				Dale Street Westbound				Redlands Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Location: Perris
 N/S: Redlands Avenue
 E/W: Dale Street



Date: 2/10/2022
 Day: Thursday

PEDESTRIANS

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

	North Leg Redlands Avenue	East Leg Dale Street	South Leg Redlands Avenue	West Leg Dale Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	1	1
4:15 PM	0	0	0	0	0
4:30 PM	2	2	1	0	5
4:45 PM	0	0	0	0	0
5:00 PM	1	0	0	0	1
5:15 PM	0	0	1	1	2
5:30 PM	0	0	1	0	1
5:45 PM	1	0	0	0	1
TOTAL VOLUMES:	4	2	3	2	11

Location: Perris
 N/S: Redlands Avenue
 E/W: Dale Street



Date: 2/10/2022
 Day: Thursday

BICYCLES

	Southbound Redlands Avenue			Westbound Dale Street			Northbound Redlands Avenue			Eastbound Dale Street			
	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	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	1	0	0	0	0	0	1	0	0	0	0	2

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

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

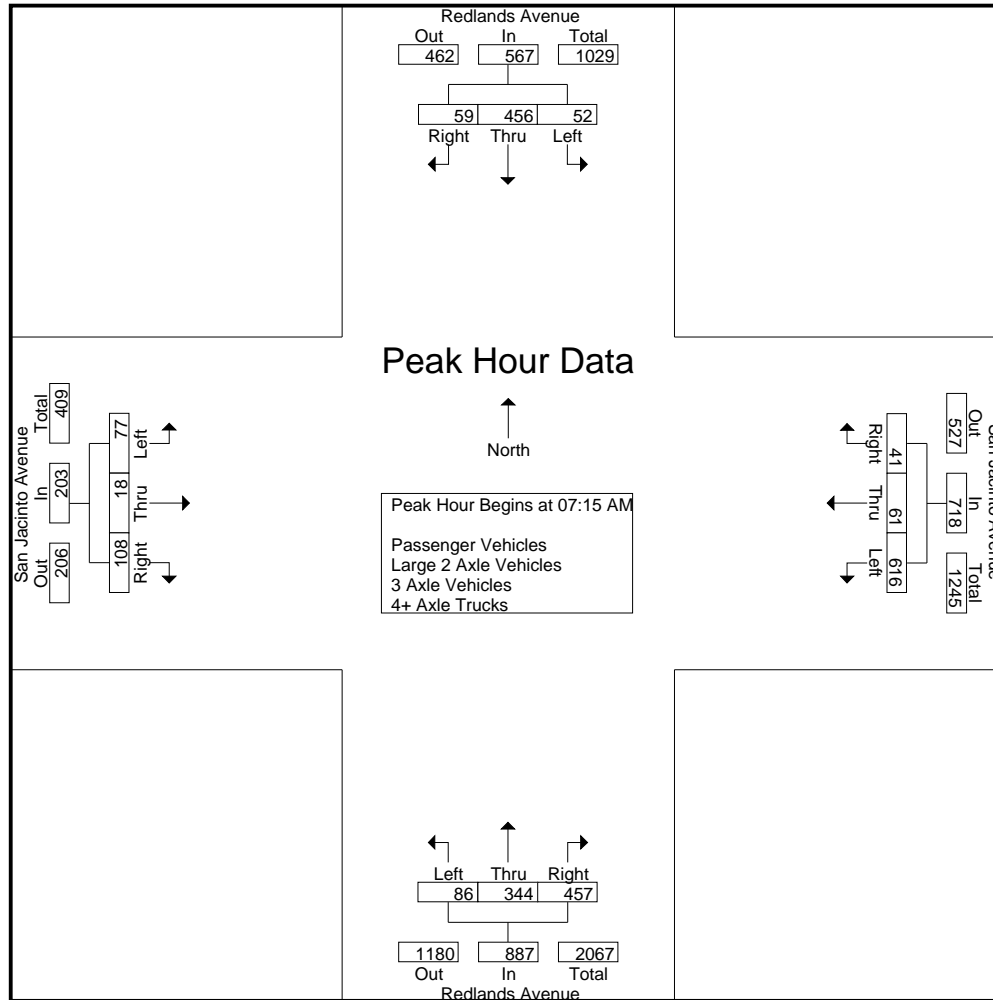
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Redlands Avenue Southbound					San Jacinto Avenue Westbound					Redlands Avenue Northbound					San Jacinto Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	5	80	9	5	94	114	11	4	4	129	9	60	99	27	168	3	3	23	21	29	57	420	477
07:15 AM	13	85	7	3	105	129	12	7	3	148	18	87	114	47	219	17	7	27	16	51	69	523	592
07:30 AM	11	140	16	3	167	179	20	11	6	210	14	91	121	37	226	33	5	36	34	74	80	677	757
07:45 AM	17	131	19	0	167	175	19	17	11	211	26	90	123	42	239	18	4	27	25	49	78	666	744
Total	46	436	51	11	533	597	62	39	24	698	67	328	457	153	852	71	19	113	96	203	284	2286	2570
08:00 AM	11	100	17	1	128	133	10	6	4	149	28	76	99	31	203	9	2	18	14	29	50	509	559
08:15 AM	8	76	10	0	94	105	12	3	2	120	20	67	102	30	189	11	9	20	16	40	48	443	491
08:30 AM	4	96	5	0	105	92	9	6	5	107	17	55	68	34	140	7	6	23	12	36	51	388	439
08:45 AM	2	64	5	1	71	102	11	6	3	119	12	37	51	27	100	3	9	19	16	31	47	321	368
Total	25	336	37	2	398	432	42	21	14	495	77	235	320	122	632	30	26	80	58	136	196	1661	1857
Grand Total	71	772	88	13	931	1029	104	60	38	1193	144	563	777	275	1484	101	45	193	154	339	480	3947	4427
Apprch %	7.6	82.9	9.5			86.3	8.7	5			9.7	37.9	52.4			29.8	13.3	56.9					
Total %	1.8	19.6	2.2		23.6	26.1	2.6	1.5		30.2	3.6	14.3	19.7		37.6	2.6	1.1	4.9		8.6	10.8	89.2	
Passenger Vehicles	70	760	85		928	1009	103	58		1207	141	544	751		1702	101	45	186		480	0	0	4317
% Passenger Vehicles	98.6	98.4	96.6	100	98.3	98.1	99	96.7	97.4	98.1	97.9	96.6	96.7	96.7	96.8	100	100	96.4	96.1	97.4	0	0	97.5
Large 2 Axle Vehicles	1	12	3		16	14	1	2		18	2	17	15		38	0	0	5		10	0	0	82
% Large 2 Axle Vehicles	1.4	1.6	3.4	0	1.7	1.4	1	3.3	2.6	1.5	1.4	3	1.9	1.5	2.2	0	0	2.6	3.2	2	0	0	1.9
3 Axle Vehicles	0	0	0		0	4	0	0		4	1	2	3		8	0	0	1		1	0	0	13
% 3 Axle Vehicles	0	0	0	0	0	0.4	0	0	0	0.3	0.7	0.4	0.4	0.7	0.5	0	0	0.5	0	0.2	0	0	0.3
4+ Axle Trucks	0	0	0		0	2	0	0		2	0	0	8		11	0	0	1		2	0	0	15
% 4+ Axle Trucks	0	0	0	0	0	0.2	0	0	0	0.2	0	0	1	1.1	0.6	0	0	0.5	0.6	0.4	0	0	0.3

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	13	85	7	105	129	12	7	148	18	87	114	219	17	7	27	51	523
07:30 AM	11	140	16	167	179	20	11	210	14	91	121	226	33	5	36	74	677
07:45 AM	17	131	19	167	175	19	17	211	26	90	123	239	18	4	27	49	666
08:00 AM	11	100	17	128	133	10	6	149	28	76	99	203	9	2	18	29	509
Total Volume	52	456	59	567	616	61	41	718	86	344	457	887	77	18	108	203	2375
% App. Total	9.2	80.4	10.4		85.8	8.5	5.7		9.7	38.8	51.5		37.9	8.9	53.2		
PHF	.765	.814	.776	.849	.860	.763	.603	.851	.768	.945	.929	.928	.583	.643	.750	.686	.877

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
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City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
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Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:00 AM				
+0 mins.	13	85	7	105	129	12	7	148	18	87	114	219	3	3	23	29	
+15 mins.	11	140	16	167	179	20	11	210	14	91	121	226	17	7	27	51	
+30 mins.	17	131	19	167	175	19	17	211	26	90	123	239	33	5	36	74	
+45 mins.	11	100	17	128	133	10	6	149	28	76	99	203	18	4	27	49	
Total Volume	52	456	59	567	616	61	41	718	86	344	457	887	71	19	113	203	
% App. Total	9.2	80.4	10.4		85.8	8.5	5.7		9.7	38.8	51.5		35	9.4	55.7		
PHF	.765	.814	.776	.849	.860	.763	.603	.851	.768	.945	.929	.928	.538	.679	.785	.686	

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

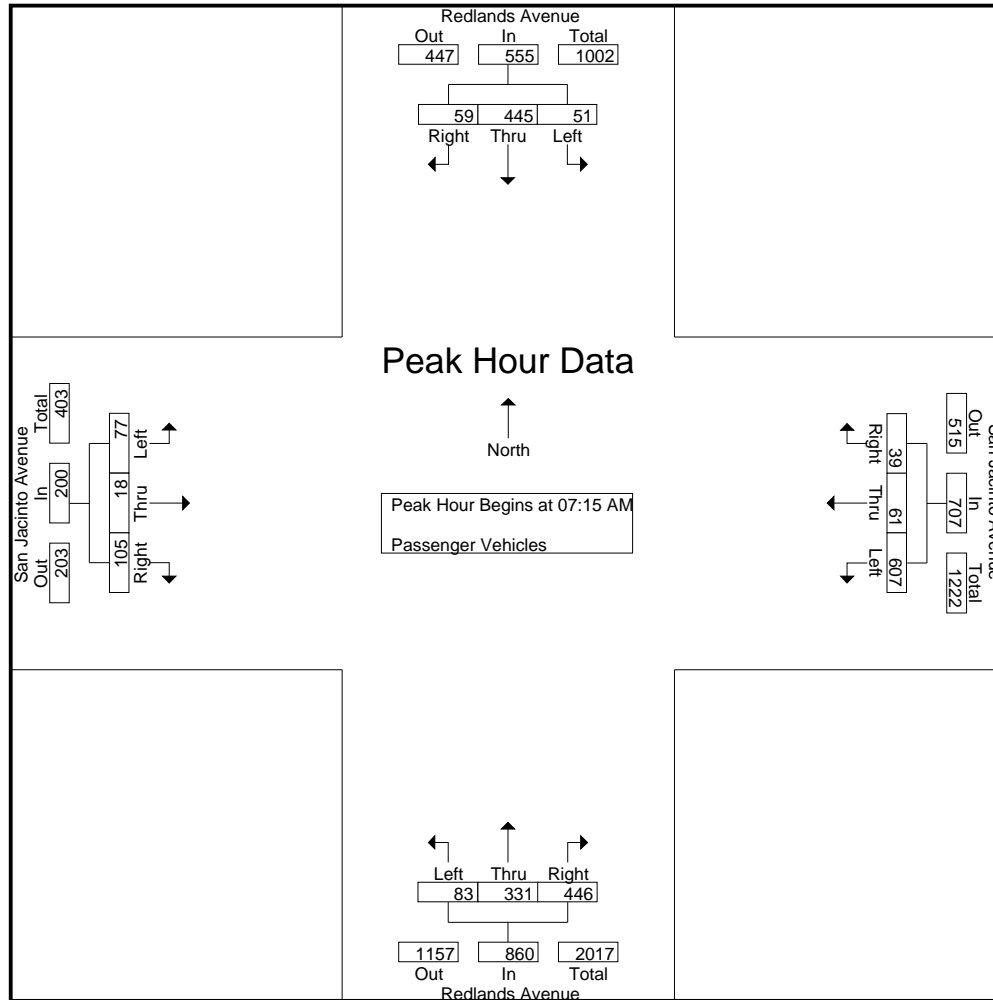
Groups Printed- Passenger Vehicles

Start Time	Redlands Avenue Southbound					San Jacinto Avenue Westbound					Redlands Avenue Northbound					San Jacinto Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	5	80	9	5	94	109	11	4	4	124	9	59	98	27	166	3	3	23	21	29	57	413	470
07:15 AM	13	83	7	3	103	129	12	5	2	146	16	81	111	46	208	17	7	26	16	50	67	507	574
07:30 AM	11	137	16	3	164	174	20	11	6	205	14	88	118	37	220	33	5	34	32	72	78	661	739
07:45 AM	16	127	19	0	162	172	19	17	11	208	25	87	121	41	233	18	4	27	25	49	77	652	729
Total	45	427	51	11	523	584	62	37	23	683	64	315	448	151	827	71	19	110	94	200	279	2233	2512
08:00 AM	11	98	17	1	126	132	10	6	4	148	28	75	96	30	199	9	2	18	14	29	49	502	551
08:15 AM	8	76	8	0	92	104	11	3	2	118	20	66	95	29	181	11	9	19	15	39	46	430	476
08:30 AM	4	95	4	0	103	89	9	6	5	104	17	52	65	32	134	7	6	21	10	34	47	375	422
08:45 AM	2	64	5	1	71	100	11	6	3	117	12	36	47	24	95	3	9	18	15	30	43	313	356
Total	25	333	34	2	392	425	41	21	14	487	77	229	303	115	609	30	26	76	54	132	185	1620	1805
Grand Total	70	760	85	13	915	1009	103	58	37	1170	141	544	751	266	1436	101	45	186	148	332	464	3853	4317
Apprch %	7.7	83.1	9.3			86.2	8.8	5			9.8	37.9	52.3			30.4	13.6	56					
Total %	1.8	19.7	2.2		23.7	26.2	2.7	1.5		30.4	3.7	14.1	19.5		37.3	2.6	1.2	4.8		8.6	10.7	89.3	

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	13	83	7	103	129	12	5	146	16	81	111	208	17	7	26	50	507
07:30 AM	11	137	16	164	174	20	11	205	14	88	118	220	33	5	34	72	661
07:45 AM	16	127	19	162	172	19	17	208	25	87	121	233	18	4	27	49	652
08:00 AM	11	98	17	126	132	10	6	148	28	75	96	199	9	2	18	29	502
Total Volume	51	445	59	555	607	61	39	707	83	331	446	860	77	18	105	200	2322
% App. Total	9.2	80.2	10.6		85.9	8.6	5.5		9.7	38.5	51.9		38.5	9	52.5		
PHF	.797	.812	.776	.846	.872	.763	.574	.850	.741	.940	.921	.923	.583	.643	.772	.694	.878

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
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City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	13	83	7	103	129	12	5	146	16	81	111	208	17	7	26	50	
+15 mins.	11	137	16	164	174	20	11	205	14	88	118	220	33	5	34	72	
+30 mins.	16	127	19	162	172	19	17	208	25	87	121	233	18	4	27	49	
+45 mins.	11	98	17	126	132	10	6	148	28	75	96	199	9	2	18	29	
Total Volume	51	445	59	555	607	61	39	707	83	331	446	860	77	18	105	200	
% App. Total	9.2	80.2	10.6		85.9	8.6	5.5		9.7	38.5	51.9		38.5	9	52.5		
PHF	.797	.812	.776	.846	.872	.763	.574	.850	.741	.940	.921	.923	.583	.643	.772	.694	

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

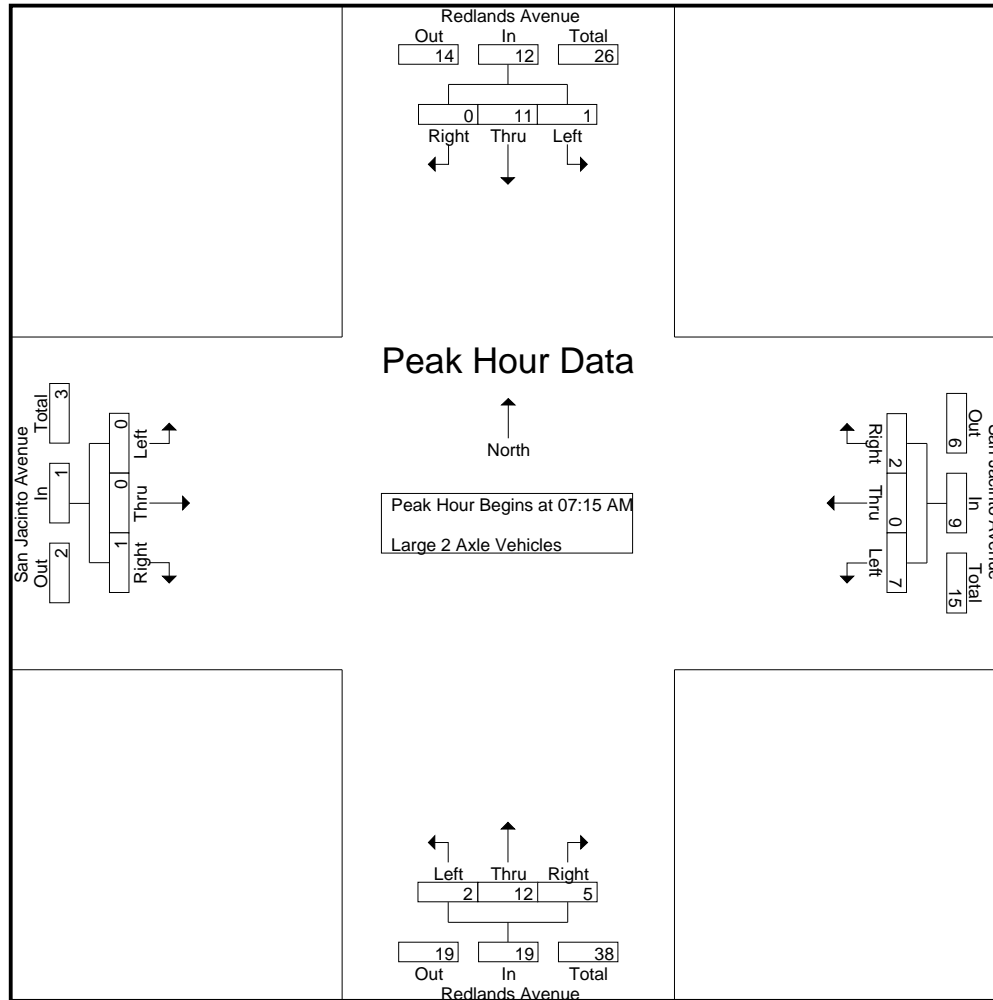
Groups Printed- Large 2 Axle Vehicles

Start Time	Redlands Avenue Southbound					San Jacinto Avenue Westbound					Redlands Avenue Northbound					San Jacinto Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	2	0	0	0	2	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	4	4
07:15 AM	0	2	0	0	2	0	0	2	1	2	1	5	1	0	7	0	0	0	0	0	0	0	0	0	0	1	11	12
07:30 AM	0	3	0	0	3	3	0	0	0	3	0	3	1	0	4	0	0	1	1	1	0	0	1	1	1	1	11	12
07:45 AM	1	4	0	0	5	3	0	0	0	3	1	3	1	0	5	0	0	0	0	0	0	0	0	0	0	0	13	13
Total	1	9	0	0	10	8	0	2	1	10	2	12	4	0	18	0	0	1	1	1	0	0	1	1	1	2	39	41
08:00 AM	0	2	0	0	2	1	0	0	0	1	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	6	6
08:15 AM	0	0	2	0	2	1	1	0	0	2	0	1	4	0	5	0	0	1	1	1	0	0	1	1	1	1	10	11
08:30 AM	0	1	1	0	2	3	0	0	0	3	0	2	2	1	4	0	0	2	2	2	0	0	2	2	2	3	11	14
08:45 AM	0	0	0	0	0	1	0	0	0	1	0	1	3	3	4	0	0	1	1	1	0	0	1	1	1	4	6	10
Total	0	3	3	0	6	6	1	0	0	7	0	5	11	4	16	0	0	4	4	4	0	0	4	4	4	8	33	41
Grand Total	1	12	3	0	16	14	1	2	1	17	2	17	15	4	34	0	0	5	5	5	0	0	5	5	5	10	72	82
Apprch %	6.2	75	18.8			82.4	5.9	11.8			5.9	50	44.1			0	0	100			0	0	100					
Total %	1.4	16.7	4.2		22.2	19.4	1.4	2.8		23.6	2.8	23.6	20.8		47.2	0	0	6.9		6.9	0	0	6.9		6.9	12.2	87.8	

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	2	0	2	0	0	2	2	1	5	1	7	0	0	0	0	0
07:30 AM	0	3	0	3	3	0	0	3	0	3	1	4	0	0	1	1	1
07:45 AM	1	4	0	5	3	0	0	3	1	3	1	5	0	0	0	0	0
08:00 AM	0	2	0	2	1	0	0	1	0	1	2	3	0	0	0	0	0
Total Volume	1	11	0	12	7	0	2	9	2	12	5	19	0	0	1	1	1
% App. Total	8.3	91.7	0		77.8	0	22.2		10.5	63.2	26.3		0	0	100		
PHF	.250	.688	.000	.600	.583	.000	.250	.750	.500	.600	.625	.679	.000	.000	.250	.250	.788

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
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City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	2	0	2	0	0	2	2	1	5	1	7	0	0	0	0	
+15 mins.	0	3	0	3	3	0	0	3	0	3	1	4	0	0	1	1	
+30 mins.	1	4	0	5	3	0	0	3	1	3	1	5	0	0	0	0	
+45 mins.	0	2	0	2	1	0	0	1	0	1	2	3	0	0	0	0	
Total Volume	1	11	0	12	7	0	2	9	2	12	5	19	0	0	1	1	
% App. Total	8.3	91.7	0		77.8	0	22.2		10.5	63.2	26.3		0	0	100		
PHF	.250	.688	.000	.600	.583	.000	.250	.750	.500	.600	.625	.679	.000	.000	.250	.250	

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

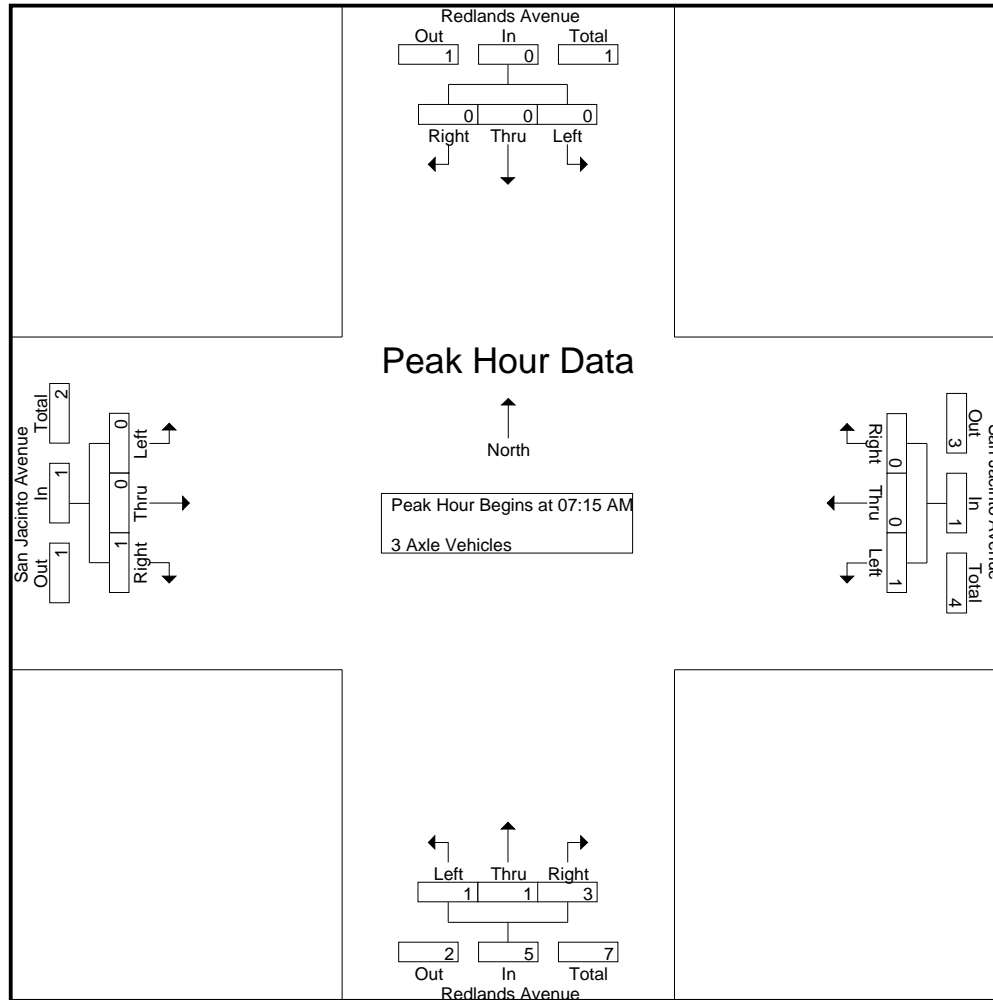
Groups Printed- 3 Axle Vehicles

Start Time	Redlands Avenue Southbound					San Jacinto Avenue Westbound					Redlands Avenue Northbound					San Jacinto Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	2	1	4	0	0	1	0	1	1	5	6	6
07:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	1	1	2	2
Total	0	0	0	0	0	3	0	0	0	3	1	1	3	2	5	0	0	1	0	1	2	9	11	11
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	1
08:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	2	2	2
Grand Total	0	0	0	0	0	4	0	0	0	4	1	2	3	2	6	0	0	1	0	1	2	11	13	13
Apprch %	0	0	0			100	0	0			16.7	33.3	50			0	0	100						
Total %	0	0	0			36.4	0	0		36.4	9.1	18.2	27.3		54.5	0	0	9.1		9.1	15.4	84.6		

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	0	0	0	0	1	1	2	4	0	0	1	1	5
07:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	0	0	1	1	1	3	5	0	0	1	1	7
% App. Total	0	0	0		100	0	0		20	20	60		0	0	100		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.250	.250	.375	.313	.000	.000	.250	.250	.350

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
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City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
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Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	0	0	0	0	0	0	0	1	1	2	4	0	0	1	1	
+15 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	1	0	0	1	1	1	3	5	0	0	1	1	
% App. Total	0	0	0	0	100	0	0		20	20	60		0	0	100		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.250	.250	.375	.313	.000	.000	.250	.250	

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

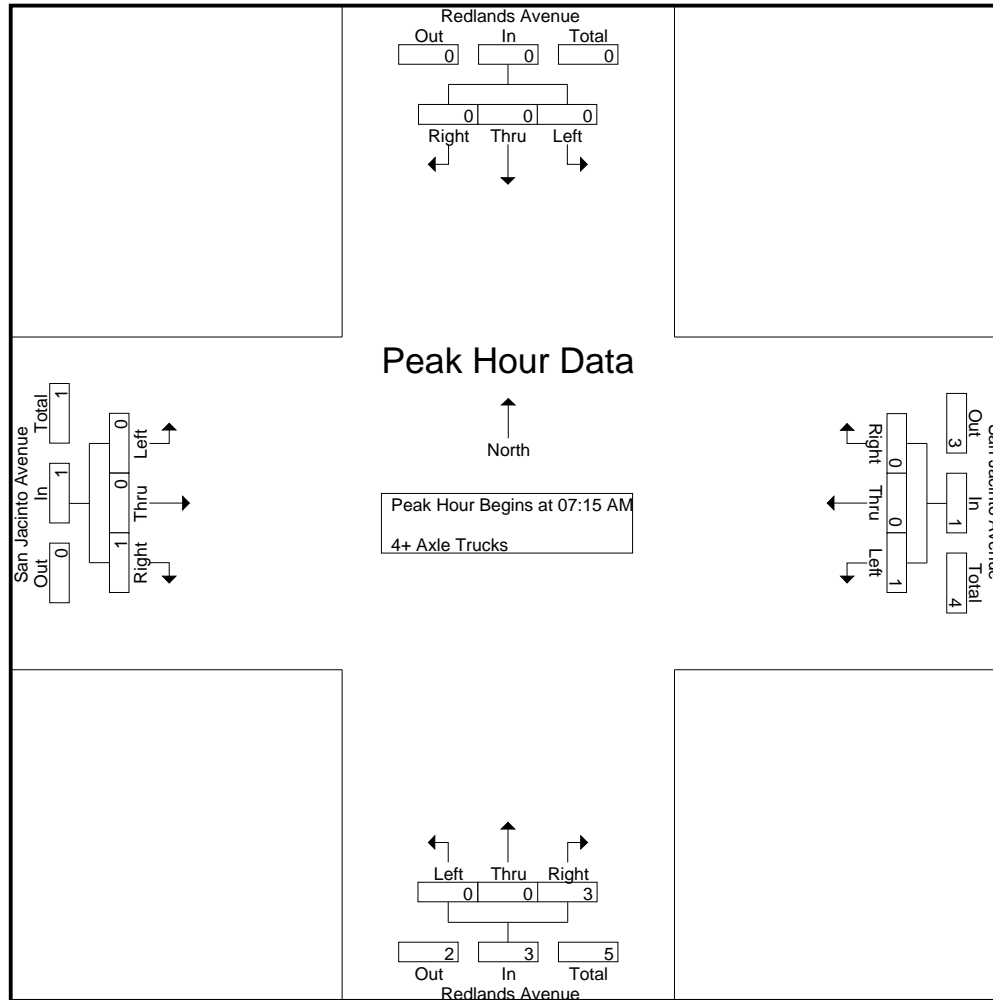
Groups Printed- 4+ Axle Trucks

Start Time	Redlands Avenue Southbound					San Jacinto Avenue Westbound					Redlands Avenue Northbound					San Jacinto Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
07:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	2	0	2	0	0	1	1	1	1	1	1	1	1	1	4	5
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	2	0	0	0	2	0	0	2	0	2	0	0	1	1	1	1	1	1	1	1	1	5	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	3	1	3	0	0	0	0	0	0	0	0	0	0	1	3	4
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	6	3	6	0	0	0	0	0	0	0	0	0	0	3	6	9
Grand Total	0	0	0	0	0	2	0	0	0	2	0	0	8	3	8	0	0	1	1	1	1	1	1	1	1	4	11	15
Apprch %	0	0	0			100	0	0			0	0	100			0	0	100										
Total %	0	0	0			18.2	0	0		18.2	0	0	72.7		72.7	0	0	9.1		9.1						26.7	73.3	

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total				
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total					
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	1	0	0	1	0	0	2	2	0	0	1	1	0	0	1	1	4
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	1	0	0	1	0	0	3	3	0	0	1	1	0	0	1	1	5
% App. Total	0	0	0		100	0	0		0	0	100		0	0	100		0	0	100		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.375	.375	.000	.000	.250	.250	.000	.000	.250	.250	.313

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
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City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
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Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	1	0	0	1	0	0	2	2	0	0	1	1	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
Total Volume	0	0	0	0	1	0	0	1	0	0	3	3	0	0	1	1	1
% App. Total	0	0	0	0	100	0	0		0	0	100		0	0	100		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.375	.375	.000	.000	.250	.250	

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
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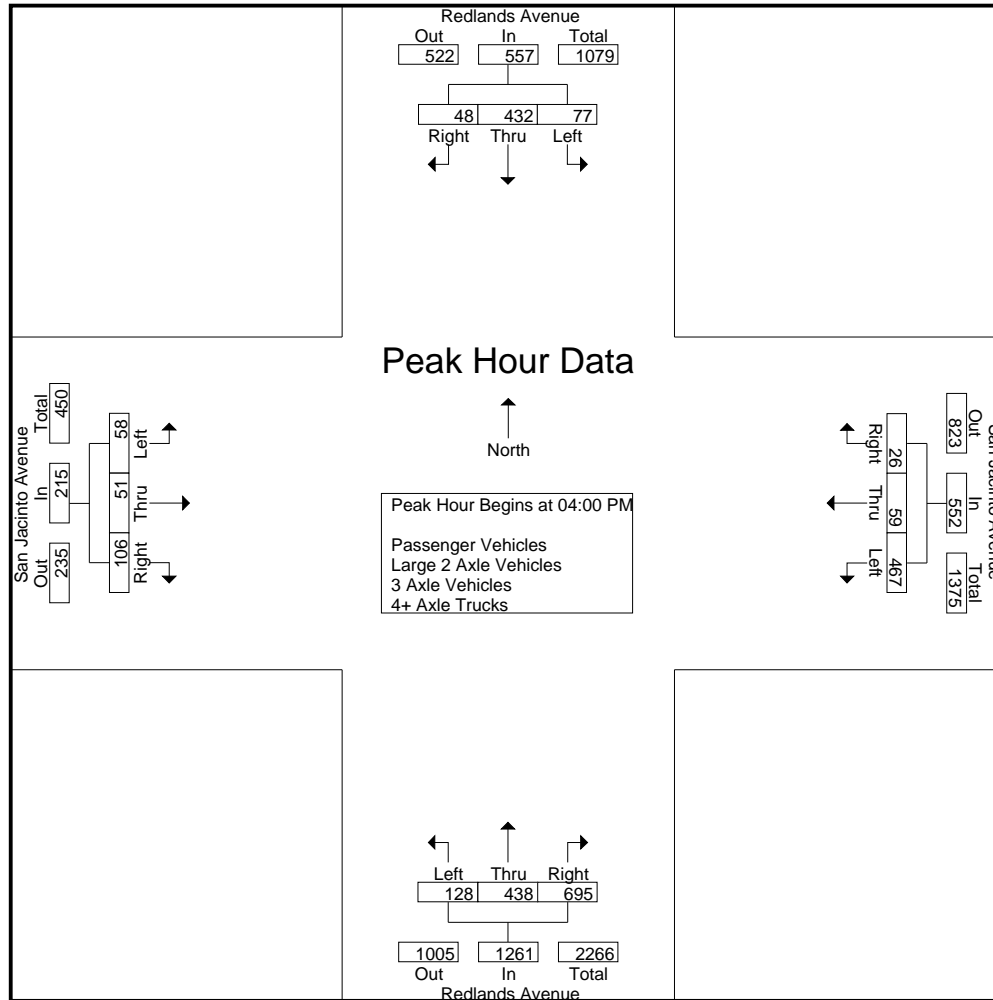
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Redlands Avenue Southbound					San Jacinto Avenue Westbound					Redlands Avenue Northbound					San Jacinto Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	21	109	12	6	142	123	21	15	8	159	38	106	162	62	306	17	9	28	19	54	95	661	756
04:15 PM	13	108	10	3	131	127	15	3	3	145	36	102	178	59	316	13	11	26	20	50	85	642	727
04:30 PM	23	116	13	2	152	107	10	5	3	122	37	113	199	70	349	11	11	28	21	50	96	673	769
04:45 PM	20	99	13	3	132	110	13	3	3	126	17	117	156	88	290	17	20	24	15	61	109	609	718
Total	77	432	48	14	557	467	59	26	17	552	128	438	695	279	1261	58	51	106	75	215	385	2585	2970
05:00 PM	18	117	6	2	141	115	6	9	7	130	28	94	161	65	283	9	12	27	21	48	95	602	697
05:15 PM	16	92	7	2	115	79	6	15	11	100	29	103	182	83	314	11	10	19	16	40	112	569	681
05:30 PM	14	85	12	3	111	106	10	7	2	123	26	133	152	54	311	17	10	27	20	54	79	599	678
05:45 PM	17	92	16	0	125	85	12	6	5	103	19	111	165	69	295	7	6	18	15	31	89	554	643
Total	65	386	41	7	492	385	34	37	25	456	102	441	660	271	1203	44	38	91	72	173	375	2324	2699
Grand Total	142	818	89	21	1049	852	93	63	42	1008	230	879	1355	550	2464	102	89	197	147	388	760	4909	5669
Apprch %	13.5	78	8.5			84.5	9.2	6.2			9.3	35.7	55			26.3	22.9	50.8					
Total %	2.9	16.7	1.8		21.4	17.4	1.9	1.3		20.5	4.7	17.9	27.6		50.2	2.1	1.8	4		7.9	13.4	86.6	
Passenger Vehicles	141	801	89		1052	831	92	63		1028	228	867	1330		2964	102	86	197		532	0	0	5576
% Passenger Vehicles	99.3	97.9	100	100	98.3	97.5	98.9	100	100	97.9	99.1	98.6	98.2	98	98.3	100	96.6	100	100	99.4	0	0	98.4
Large 2 Axle Vehicles	1	11	0		12	13	1	0		14	1	9	23		43	0	2	0		2	0	0	71
% Large 2 Axle Vehicles	0.7	1.3	0	0	1.1	1.5	1.1	0	0	1.3	0.4	1	1.7	1.8	1.4	0	2.2	0	0	0.4	0	0	1.3
3 Axle Vehicles	0	5	0		5	6	0	0		6	0	3	0		3	0	0	0		0	0	0	14
% 3 Axle Vehicles	0	0.6	0	0	0.5	0.7	0	0	0	0.6	0	0.3	0	0	0.1	0	0	0	0	0	0	0	0.2
4+ Axle Trucks	0	1	0		1	2	0	0		2	1	0	2		4	0	1	0		1	0	0	8
% 4+ Axle Trucks	0	0.1	0	0	0.1	0.2	0	0	0	0.2	0.4	0	0.1	0.2	0.1	0	1.1	0	0	0.2	0	0	0.1

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	21	109	12	142	123	21	15	159	38	106	162	306	17	9	28	54	661
04:15 PM	13	108	10	131	127	15	3	145	36	102	178	316	13	11	26	50	642
04:30 PM	23	116	13	152	107	10	5	122	37	113	199	349	11	11	28	50	673
04:45 PM	20	99	13	132	110	13	3	126	17	117	156	290	17	20	24	61	609
Total Volume	77	432	48	557	467	59	26	552	128	438	695	1261	58	51	106	215	2585
% App. Total	13.8	77.6	8.6		84.6	10.7	4.7		10.2	34.7	55.1		27	23.7	49.3		
PHF	.837	.931	.923	.916	.919	.702	.433	.868	.842	.936	.873	.903	.853	.638	.946	.881	.960

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

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City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J PM
 Site Code : 05122096
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Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	21	109	12	142	123	21	15	159	38	106	162	306	17	9	28	54	
+15 mins.	13	108	10	131	127	15	3	145	36	102	178	316	13	11	26	50	
+30 mins.	23	116	13	152	107	10	5	122	37	113	199	349	11	11	28	50	
+45 mins.	20	99	13	132	110	13	3	126	17	117	156	290	17	20	24	61	
Total Volume	77	432	48	557	467	59	26	552	128	438	695	1261	58	51	106	215	
% App. Total	13.8	77.6	8.6		84.6	10.7	4.7		10.2	34.7	55.1		27	23.7	49.3		
PHF	.837	.931	.923	.916	.919	.702	.433	.868	.842	.936	.873	.903	.853	.638	.946	.881	

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J PM
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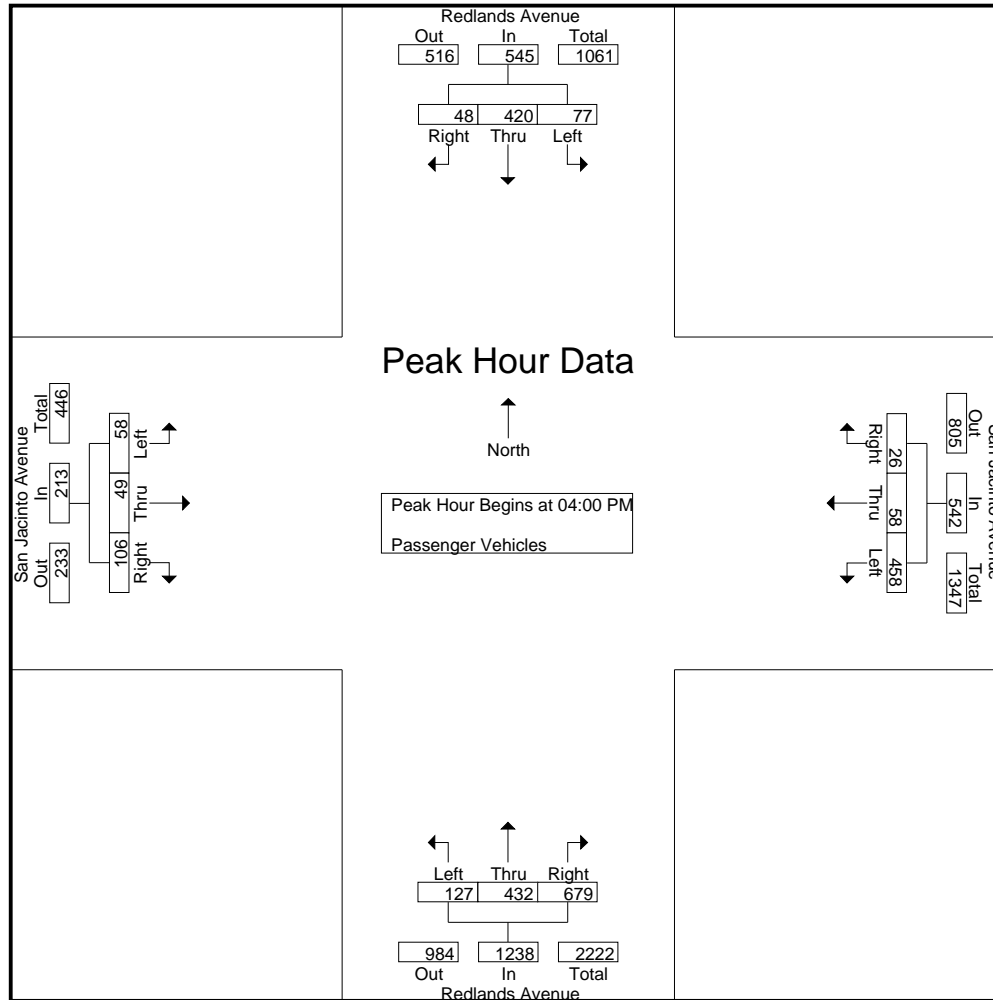
Groups Printed- Passenger Vehicles

Start Time	Redlands Avenue Southbound					San Jacinto Avenue Westbound					Redlands Avenue Northbound					San Jacinto Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	21	105	12	6	138	121	21	15	8	157	38	105	160	61	303	17	8	28	19	53	94	651	745
04:15 PM	13	105	10	3	128	124	14	3	3	141	36	101	176	59	313	13	11	26	20	50	85	632	717
04:30 PM	23	114	13	2	150	105	10	5	3	120	36	110	193	68	339	11	11	28	21	50	94	659	753
04:45 PM	20	96	13	3	129	108	13	3	3	124	17	116	150	84	283	17	19	24	15	60	105	596	701
Total	77	420	48	14	545	458	58	26	17	542	127	432	679	272	1238	58	49	106	75	213	378	2538	2916
05:00 PM	17	114	6	2	137	111	6	9	7	126	27	92	156	61	275	9	12	27	21	48	91	586	677
05:15 PM	16	92	7	2	115	78	6	15	11	99	29	103	180	83	312	11	9	19	16	39	112	565	677
05:30 PM	14	84	12	3	110	102	10	7	2	119	26	132	150	54	308	17	10	27	20	54	79	591	670
05:45 PM	17	91	16	0	124	82	12	6	5	100	19	108	165	69	292	7	6	18	15	31	89	547	636
Total	64	381	41	7	486	373	34	37	25	444	101	435	651	267	1187	44	37	91	72	172	371	2289	2660
Grand Total	141	801	89	21	1031	831	92	63	42	986	228	867	1330	539	2425	102	86	197	147	385	749	4827	5576
Apprch %	13.7	77.7	8.6			84.3	9.3	6.4			9.4	35.8	54.8			26.5	22.3	51.2					
Total %	2.9	16.6	1.8		21.4	17.2	1.9	1.3		20.4	4.7	18	27.6		50.2	2.1	1.8	4.1		8	13.4	86.6	

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	21	105	12	138	121	21	15	157	38	105	160	303	17	8	28	53	651
04:15 PM	13	105	10	128	124	14	3	141	36	101	176	313	13	11	26	50	632
04:30 PM	23	114	13	150	105	10	5	120	36	110	193	339	11	11	28	50	659
04:45 PM	20	96	13	129	108	13	3	124	17	116	150	283	17	19	24	60	596
Total Volume	77	420	48	545	458	58	26	542	127	432	679	1238	58	49	106	213	2538
% App. Total	14.1	77.1	8.8		84.5	10.7	4.8		10.3	34.9	54.8		27.2	23	49.8		
PHF	.837	.921	.923	.908	.923	.690	.433	.863	.836	.931	.880	.913	.853	.645	.946	.888	.963

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

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 Weather: Clear

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 Site Code : 05122096
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Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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.	21	105	12	138	121	21	15	157	38	105	160	303	17	8	28	53	
+15 mins.	13	105	10	128	124	14	3	141	36	101	176	313	13	11	26	50	
+30 mins.	23	114	13	150	105	10	5	120	36	110	193	339	11	11	28	50	
+45 mins.	20	96	13	129	108	13	3	124	17	116	150	283	17	19	24	60	
Total Volume	77	420	48	545	458	58	26	542	127	432	679	1238	58	49	106	213	
% App. Total	14.1	77.1	8.8		84.5	10.7	4.8		10.3	34.9	54.8		27.2	23	49.8		
PHF	.837	.921	.923	.908	.923	.690	.433	.863	.836	.931	.880	.913	.853	.645	.946	.888	

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J PM
 Site Code : 05122096
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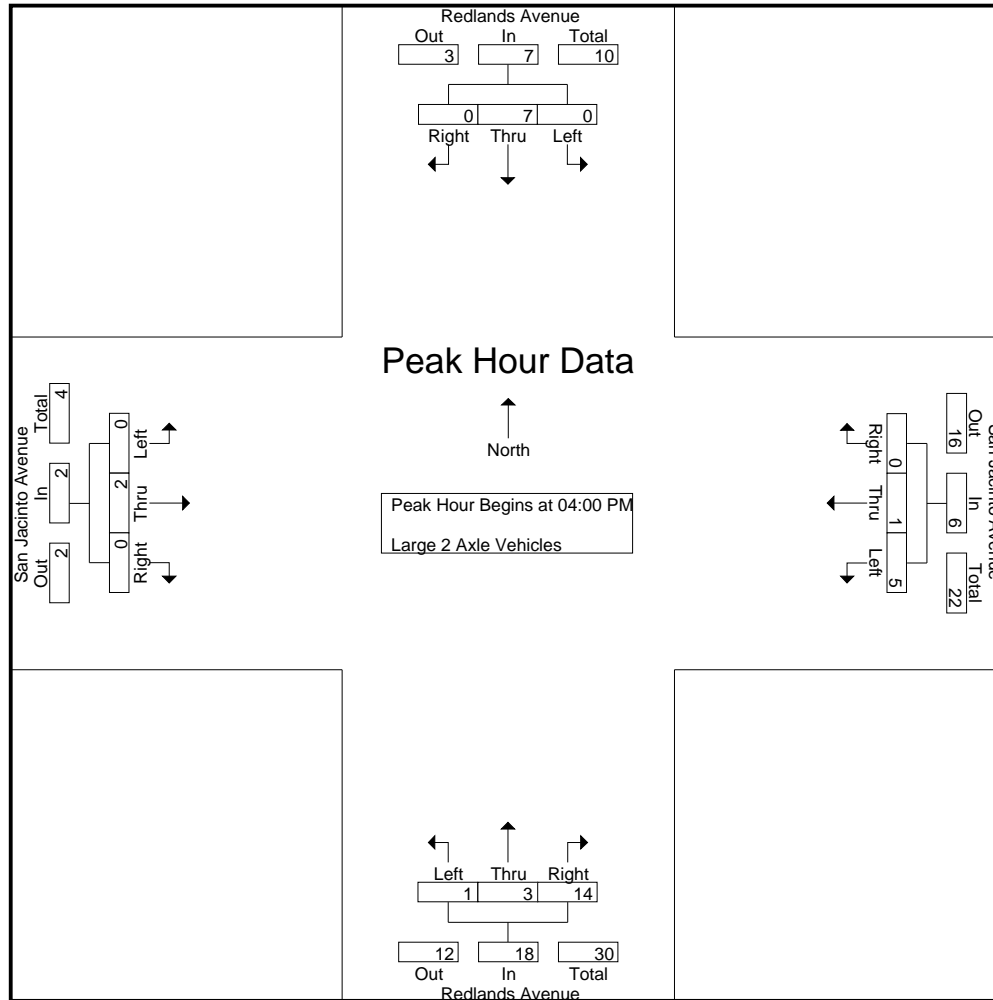
Groups Printed- Large 2 Axle Vehicles

Start Time	Redlands Avenue Southbound					San Jacinto Avenue Westbound					Redlands Avenue Northbound					San Jacinto Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	1	0	0	1	1	0	0	0	1	0	1	2	1	3	0	1	0	0	1	1	6	7
04:15 PM	0	2	0	0	2	1	1	0	0	2	0	0	1	0	1	0	0	0	0	0	0	5	5
04:30 PM	0	2	0	0	2	2	0	0	0	2	1	1	6	2	8	0	0	0	0	0	2	12	14
04:45 PM	0	2	0	0	2	1	0	0	0	1	0	1	5	3	6	0	1	0	0	1	3	10	13
Total	0	7	0	0	7	5	1	0	0	6	1	3	14	6	18	0	2	0	0	2	6	33	39
05:00 PM	1	2	0	0	3	2	0	0	0	2	0	2	5	4	7	0	0	0	0	0	4	12	16
05:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	2	0	2	0	0	0	0	0	0	3	3
05:30 PM	0	1	0	0	1	2	0	0	0	2	0	1	2	0	3	0	0	0	0	0	0	6	6
05:45 PM	0	1	0	0	1	3	0	0	0	3	0	3	0	0	3	0	0	0	0	0	0	7	7
Total	1	4	0	0	5	8	0	0	0	8	0	6	9	4	15	0	0	0	0	0	4	28	32
Grand Total	1	11	0	0	12	13	1	0	0	14	1	9	23	10	33	0	2	0	0	2	10	61	71
Apprch %	8.3	91.7	0			92.9	7.1	0			3	27.3	69.7			0	100	0					
Total %	1.6	18	0		19.7	21.3	1.6	0		23	1.6	14.8	37.7		54.1	0	3.3	0		3.3	14.1	85.9	

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	1	0	1	1	0	0	1	0	1	2	3	0	1	0	1	6
04:15 PM	0	2	0	2	1	1	0	2	0	0	1	1	0	0	0	0	5
04:30 PM	0	2	0	2	2	0	0	2	1	1	6	8	0	0	0	0	12
04:45 PM	0	2	0	2	1	0	0	1	0	1	5	6	0	1	0	1	10
Total Volume	0	7	0	7	5	1	0	6	1	3	14	18	0	2	0	2	33
% App. Total	0	100	0		83.3	16.7	0		5.6	16.7	77.8		0	100	0		
PHF	.000	.875	.000	.875	.625	.250	.000	.750	.250	.750	.583	.563	.000	.500	.000	.500	.688

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J PM
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City of Perris
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Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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	0	0	1	0	1	2	3	0	1	0	1	
+15 mins.	0	2	0	2	1	1	0	2	0	0	1	1	0	0	0	0	
+30 mins.	0	2	0	2	2	0	0	2	1	1	6	8	0	0	0	0	
+45 mins.	0	2	0	2	1	0	0	1	0	1	5	6	0	1	0	1	
Total Volume	0	7	0	7	5	1	0	6	1	3	14	18	0	2	0	2	
% App. Total	0	100	0		83.3	16.7	0		5.6	16.7	77.8		0	100	0		
PHF	.000	.875	.000	.875	.625	.250	.000	.750	.250	.750	.583	.563	.000	.500	.000	.500	

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
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File Name : 01_PER_Redlands_San J PM
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 Page No : 1

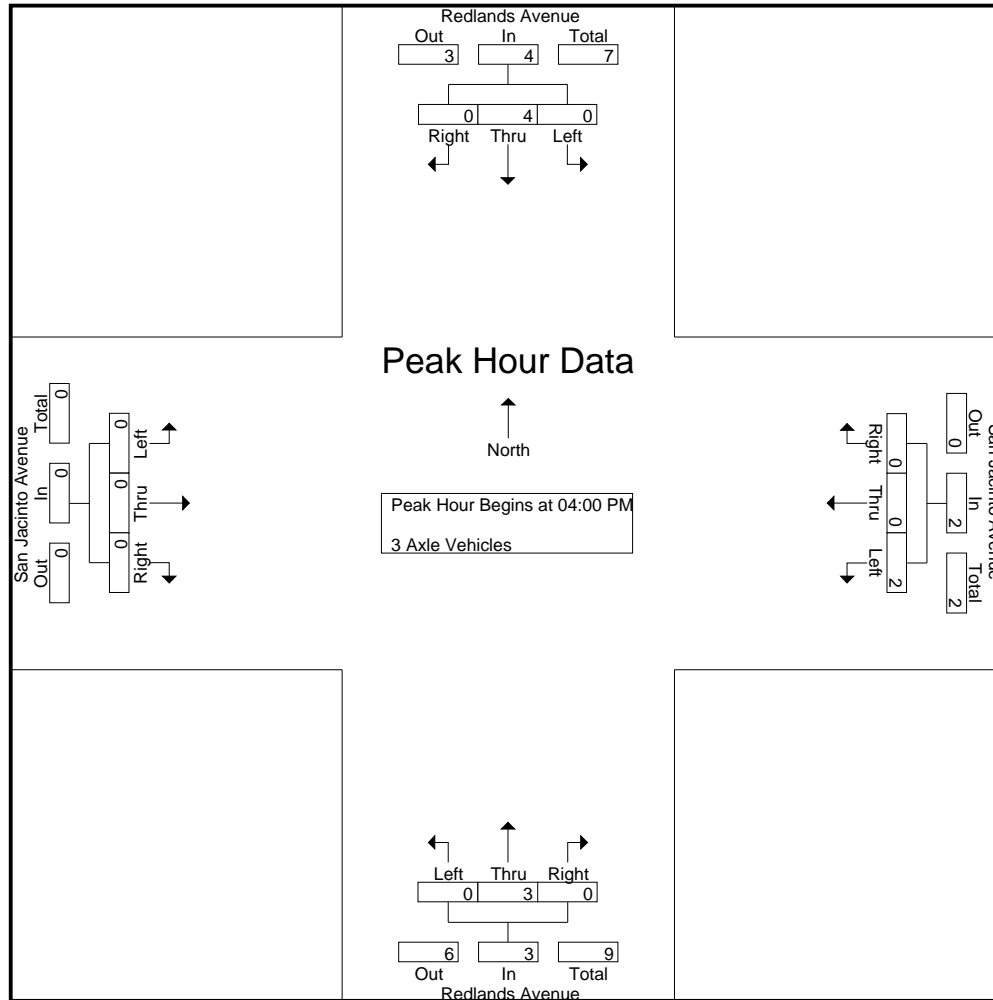
Groups Printed- 3 Axle Vehicles

Start Time	Redlands Avenue Southbound					San Jacinto Avenue Westbound					Redlands Avenue Northbound					San Jacinto Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
04:15 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
04:45 PM	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	4	0	0	4	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	9	9
05:00 PM	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
Grand Total	0	5	0	0	5	6	0	0	0	6	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	14	14
Apprch %	0	100	0			100	0	0			0	100	0			0	0	0			0	0	0			0		
Total %	0	35.7	0		35.7	42.9	0	0		42.9	0	21.4	0		21.4	0	0	0		0	0	0	0		0	0	100	

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total				
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total					
04:00 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:15 PM	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
04:45 PM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	4	0	4	2	0	0	2	0	3	0	3	0	0	0	0	0	0	0	0	9
% App. Total	0	100	0		100	0	0		0	100	0		0	0	0		0	0	0		
PHF	.000	.333	.000	.333	.500	.000	.000	.500	.000	.375	.000	.375	.000	.000	.000	.000	.000	.000	.000	.000	.750

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	
+45 mins.	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	
Total Volume	0	4	0	4	2	0	0	2	0	3	0	3	0	0	0	0	
% App. Total	0	100	0		100	0	0		0	100	0		0	0	0		
PHF	.000	.333	.000	.333	.500	.000	.000	.500	.000	.375	.000	.375	.000	.000	.000	.000	

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

Groups Printed- 4+ Axle Trucks

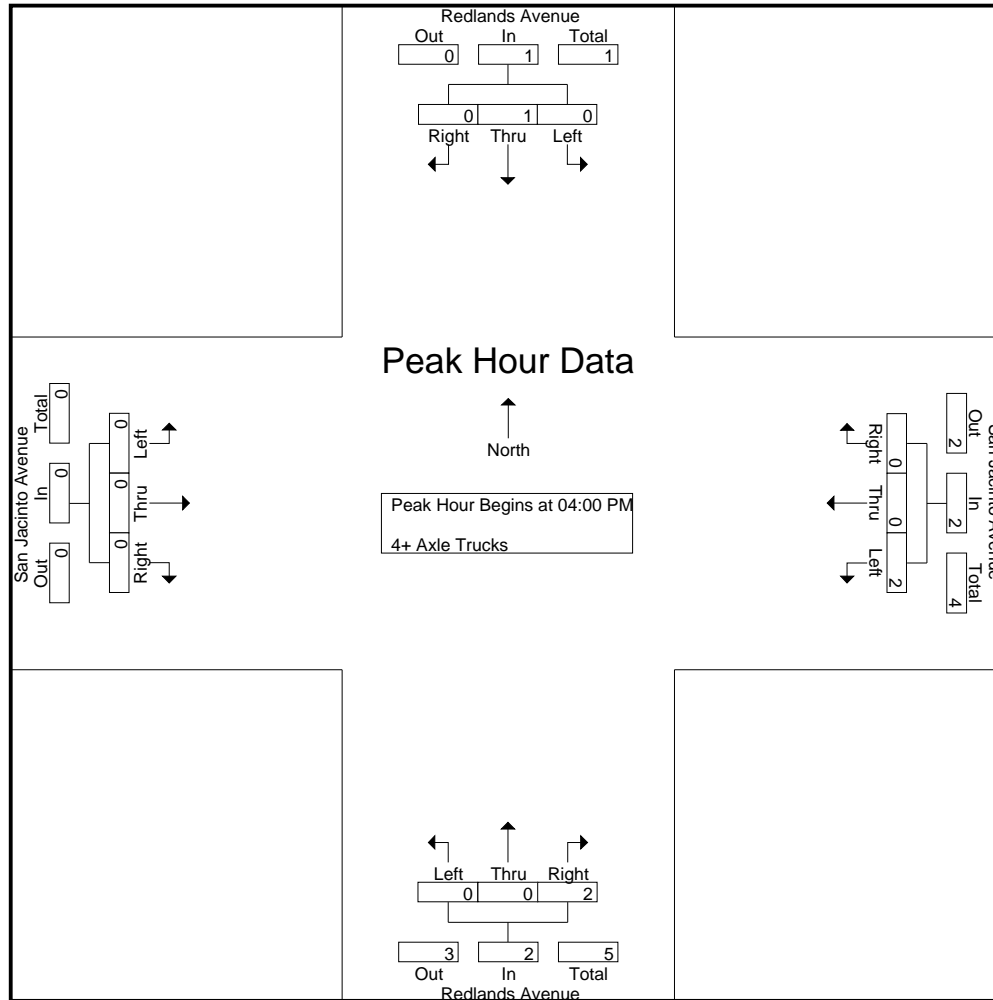
Start Time	Redlands Avenue Southbound					San Jacinto Avenue Westbound					Redlands Avenue Northbound					San Jacinto Avenue Eastbound					Exclu. Total	Inclu. Total	Int. Total					
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total								
04:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	1	0	0	1	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
Total	0	1	0	0	1	2	0	0	0	2	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	1	5	6
05:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	1	0	2	2
Grand Total	0	1	0	0	1	2	0	0	0	2	1	0	2	1	3	0	1	0	0	1	0	0	0	0	1	1	7	8
Apprch %	0	100	0			100	0	0			33.3	0	66.7			0	100	0										
Total %	0	14.3	0		14.3	28.6	0	0		28.6	14.3	0	28.6		42.9	0	14.3	0		14.3					12.5	87.5		

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total				
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total					
04:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	1	2	0	0	2	0	0	2	2	0	0	0	0	0	0	0	0	5
% App. Total	0	100	0		100	0	0		0	0	100		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.500	.000	.000	.500	.000	.000	.500	.500	.000	.000	.000	.000	.000	.000	.000	.000	.417

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

City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 01_PER_Redlands_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				San Jacinto Avenue Westbound				Redlands Avenue Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	
+15 mins.	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	
Total Volume	0	1	0	1	2	0	0	2	0	0	2	2	0	0	0	0	
% App. Total	0	100	0		100	0	0		0	0	100		0	0	0		
PHF	.000	.250	.000	.250	.500	.000	.000	.500	.000	.000	.500	.500	.000	.000	.000	.000	

Location: Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue



Date: 2/3/2022
 Day: Thursday

PEDESTRIANS

	North Leg Redlands Avenue Pedestrians	East Leg San Jacinto Avenue Pedestrians	South Leg Redlands Avenue Pedestrians	West Leg San Jacinto Avenue Pedestrians	
7:00 AM	1	0	0	0	1
7:15 AM	1	0	0	0	1
7:30 AM	0	0	0	1	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	1	0	0	1	2
8:30 AM	0	0	1	0	1
8:45 AM	1	0	0	0	1
TOTAL VOLUMES:	4	0	1	2	7

	North Leg Redlands Avenue Pedestrians	East Leg San Jacinto Avenue Pedestrians	South Leg Redlands Avenue Pedestrians	West Leg San Jacinto Avenue Pedestrians	
4:00 PM	0	1	3	2	6
4:15 PM	1	0	0	0	1
4:30 PM	1	0	0	2	3
4:45 PM	1	0	0	1	2
5:00 PM	0	0	0	1	1
5:15 PM	1	0	1	1	3
5:30 PM	0	0	0	0	0
5:45 PM	1	0	0	0	1
TOTAL VOLUMES:	5	1	4	7	17

Location: Perris
 N/S: Redlands Avenue
 E/W: San Jacinto Avenue



Date: 2/3/2022
 Day: Thursday

BICYCLES

	Southbound Redlands Avenue			Westbound San Jacinto Avenue			Northbound Redlands Avenue			Eastbound San Jacinto 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 Redlands Avenue			Westbound San Jacinto Avenue			Northbound Redlands Avenue			Eastbound San Jacinto Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	2	2	0	0	0	1	0	0	0	5
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	2	3	0	0	1	1	0	1	0	9

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

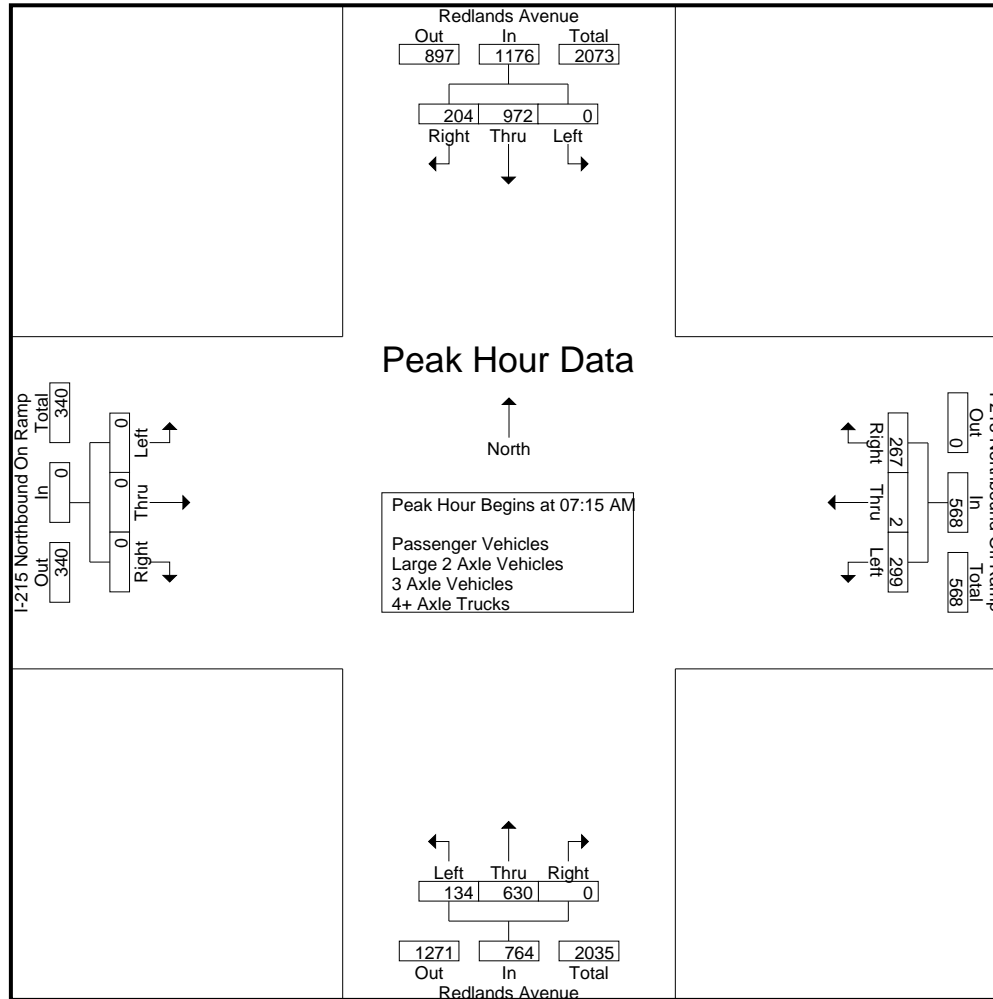
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Redlands Avenue Southbound					I-215 Northbound Off Ramp Westbound					Redlands Avenue Northbound					I-215 Northbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	182	34	15	216	76	2	91	54	169	34	78	0	0	112	0	0	0	0	0	69	497	566
07:15 AM	0	209	42	22	251	76	1	90	51	167	24	133	0	0	157	0	0	0	0	0	73	575	648
07:30 AM	0	287	70	21	357	72	0	74	39	146	34	165	0	0	199	0	0	0	0	0	60	702	762
07:45 AM	0	268	60	16	328	76	0	48	27	124	30	183	0	0	213	0	0	0	0	0	43	665	708
Total	0	946	206	74	1152	300	3	303	171	606	122	559	0	0	681	0	0	0	0	0	245	2439	2684
08:00 AM	0	208	32	22	240	75	1	55	30	131	46	149	0	0	195	0	0	0	0	0	52	566	618
08:15 AM	0	178	30	19	208	47	0	46	25	93	59	149	0	0	208	0	0	0	0	0	44	509	553
08:30 AM	0	173	27	7	200	46	1	37	22	84	32	96	0	0	128	0	0	0	0	0	29	412	441
08:45 AM	0	154	28	14	182	53	0	31	19	84	35	66	0	0	101	0	0	0	0	0	33	367	400
Total	0	713	117	62	830	221	2	169	96	392	172	460	0	0	632	0	0	0	0	0	158	1854	2012
Grand Total	0	1659	323	136	1982	521	5	472	267	998	294	1019	0	0	1313	0	0	0	0	0	403	4293	4696
Apprch %	0	83.7	16.3			52.2	0.5	47.3			22.4	77.6	0			0	0	0					
Total %	0	38.6	7.5		46.2	12.1	0.1	11		23.2	6.8	23.7	0		30.6	0	0	0		0	8.6	91.4	
Passenger Vehicles	0	1614	319		2067	467	4	457		1193	247	978	0		1225	0	0	0		0	0	0	4485
% Passenger Vehicles	0	97.3	98.8	98.5	97.6	89.6	80	96.8	99.3	94.3	84	96	0	0	93.3	0	0	0	0	0	0	0	95.5
Large 2 Axle Vehicles	0	36	2		39	30	0	10		42	21	30	0		51	0	0	0		0	0	0	132
% Large 2 Axle Vehicles	0	2.2	0.6	0.7	1.8	5.8	0	2.1	0.7	3.3	7.1	2.9	0	0	3.9	0	0	0	0	0	0	0	2.8
3 Axle Vehicles	0	4	1		6	14	0	2		16	4	5	0		9	0	0	0		0	0	0	31
% 3 Axle Vehicles	0	0.2	0.3	0.7	0.3	2.7	0	0.4	0	1.3	1.4	0.5	0	0	0.7	0	0	0	0	0	0	0	0.7
4+ Axle Trucks	0	5	1		6	10	1	3		14	22	6	0		28	0	0	0		0	0	0	48
% 4+ Axle Trucks	0	0.3	0.3	0	0.3	1.9	20	0.6	0	1.1	7.5	0.6	0	0	2.1	0	0	0	0	0	0	0	1

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	209	42	251	76	1	90	167	24	133	0	157	0	0	0	0	575
07:30 AM	0	287	70	357	72	0	74	146	34	165	0	199	0	0	0	0	702
07:45 AM	0	268	60	328	76	0	48	124	30	183	0	213	0	0	0	0	665
08:00 AM	0	208	32	240	75	1	55	131	46	149	0	195	0	0	0	0	566
Total Volume	0	972	204	1176	299	2	267	568	134	630	0	764	0	0	0	0	2508
% App. Total	0	82.7	17.3		52.6	0.4	47		17.5	82.5	0		0	0	0		
PHF	.000	.847	.729	.824	.984	.500	.742	.850	.728	.861	.000	.897	.000	.000	.000	.000	.893

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:00 AM				07:30 AM				07:00 AM				
+0 mins.	0	209	42	251	76	2	91	169	34	165	0	199	0	0	0	0	
+15 mins.	0	287	70	357	76	1	90	167	30	183	0	213	0	0	0	0	
+30 mins.	0	268	60	328	72	0	74	146	46	149	0	195	0	0	0	0	
+45 mins.	0	208	32	240	76	0	48	124	59	149	0	208	0	0	0	0	
Total Volume	0	972	204	1176	300	3	303	606	169	646	0	815	0	0	0	0	
% App. Total	0	82.7	17.3		49.5	0.5	50		20.7	79.3	0		0	0	0		
PHF	.000	.847	.729	.824	.987	.375	.832	.896	.716	.883	.000	.957	.000	.000	.000	.000	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

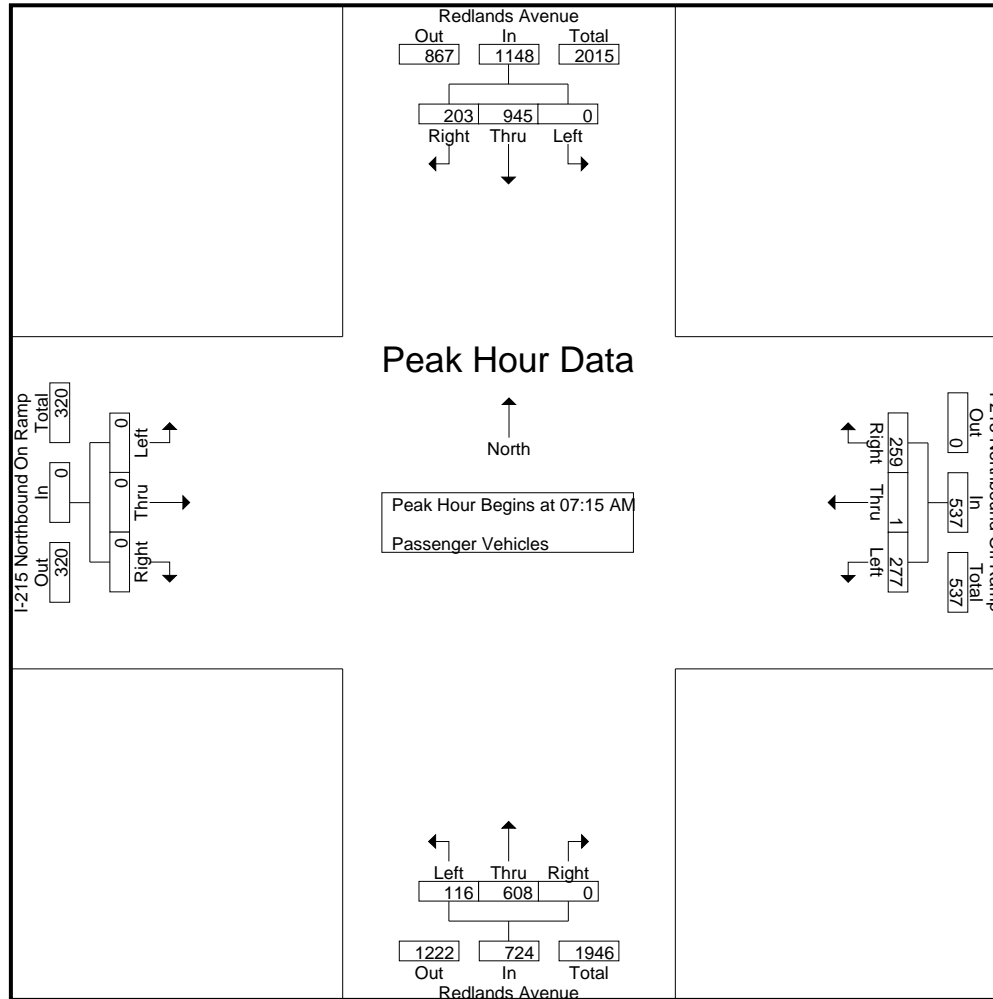
Groups Printed- Passenger Vehicles

Start Time	Redlands Avenue Southbound					I-215 Northbound Off Ramp Westbound					Redlands Avenue Northbound					I-215 Northbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	176	33	14	209	65	2	90	54	157	28	76	0	0	104	0	0	0	0	0	68	470	538
07:15 AM	0	205	42	22	247	69	1	87	51	157	22	126	0	0	148	0	0	0	0	0	73	552	625
07:30 AM	0	278	70	21	348	65	0	71	39	136	28	159	0	0	187	0	0	0	0	0	60	671	731
07:45 AM	0	260	59	16	319	71	0	47	27	118	27	176	0	0	203	0	0	0	0	0	43	640	683
Total	0	919	204	73	1123	270	3	295	171	568	105	537	0	0	642	0	0	0	0	0	244	2333	2577
08:00 AM	0	202	32	22	234	72	0	54	30	126	39	147	0	0	186	0	0	0	0	0	52	546	598
08:15 AM	0	177	29	18	206	41	0	44	24	85	54	142	0	0	196	0	0	0	0	0	42	487	529
08:30 AM	0	168	26	7	194	42	1	34	21	77	22	90	0	0	112	0	0	0	0	0	28	383	411
08:45 AM	0	148	28	14	176	42	0	30	19	72	27	62	0	0	89	0	0	0	0	0	33	337	370
Total	0	695	115	61	810	197	1	162	94	360	142	441	0	0	583	0	0	0	0	0	155	1753	1908
Grand Total	0	1614	319	134	1933	467	4	457	265	928	247	978	0	0	1225	0	0	0	0	0	399	4086	4485
Apprch %	0	83.5	16.5			50.3	0.4	49.2			20.2	79.8	0			0	0	0					
Total %	0	39.5	7.8		47.3	11.4	0.1	11.2		22.7	6	23.9	0		30	0	0	0			8.9	91.1	

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	205	42	247	69	1	87	157	22	126	0	148	0	0	0	0	552
07:30 AM	0	278	70	348	65	0	71	136	28	159	0	187	0	0	0	0	671
07:45 AM	0	260	59	319	71	0	47	118	27	176	0	203	0	0	0	0	640
08:00 AM	0	202	32	234	72	0	54	126	39	147	0	186	0	0	0	0	546
Total Volume	0	945	203	1148	277	1	259	537	116	608	0	724	0	0	0	0	2409
% App. Total	0	82.3	17.7		51.6	0.2	48.2		16	84	0		0	0	0		
PHF	.000	.850	.725	.825	.962	.250	.744	.855	.744	.864	.000	.892	.000	.000	.000	.000	.898

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	205	42	247	69	1	87	157	22	126	0	148	0	0	0	0	
+15 mins.	0	278	70	348	65	0	71	136	28	159	0	187	0	0	0	0	
+30 mins.	0	260	59	319	71	0	47	118	27	176	0	203	0	0	0	0	
+45 mins.	0	202	32	234	72	0	54	126	39	147	0	186	0	0	0	0	
Total Volume	0	945	203	1148	277	1	259	537	116	608	0	724	0	0	0	0	
% App. Total	0	82.3	17.7		51.6	0.2	48.2		16	84	0		0	0	0		
PHF	.000	.850	.725	.825	.962	.250	.744	.855	.744	.864	.000	.892	.000	.000	.000	.000	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

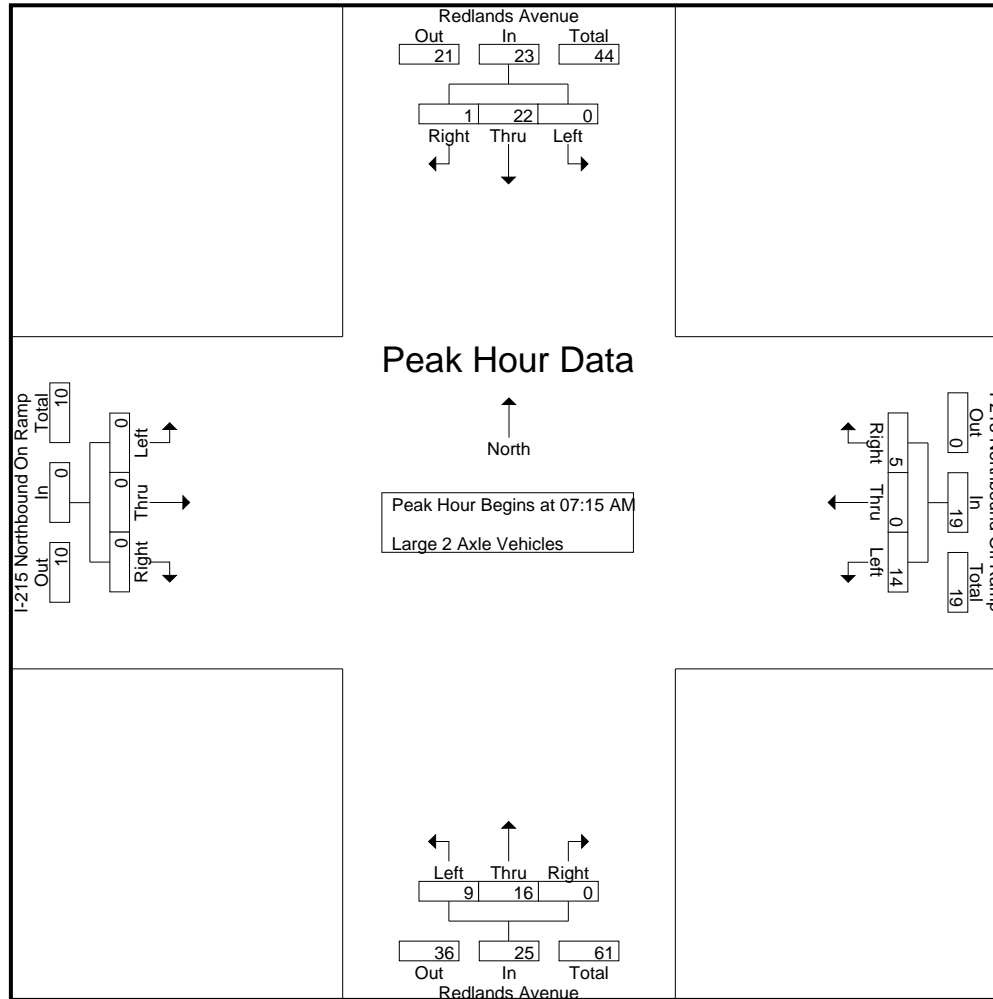
Groups Printed- Large 2 Axle Vehicles

Start Time	Redlands Avenue Southbound					I-215 Northbound Off Ramp Westbound					Redlands Avenue Northbound					I-215 Northbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	3	0	0	3	8	0	1	0	9	4	1	0	0	5	0	0	0	0	0	0	0	17	17
07:15 AM	0	3	0	0	3	5	0	2	0	7	0	4	0	0	4	0	0	0	0	0	0	0	14	14
07:30 AM	0	6	0	0	6	3	0	3	0	6	2	4	0	0	6	0	0	0	0	0	0	0	18	18
07:45 AM	0	8	1	0	9	4	0	0	0	4	3	7	0	0	10	0	0	0	0	0	0	0	23	23
Total	0	20	1	0	21	20	0	6	0	26	9	16	0	0	25	0	0	0	0	0	0	0	72	72
08:00 AM	0	5	0	0	5	2	0	0	0	2	4	1	0	0	5	0	0	0	0	0	0	0	12	12
08:15 AM	0	1	1	1	2	2	0	2	1	4	0	4	0	0	4	0	0	0	0	0	2	0	10	12
08:30 AM	0	5	0	0	5	0	0	2	1	2	4	5	0	0	9	0	0	0	0	0	1	0	16	17
08:45 AM	0	5	0	0	5	6	0	0	0	6	4	4	0	0	8	0	0	0	0	0	0	0	19	19
Total	0	16	1	1	17	10	0	4	2	14	12	14	0	0	26	0	0	0	0	0	3	0	57	60
Grand Total	0	36	2	1	38	30	0	10	2	40	21	30	0	0	51	0	0	0	0	0	3	0	129	132
Apprch %	0	94.7	5.3			75	0	25			41.2	58.8	0			0	0	0						
Total %	0	27.9	1.6		29.5	23.3	0	7.8		31	16.3	23.3	0		39.5	0	0	0		0	2.3	0	97.7	

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	3	0	3	5	0	2	7	0	4	0	4	0	0	0	0	14
07:30 AM	0	6	0	6	3	0	3	6	2	4	0	6	0	0	0	0	18
07:45 AM	0	8	1	9	4	0	0	4	3	7	0	10	0	0	0	0	23
08:00 AM	0	5	0	5	2	0	0	2	4	1	0	5	0	0	0	0	12
Total Volume	0	22	1	23	14	0	5	19	9	16	0	25	0	0	0	0	67
% App. Total	0	95.7	4.3		73.7	0	26.3		36	64	0		0	0	0		
PHF	.000	.688	.250	.639	.700	.000	.417	.679	.563	.571	.000	.625	.000	.000	.000	.000	.728

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	3	0	3	5	0	2	7	0	4	0	4	0	0	0	0	
+15 mins.	0	6	0	6	3	0	3	6	2	4	0	6	0	0	0	0	
+30 mins.	0	8	1	9	4	0	0	4	3	7	0	10	0	0	0	0	
+45 mins.	0	5	0	5	2	0	0	2	4	1	0	5	0	0	0	0	
Total Volume	0	22	1	23	14	0	5	19	9	16	0	25	0	0	0	0	
% App. Total	0	95.7	4.3		73.7	0	26.3		36	64	0		0	0	0		
PHF	.000	.688	.250	.639	.700	.000	.417	.679	.563	.571	.000	.625	.000	.000	.000	.000	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

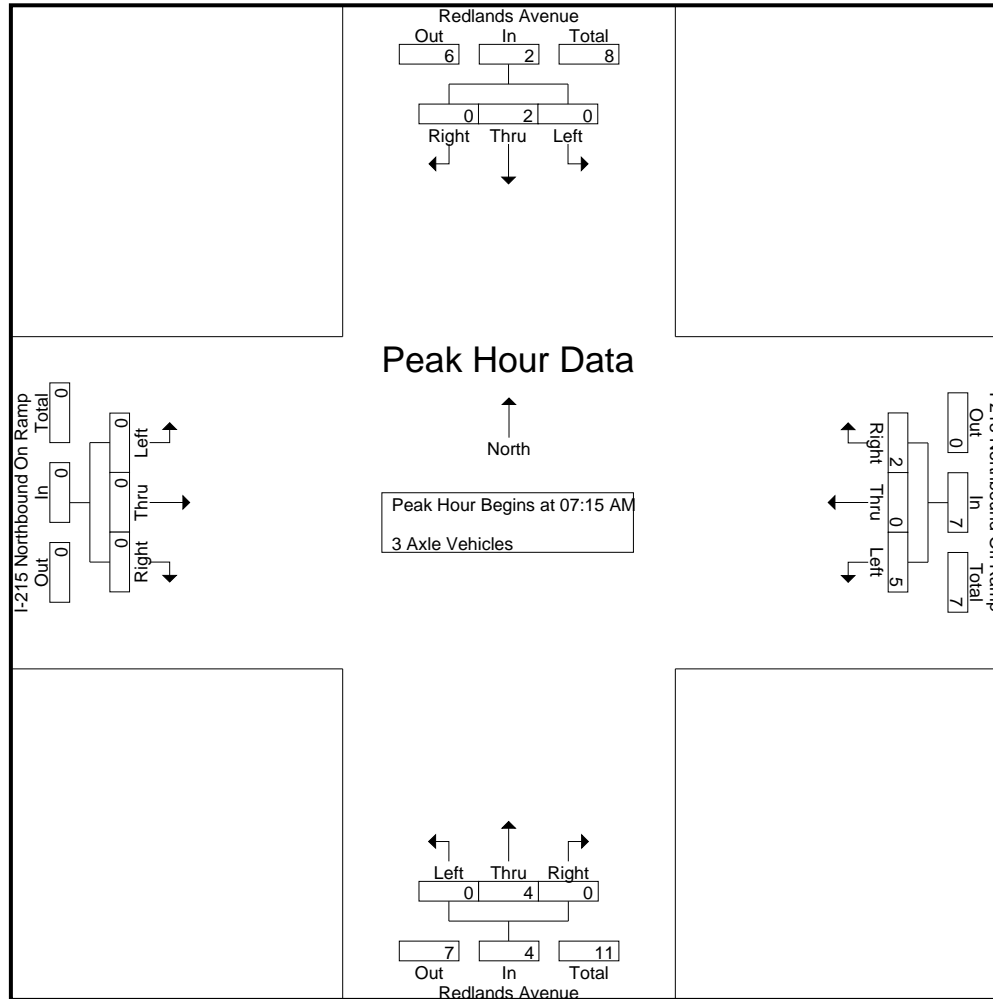
Groups Printed- 3 Axle Vehicles

Start Time	Redlands Avenue Southbound					I-215 Northbound Off Ramp Westbound					Redlands Avenue Northbound					I-215 Northbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	1	1	1	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	3	4
07:15 AM	0	1	0	0	1	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	0	5	5
07:30 AM	0	1	0	0	1	3	0	0	0	3	0	1	0	0	1	0	0	0	0	0	0	5	5
07:45 AM	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	3	1	1	4	4	0	2	0	6	1	4	0	0	5	0	0	0	0	0	1	15	16
08:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
08:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
08:30 AM	0	0	0	0	0	3	0	0	0	3	1	1	0	0	2	0	0	0	0	0	0	5	5
08:45 AM	0	1	0	0	1	5	0	0	0	5	2	0	0	0	2	0	0	0	0	0	0	8	8
Total	0	1	0	0	1	10	0	0	0	10	3	1	0	0	4	0	0	0	0	0	0	15	15
Grand Total	0	4	1	1	5	14	0	2	0	16	4	5	0	0	9	0	0	0	0	0	1	30	31
Apprch %	0	80	20			87.5	0	12.5			44.4	55.6	0			0	0	0					
Total %	0	13.3	3.3		16.7	46.7	0	6.7		53.3	13.3	16.7	0		30	0	0	0		0	3.2	96.8	

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	1	0	1	0	0	1	1	0	3	0	3	0	0	0	0	5
07:30 AM	0	1	0	1	3	0	0	3	0	1	0	1	0	0	0	0	5
07:45 AM	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	2
08:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	2	0	2	5	0	2	7	0	4	0	4	0	0	0	0	13
% App. Total	0	100	0		71.4	0	28.6		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.417	.000	.500	.583	.000	.333	.000	.333	.000	.000	.000	.000	.650

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	1	0	1	0	0	1	1	0	3	0	3	0	0	0	0	
+15 mins.	0	1	0	1	3	0	0	3	0	1	0	1	0	0	0	0	
+30 mins.	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	
Total Volume	0	2	0	2	5	0	2	7	0	4	0	4	0	0	0	0	
% App. Total	0	100	0		71.4	0	28.6		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.417	.000	.500	.583	.000	.333	.000	.333	.000	.000	.000	.000	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

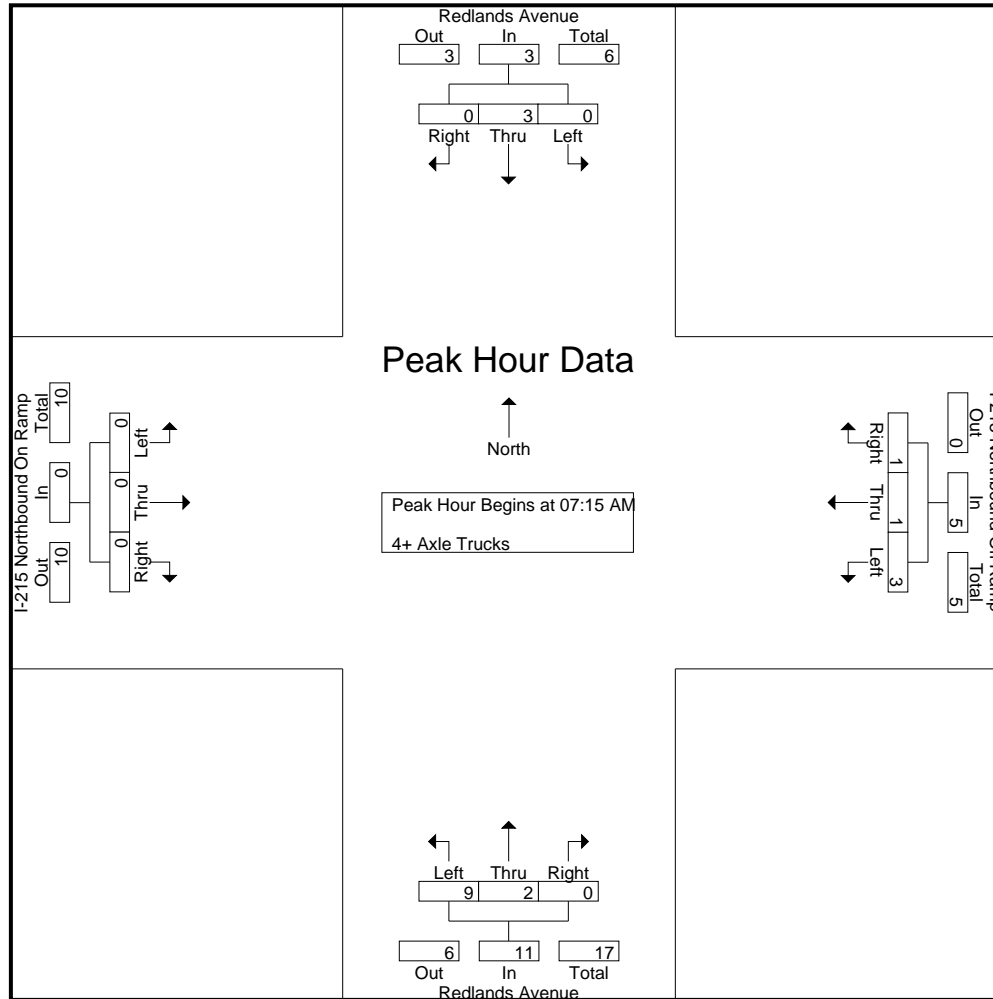
Groups Printed- 4+ Axle Trucks

Start Time	Redlands Avenue Southbound					I-215 Northbound Off Ramp Westbound					Redlands Avenue Northbound					I-215 Northbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	2	0	0	2	3	0	0	0	3	1	1	0	0	2	0	0	0	0	0	0	0	7	7
07:15 AM	0	0	0	0	0	2	0	0	0	2	2	0	0	0	2	0	0	0	0	0	0	0	4	4
07:30 AM	0	2	0	0	2	1	0	0	0	1	4	1	0	0	5	0	0	0	0	0	0	0	8	8
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	4	0	0	4	6	0	0	0	6	7	2	0	0	9	0	0	0	0	0	0	0	19	19
08:00 AM	0	1	0	0	1	0	1	1	0	2	3	1	0	0	4	0	0	0	0	0	0	0	7	7
08:15 AM	0	0	0	0	0	3	0	0	0	3	5	3	0	0	8	0	0	0	0	0	0	0	11	11
08:30 AM	0	0	1	0	1	1	0	1	0	2	5	0	0	0	5	0	0	0	0	0	0	0	8	8
08:45 AM	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	0	0	0	0	0	0	0	3	3
Total	0	1	1	0	2	4	1	3	0	8	15	4	0	0	19	0	0	0	0	0	0	0	29	29
Grand Total	0	5	1	0	6	10	1	3	0	14	22	6	0	0	28	0	0	0	0	0	0	0	48	48
Apprch %	0	83.3	16.7			71.4	7.1	21.4			78.6	21.4	0			0	0	0			0	0		
Total %	0	10.4	2.1		12.5	20.8	2.1	6.2		29.2	45.8	12.5	0		58.3	0	0	0		0	0	0	100	

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	2	0	0	2	2	0	0	2	0	0	0	0	4
07:30 AM	0	2	0	2	1	0	0	1	4	1	0	5	0	0	0	0	8
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	1	0	1	0	1	1	2	3	1	0	4	0	0	0	0	7
Total Volume	0	3	0	3	3	1	1	5	9	2	0	11	0	0	0	0	19
% App. Total	0	100	0		60	20	20		81.8	18.2	0		0	0	0		
PHF	.000	.375	.000	.375	.375	.250	.250	.625	.563	.500	.000	.550	.000	.000	.000	.000	.594

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	0	0	0	2	0	0	2	2	0	0	2	0	0	0	0	
+15 mins.	0	2	0	2	1	0	0	1	4	1	0	5	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	1	0	1	0	1	1	2	3	1	0	4	0	0	0	0	
Total Volume	0	3	0	3	3	1	1	5	9	2	0	11	0	0	0	0	
% App. Total	0	100	0		60	20	20		81.8	18.2	0		0	0	0		
PHF	.000	.375	.000	.375	.375	.250	.250	.625	.563	.500	.000	.550	.000	.000	.000	.000	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

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

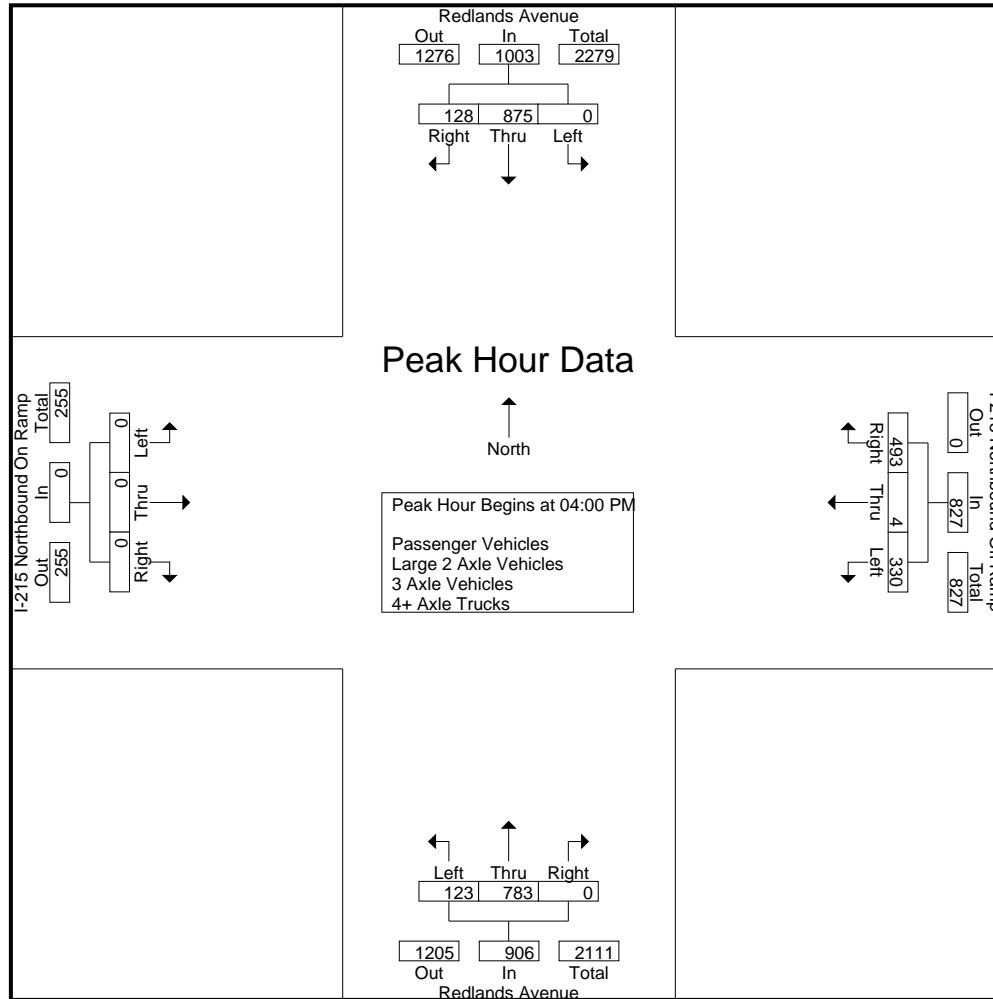
Start Time	Redlands Avenue Southbound					I-215 Northbound Off Ramp Westbound					Redlands Avenue Northbound					I-215 Northbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	227	34	17	261	76	0	112	49	188	26	207	0	0	233	0	0	0	0	0	66	682	748
04:15 PM	0	227	31	12	258	89	3	143	42	235	26	174	0	0	200	0	0	0	0	0	54	693	747
04:30 PM	0	208	41	15	249	76	1	119	43	196	42	220	0	0	262	0	0	0	0	0	58	707	765
04:45 PM	0	213	22	7	235	89	0	119	49	208	29	182	0	0	211	0	0	0	0	0	56	654	710
Total	0	875	128	51	1003	330	4	493	183	827	123	783	0	0	906	0	0	0	0	0	234	2736	2970
05:00 PM	0	213	46	21	259	80	1	133	54	214	42	156	0	0	198	0	0	0	0	0	75	671	746
05:15 PM	0	161	35	14	196	94	0	131	56	225	41	189	0	0	230	0	0	0	0	0	70	651	721
05:30 PM	0	181	39	14	220	68	1	125	60	194	34	188	0	0	222	0	0	0	0	0	74	636	710
05:45 PM	0	160	38	13	198	86	0	121	54	207	32	174	0	0	206	0	0	0	0	0	67	611	678
Total	0	715	158	62	873	328	2	510	224	840	149	707	0	0	856	0	0	0	0	0	286	2569	2855
Grand Total	0	1590	286	113	1876	658	6	1003	407	1667	272	1490	0	0	1762	0	0	0	0	0	520	5305	5825
Apprch %	0	84.8	15.2			39.5	0.4	60.2			15.4	84.6	0			0	0	0					
Total %	0	30	5.4		35.4	12.4	0.1	18.9		31.4	5.1	28.1	0		33.2	0	0	0		0	8.9	91.1	
Passenger Vehicles	0	1550	278		1938	621	3	983		2003	243	1466	0		1709	0	0	0		0	0	0	5650
% Passenger Vehicles	0	97.5	97.2	97.3	97.4	94.4	50	98	97.3	96.6	89.3	98.4	0	0	97	0	0	0	0	0	0	0	97
Large 2 Axle Vehicles	0	28	4		33	24	1	16		51	13	20	0		33	0	0	0		0	0	0	117
% Large 2 Axle Vehicles	0	1.8	1.4	0.9	1.7	3.6	16.7	1.6	2.5	2.5	4.8	1.3	0	0	1.9	0	0	0	0	0	0	0	2
3 Axle Vehicles	0	9	2		12	9	2	2		13	3	1	0		4	0	0	0		0	0	0	29
% 3 Axle Vehicles	0	0.6	0.7	0.9	0.6	1.4	33.3	0.2	0	0.6	1.1	0.1	0	0	0.2	0	0	0	0	0	0	0	0.5
4+ Axle Trucks	0	3	2		6	4	0	2		7	13	3	0		16	0	0	0		0	0	0	29
% 4+ Axle Trucks	0	0.2	0.7	0.9	0.3	0.6	0	0.2	0.2	0.3	4.8	0.2	0	0	0.9	0	0	0	0	0	0	0	0.5

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	227	34	261	76	0	112	188	26	207	0	233	0	0	0	0	682
04:15 PM	0	227	31	258	89	3	143	235	26	174	0	200	0	0	0	0	693
04:30 PM	0	208	41	249	76	1	119	196	42	220	0	262	0	0	0	0	707
04:45 PM	0	213	22	235	89	0	119	208	29	182	0	211	0	0	0	0	654
Total Volume	0	875	128	1003	330	4	493	827	123	783	0	906	0	0	0	0	2736
% App. Total	0	87.2	12.8		39.9	0.5	59.6		13.6	86.4	0		0	0	0		
PHF	.000	.964	.780	.961	.927	.333	.862	.880	.732	.890	.000	.865	.000	.000	.000	.000	.967

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

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:15 PM				04:00 PM				04:00 PM				
+0 mins.	0	227	34	261	89	3	143	235	26	207	0	233	0	0	0	0	
+15 mins.	0	227	31	258	76	1	119	196	26	174	0	200	0	0	0	0	
+30 mins.	0	208	41	249	89	0	119	208	42	220	0	262	0	0	0	0	
+45 mins.	0	213	22	235	80	1	133	214	29	182	0	211	0	0	0	0	
Total Volume	0	875	128	1003	334	5	514	853	123	783	0	906	0	0	0	0	
% App. Total	0	87.2	12.8		39.2	0.6	60.3		13.6	86.4	0		0	0	0		
PHF	.000	.964	.780	.961	.938	.417	.899	.907	.732	.890	.000	.865	.000	.000	.000	.000	

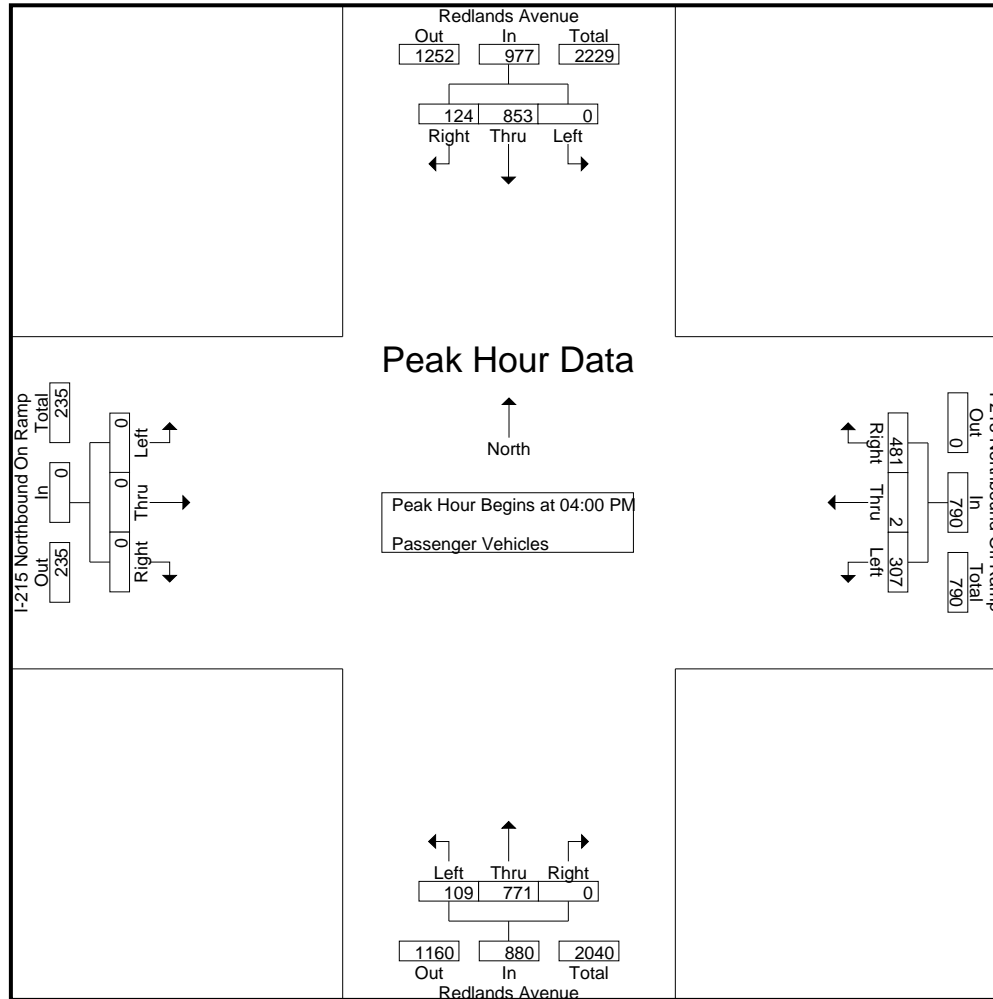
City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Redlands Avenue Southbound					I-215 Northbound Off Ramp Westbound					Redlands Avenue Northbound					I-215 Northbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	221	33	16	254	73	0	110	47	183	22	205	0	0	227	0	0	0	0	0	63	664	727
04:15 PM	0	221	30	12	251	79	1	142	42	222	25	171	0	0	196	0	0	0	0	0	54	669	723
04:30 PM	0	204	39	15	243	68	1	115	42	184	38	215	0	0	253	0	0	0	0	0	57	680	737
04:45 PM	0	207	22	7	229	87	0	114	46	201	24	180	0	0	204	0	0	0	0	0	53	634	687
Total	0	853	124	50	977	307	2	481	177	790	109	771	0	0	880	0	0	0	0	0	227	2647	2874
05:00 PM	0	208	43	20	251	74	0	130	51	204	39	151	0	0	190	0	0	0	0	0	71	645	716
05:15 PM	0	160	34	13	194	92	0	129	56	221	35	186	0	0	221	0	0	0	0	0	69	636	705
05:30 PM	0	174	39	14	213	64	1	124	59	189	31	184	0	0	215	0	0	0	0	0	73	617	690
05:45 PM	0	155	38	13	193	84	0	119	53	203	29	174	0	0	203	0	0	0	0	0	66	599	665
Total	0	697	154	60	851	314	1	502	219	817	134	695	0	0	829	0	0	0	0	0	279	2497	2776
Grand Total	0	1550	278	110	1828	621	3	983	396	1607	243	1466	0	0	1709	0	0	0	0	0	506	5144	5650
Apprch %	0	84.8	15.2			38.6	0.2	61.2			14.2	85.8	0			0	0	0					
Total %	0	30.1	5.4		35.5	12.1	0.1	19.1		31.2	4.7	28.5	0		33.2	0	0	0		0	9	91	

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	221	33	254	73	0	110	183	22	205	0	227	0	0	0	0	664
04:15 PM	0	221	30	251	79	1	142	222	25	171	0	196	0	0	0	0	669
04:30 PM	0	204	39	243	68	1	115	184	38	215	0	253	0	0	0	0	680
04:45 PM	0	207	22	229	87	0	114	201	24	180	0	204	0	0	0	0	634
Total Volume	0	853	124	977	307	2	481	790	109	771	0	880	0	0	0	0	2647
% App. Total	0	87.3	12.7		38.9	0.3	60.9		12.4	87.6	0		0	0	0		
PHF	.000	.965	.795	.962	.882	.500	.847	.890	.717	.897	.000	.870	.000	.000	.000	.000	.973



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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	221	33	254	73	0	110	183	22	205	0	227	0	0	0	0	
+15 mins.	0	221	30	251	79	1	142	222	25	171	0	196	0	0	0	0	
+30 mins.	0	204	39	243	68	1	115	184	38	215	0	253	0	0	0	0	
+45 mins.	0	207	22	229	87	0	114	201	24	180	0	204	0	0	0	0	
Total Volume	0	853	124	977	307	2	481	790	109	771	0	880	0	0	0	0	
% App. Total	0	87.3	12.7		38.9	0.3	60.9		12.4	87.6	0		0	0	0		
PHF	.000	.965	.795	.962	.882	.500	.847	.890	.717	.897	.000	.870	.000	.000	.000	.000	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

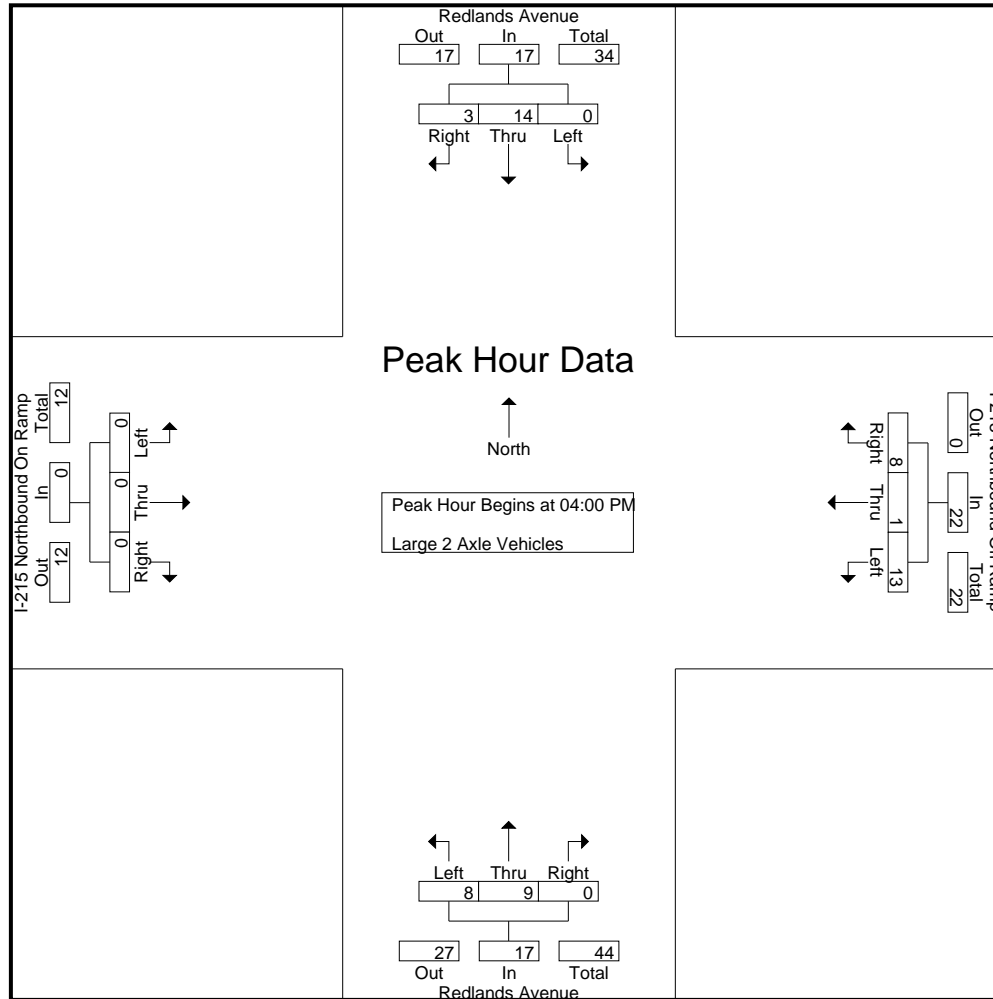
Groups Printed- Large 2 Axle Vehicles

Start Time	Redlands Avenue Southbound					I-215 Northbound Off Ramp Westbound					Redlands Avenue Northbound					I-215 Northbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	3	1	1	4	2	0	2	2	4	4	1	0	0	5	0	0	0	0	0	3	13	16
04:15 PM	0	3	0	0	3	6	1	0	0	7	0	3	0	0	3	0	0	0	0	0	0	13	13
04:30 PM	0	4	2	0	6	4	0	3	1	7	1	3	0	0	4	0	0	0	0	0	1	17	18
04:45 PM	0	4	0	0	4	1	0	3	2	4	3	2	0	0	5	0	0	0	0	0	2	13	15
Total	0	14	3	1	17	13	1	8	5	22	8	9	0	0	17	0	0	0	0	0	6	56	62
05:00 PM	0	4	1	0	5	5	0	3	3	8	1	4	0	0	5	0	0	0	0	0	3	18	21
05:15 PM	0	1	0	0	1	1	0	2	0	3	2	3	0	0	5	0	0	0	0	0	0	9	9
05:30 PM	0	4	0	0	4	3	0	1	1	4	1	4	0	0	5	0	0	0	0	0	1	13	14
05:45 PM	0	5	0	0	5	2	0	2	1	4	1	0	0	0	1	0	0	0	0	0	1	10	11
Total	0	14	1	0	15	11	0	8	5	19	5	11	0	0	16	0	0	0	0	0	5	50	55
Grand Total	0	28	4	1	32	24	1	16	10	41	13	20	0	0	33	0	0	0	0	0	11	106	117
Apprch %	0	87.5	12.5			58.5	2.4	39			39.4	60.6	0			0	0	0					
Total %	0	26.4	3.8		30.2	22.6	0.9	15.1		38.7	12.3	18.9	0		31.1	0	0	0		0	9.4	90.6	

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	3	1	4	2	0	2	4	4	1	0	5	0	0	0	0	13
04:15 PM	0	3	0	3	6	1	0	7	0	3	0	3	0	0	0	0	13
04:30 PM	0	4	2	6	4	0	3	7	1	3	0	4	0	0	0	0	17
04:45 PM	0	4	0	4	1	0	3	4	3	2	0	5	0	0	0	0	13
Total Volume	0	14	3	17	13	1	8	22	8	9	0	17	0	0	0	0	56
% App. Total	0	82.4	17.6		59.1	4.5	36.4		47.1	52.9	0		0	0	0		
PHF	.000	.875	.375	.708	.542	.250	.667	.786	.500	.750	.000	.850	.000	.000	.000	.000	.824

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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	3	1	4	2	0	2	4	4	1	0	5	0	0	0	0	
+15 mins.	0	3	0	3	6	1	0	7	0	3	0	3	0	0	0	0	
+30 mins.	0	4	2	6	4	0	3	7	1	3	0	4	0	0	0	0	
+45 mins.	0	4	0	4	1	0	3	4	3	2	0	5	0	0	0	0	
Total Volume	0	14	3	17	13	1	8	22	8	9	0	17	0	0	0	0	
% App. Total	0	82.4	17.6		59.1	4.5	36.4		47.1	52.9	0		0	0	0		
PHF	.000	.875	.375	.708	.542	.250	.667	.786	.500	.750	.000	.850	.000	.000	.000	.000	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

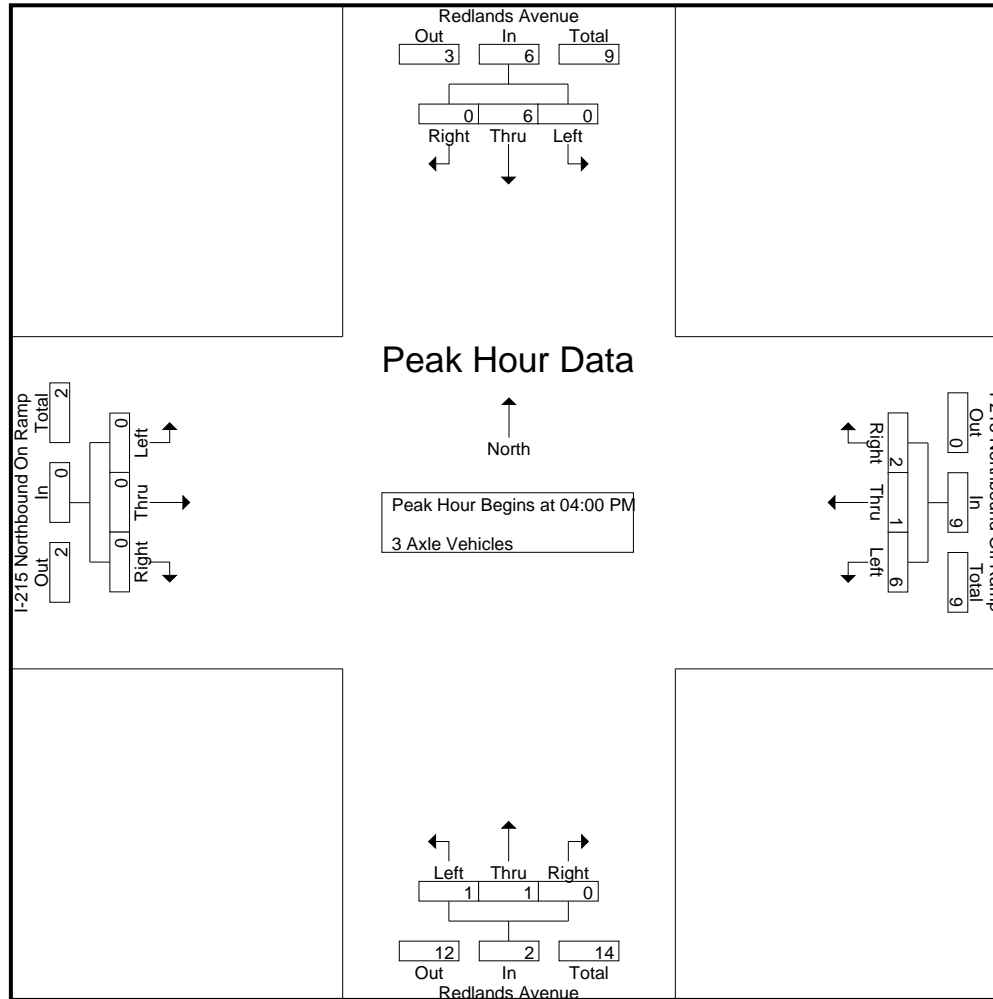
Groups Printed- 3 Axle Vehicles

Start Time	Redlands Avenue Southbound					I-215 Northbound Off Ramp Westbound					Redlands Avenue Northbound					I-215 Northbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
04:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
04:15 PM	0	1	0	0	1	3	1	1	0	5	1	0	0	0	1	0	0	0	0	0	0	0	7	7
04:30 PM	0	0	0	0	0	3	0	1	0	4	0	1	0	0	1	0	0	0	0	0	0	0	5	5
04:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	6	0	0	6	6	1	2	0	9	1	1	0	0	2	0	0	0	0	0	0	0	17	17
05:00 PM	0	1	2	1	3	1	1	0	0	2	1	0	0	0	1	0	0	0	0	0	1	6	7	7
05:15 PM	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	2	2	2
05:30 PM	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	3	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	2	1	5	3	1	0	0	4	2	0	0	0	2	0	0	0	0	0	1	11	12	12
Grand Total	0	9	2	1	11	9	2	2	0	13	3	1	0	0	4	0	0	0	0	0	1	28	29	29
Apprch %	0	81.8	18.2			69.2	15.4	15.4			75	25	0			0	0	0						
Total %	0	32.1	7.1		39.3	32.1	7.1	7.1		46.4	10.7	3.6	0		14.3	0	0	0		0	3.4	96.6		

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	1	0	1	3	1	1	5	1	0	0	1	0	0	0	0	0
04:30 PM	0	0	0	0	3	0	1	4	0	1	0	1	0	0	0	0	0
04:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	6	0	6	6	1	2	9	1	1	0	2	0	0	0	0	0
% App. Total	0	100	0		66.7	11.1	22.2		50	50	0		0	0	0		
PHF	.000	.500	.000	.500	.500	.250	.500	.450	.250	.250	.000	.500	.000	.000	.000	.000	.607

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	1	0	1	3	1	1	5	1	0	0	1	0	0	0	0	
+30 mins.	0	0	0	0	3	0	1	4	0	1	0	1	0	0	0	0	
+45 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	6	0	6	6	1	2	9	1	1	0	2	0	0	0	0	
% App. Total	0	100	0		66.7	11.1	22.2		50	50	0		0	0	0		
PHF	.000	.500	.000	.500	.500	.250	.500	.450	.250	.250	.000	.500	.000	.000	.000	.000	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

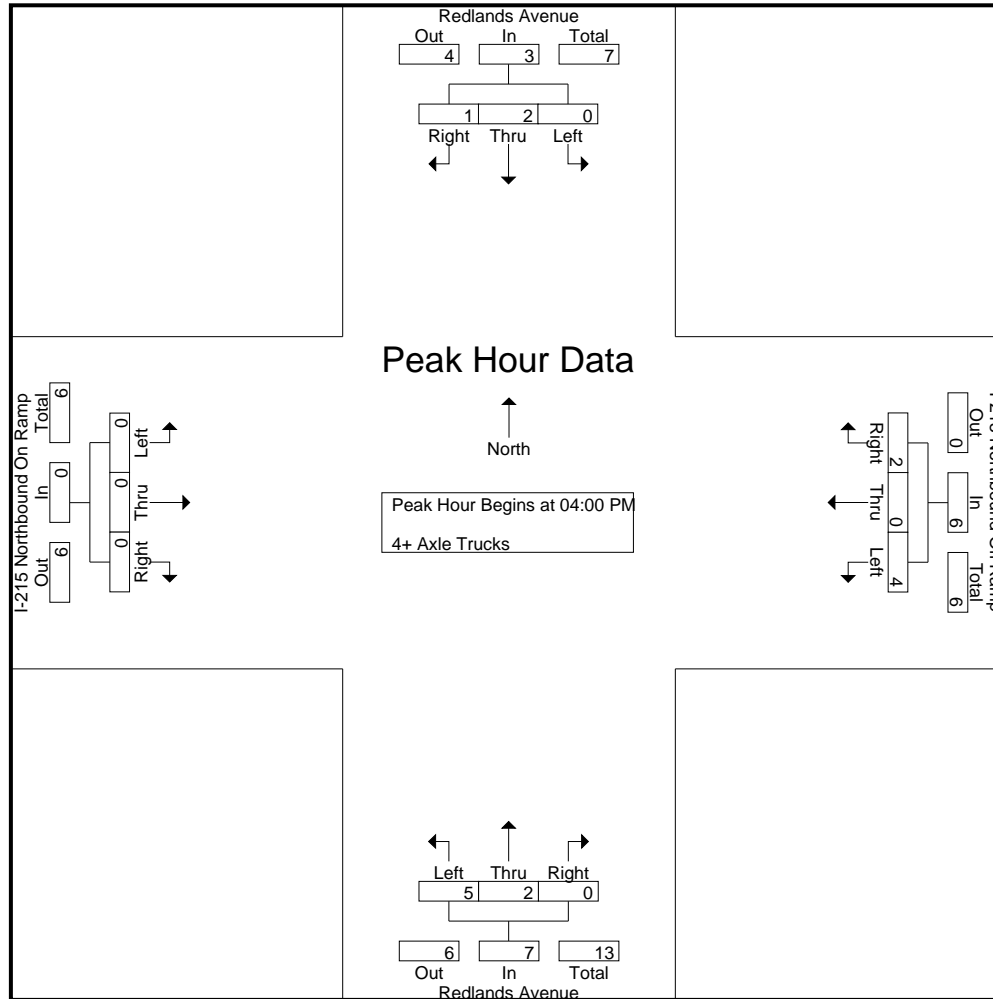
Groups Printed- 4+ Axle Trucks

Start Time	Redlands Avenue Southbound					I-215 Northbound Off Ramp Westbound					Redlands Avenue Northbound					I-215 Northbound On Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
04:00 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	2	2
04:15 PM	0	2	1	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	4
04:30 PM	0	0	0	0	0	1	0	0	0	1	3	1	0	0	4	0	0	0	0	0	0	0	5	5
04:45 PM	0	0	0	0	0	1	0	2	1	3	2	0	0	0	2	0	0	0	0	0	1	5	6	6
Total	0	2	1	0	3	4	0	2	1	6	5	2	0	0	7	0	0	0	0	0	1	16	17	17
05:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	2	2	2
05:15 PM	0	0	1	1	1	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	1	4	5	5
05:30 PM	0	1	0	0	1	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	3	3	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	2	2	2
Total	0	1	1	1	2	0	0	0	0	0	8	1	0	0	9	0	0	0	0	0	1	11	12	12
Grand Total	0	3	2	1	5	4	0	2	1	6	13	3	0	0	16	0	0	0	0	0	2	27	29	29
Apprch %	0	60	40			66.7	0	33.3			81.2	18.8	0			0	0	0						
Total %	0	11.1	7.4		18.5	14.8	0	7.4		22.2	48.1	11.1	0		59.3	0	0	0		0	6.9	93.1		

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	2
04:15 PM	0	2	1	3	1	0	0	1	0	0	0	0	0	0	0	0	4
04:30 PM	0	0	0	0	1	0	0	1	3	1	0	4	0	0	0	0	5
04:45 PM	0	0	0	0	1	0	2	3	2	0	0	2	0	0	0	0	5
Total Volume	0	2	1	3	4	0	2	6	5	2	0	7	0	0	0	0	16
% App. Total	0	66.7	33.3		66.7	0	33.3		71.4	28.6	0		0	0	0		
PHF	.000	.250	.250	.250	1.00	.000	.250	.500	.417	.500	.000	.438	.000	.000	.000	.000	.800

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Northbound Ramps
 Weather: Clear

File Name : 02_PER_Redlands_215N PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Northbound Off Ramp Westbound				Redlands Avenue Northbound				I-215 Northbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	
+15 mins.	0	2	1	3	1	0	0	1	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	1	0	0	1	3	1	0	4	0	0	0	0	
+45 mins.	0	0	0	0	1	0	2	3	2	0	0	2	0	0	0	0	
Total Volume	0	2	1	3	4	0	2	6	5	2	0	7	0	0	0	0	
% App. Total	0	66.7	33.3		66.7	0	33.3		71.4	28.6	0		0	0	0		
PHF	.000	.250	.250	.250	1.000	.000	.250	.500	.417	.500	.000	.438	.000	.000	.000	.000	

Location: Perris
 N/S: Redlands Avenue
 E/W: I-215 NB Ramps



Date: 2/3/2022
 Day: Thursday

PEDESTRIANS

	North Leg Redlands Avenue	East Leg I-215 NB Ramps	South Leg Redlands Avenue	West Leg I-215 NB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	1	1
TOTAL VOLUMES:	0	0	0	1	1

	North Leg Redlands Avenue	East Leg I-215 NB Ramps	South Leg Redlands Avenue	West Leg I-215 NB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	3	3
4:15 PM	0	0	0	2	2
4:30 PM	0	0	0	2	2
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	2	2
5:15 PM	0	0	0	2	2
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	2	2
TOTAL VOLUMES:	0	0	0	13	13

Location: Perris
 N/S: Redlands Avenue
 E/W: I-215 NB Ramps



Date: 2/3/2022
 Day: Thursday

BICYCLES

	Southbound Redlands Avenue			Westbound I-215 NB Ramps			Northbound Redlands Avenue			Eastbound I-215 NB 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 Redlands Avenue			Westbound I-215 NB Ramps			Northbound Redlands Avenue			Eastbound I-215 NB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	2	0	0	0	0	3

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

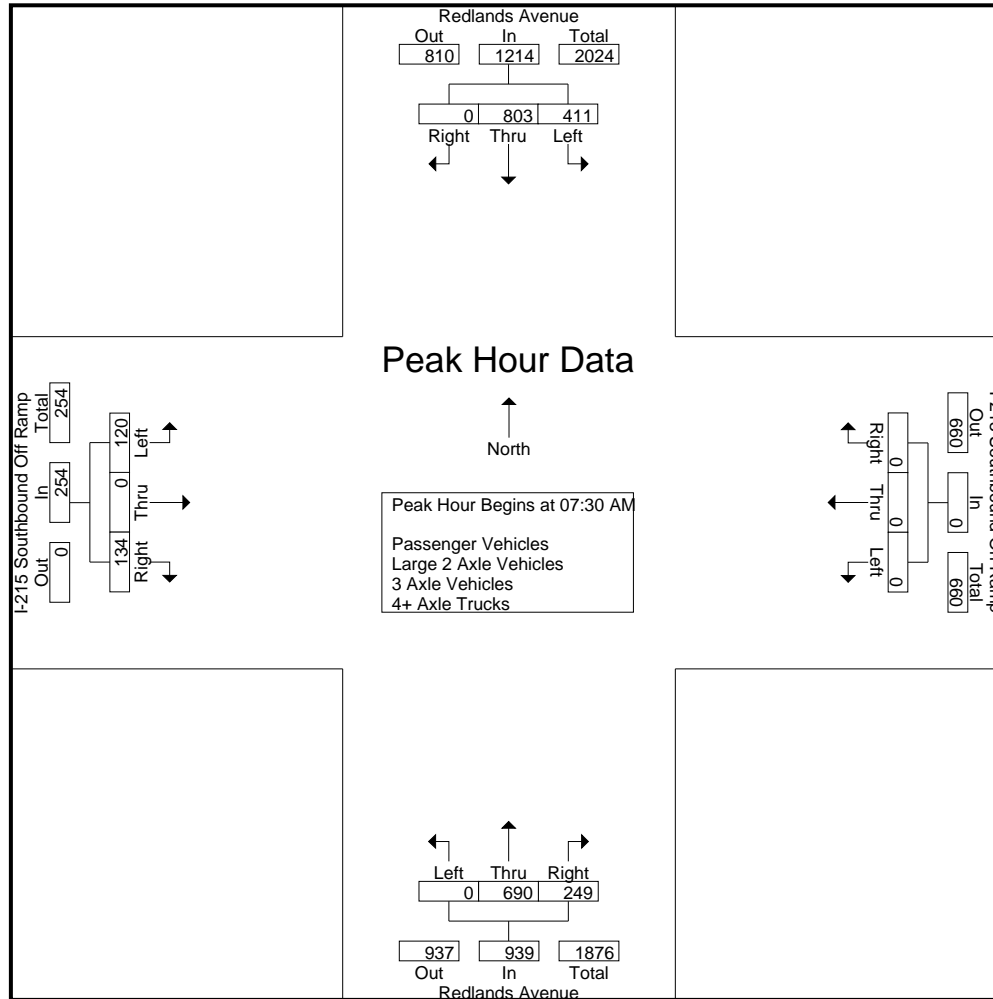
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Redlands Avenue Southbound					I-215 Southbound On Ramp Westbound					Redlands Avenue Northbound					I-215 Southbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	96	153	0	0	249	0	0	0	0	0	0	100	49	2	149	8	1	39	34	48	36	446	482
07:15 AM	94	180	0	0	274	0	0	0	0	0	0	125	36	1	161	35	1	33	21	69	22	504	526
07:30 AM	144	225	0	0	369	0	0	0	0	0	0	164	55	9	219	34	0	35	22	69	31	657	688
07:45 AM	99	243	0	0	342	0	0	0	0	0	0	173	70	7	243	40	0	40	22	80	29	665	694
Total	433	801	0	0	1234	0	0	0	0	0	0	562	210	19	772	117	2	147	99	266	118	2272	2390
08:00 AM	81	199	0	0	280	0	0	0	0	0	0	172	64	13	236	23	0	32	21	55	34	571	605
08:15 AM	87	136	0	0	223	0	0	0	0	0	0	181	60	16	241	23	0	27	16	50	32	514	546
08:30 AM	93	136	0	0	229	0	0	0	0	0	0	107	80	12	187	21	0	27	20	48	32	464	496
08:45 AM	70	134	0	0	204	0	0	0	0	0	0	93	72	3	165	16	0	33	28	49	31	418	449
Total	331	605	0	0	936	0	0	0	0	0	0	553	276	44	829	83	0	119	85	202	129	1967	2096
Grand Total	764	1406	0	0	2170	0	0	0	0	0	0	1115	486	63	1601	200	2	266	184	468	247	4239	4486
Apprch %	35.2	64.8	0			0	0	0			0	69.6	30.4			42.7	0.4	56.8					
Total %	18	33.2	0		51.2	0	0	0		0	0	26.3	11.5		37.8	4.7	0	6.3		11	5.5	94.5	
Passenger Vehicles	749	1341	0		2090	0	0	0		0	0	1059	423		1543	188	2	226		573	0	0	4206
% Passenger Vehicles	98	95.4	0		96.3	0	0	0		0	0	95	87	96.8	92.7	94	100	85	85.3	87.9	0	0	93.8
Large 2 Axle Vehicles	12	37	0		49	0	0	0		0	0	28	27		57	6	0	19		41	0	0	147
% Large 2 Axle Vehicles	1.6	2.6	0		2.3	0	0	0		0	0	2.5	5.6	3.2	3.4	3	0	7.1	8.7	6.3	0	0	3.3
3 Axle Vehicles	0	17	0		17	0	0	0		0	0	5	22		27	2	0	4		9	0	0	53
% 3 Axle Vehicles	0	1.2	0		0.8	0	0	0		0	0	0.4	4.5	0	1.6	1	0	1.5	1.6	1.4	0	0	1.2
4+ Axle Trucks	3	11	0		14	0	0	0		0	0	23	14		37	4	0	17		29	0	0	80
% 4+ Axle Trucks	0.4	0.8	0		0.6	0	0	0		0	0	2.1	2.9	0	2.2	2	0	6.4	4.3	4.4	0	0	1.8

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	144	225	0	369	0	0	0	0	0	164	55	219	34	0	35	69	657
07:45 AM	99	243	0	342	0	0	0	0	0	173	70	243	40	0	40	80	665
08:00 AM	81	199	0	280	0	0	0	0	0	172	64	236	23	0	32	55	571
08:15 AM	87	136	0	223	0	0	0	0	0	181	60	241	23	0	27	50	514
Total Volume	411	803	0	1214	0	0	0	0	0	690	249	939	120	0	134	254	2407
% App. Total	33.9	66.1	0		0	0	0		0	73.5	26.5		47.2	0	52.8		
PHF	.714	.826	.000	.822	.000	.000	.000	.000	.000	.953	.889	.966	.750	.000	.838	.794	.905

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:00 AM				07:30 AM				07:15 AM				
+0 mins.	94	180	0	274	0	0	0	0	0	164	55	219	35	1	33	69	
+15 mins.	144	225	0	369	0	0	0	0	0	173	70	243	34	0	35	69	
+30 mins.	99	243	0	342	0	0	0	0	0	172	64	236	40	0	40	80	
+45 mins.	81	199	0	280	0	0	0	0	0	181	60	241	23	0	32	55	
Total Volume	418	847	0	1265	0	0	0	0	0	690	249	939	132	1	140	273	
% App. Total	33	67	0		0	0	0		0	73.5	26.5		48.4	0.4	51.3		
PHF	.726	.871	.000	.857	.000	.000	.000	.000	.000	.953	.889	.966	.825	.250	.875	.853	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

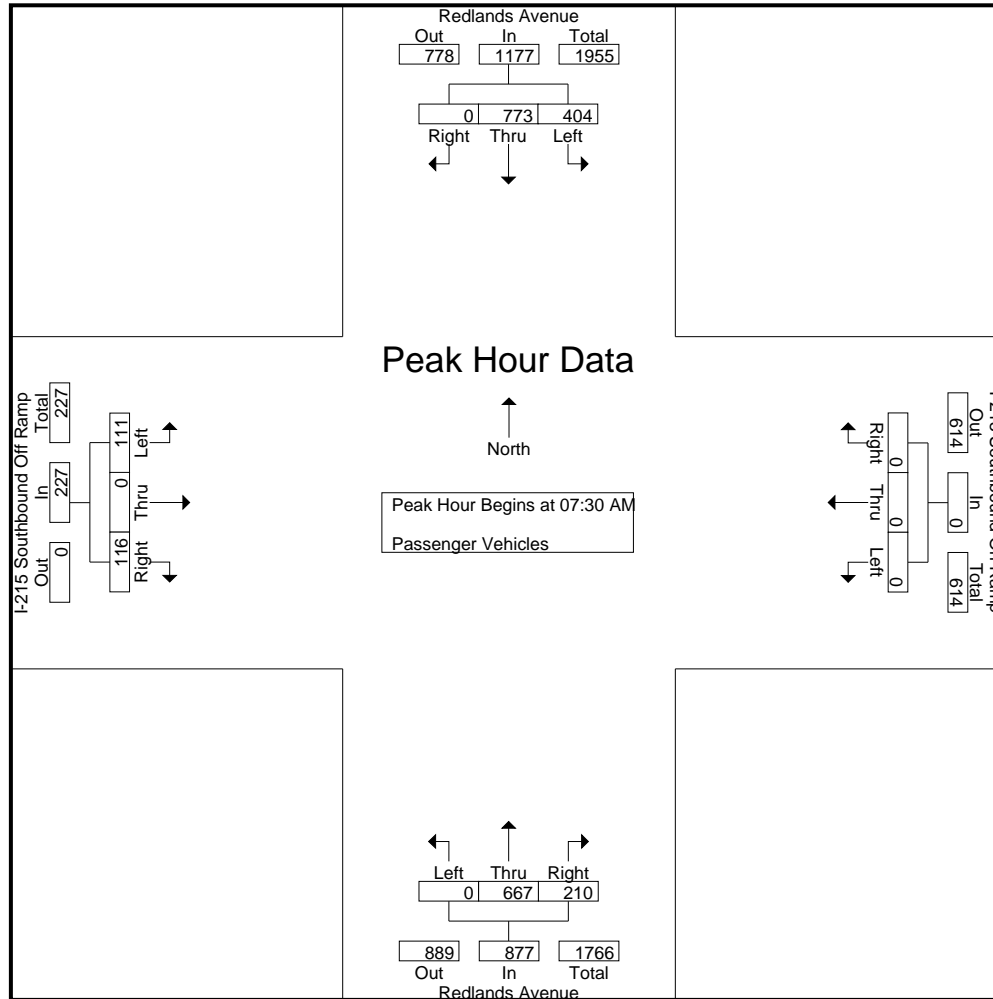
Groups Printed- Passenger Vehicles

Start Time	Redlands Avenue Southbound					I-215 Southbound On Ramp Westbound					Redlands Avenue Northbound					I-215 Southbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	92	145	0	0	237	0	0	0	0	0	0	96	44	2	140	8	1	33	29	42	31	419	450
07:15 AM	93	170	0	0	263	0	0	0	0	0	0	118	32	1	150	33	1	28	18	62	19	475	494
07:30 AM	142	213	0	0	355	0	0	0	0	0	0	158	48	8	206	33	0	31	18	64	26	625	651
07:45 AM	96	236	0	0	332	0	0	0	0	0	0	169	64	7	233	37	0	38	22	75	29	640	669
Total	423	764	0	0	1187	0	0	0	0	0	0	541	188	18	729	111	2	130	87	243	105	2159	2264
08:00 AM	79	195	0	0	274	0	0	0	0	0	0	167	47	12	214	21	0	25	17	46	29	534	563
08:15 AM	87	129	0	0	216	0	0	0	0	0	0	173	51	16	224	20	0	22	14	42	30	482	512
08:30 AM	92	128	0	0	220	0	0	0	0	0	0	96	76	12	172	20	0	20	15	40	27	432	459
08:45 AM	68	125	0	0	193	0	0	0	0	0	0	82	61	3	143	16	0	29	24	45	27	381	408
Total	326	577	0	0	903	0	0	0	0	0	0	518	235	43	753	77	0	96	70	173	113	1829	1942
Grand Total	749	1341	0	0	2090	0	0	0	0	0	0	1059	423	61	1482	188	2	226	157	416	218	3988	4206
Apprch %	35.8	64.2	0			0	0	0			0	71.5	28.5			45.2	0.5	54.3					
Total %	18.8	33.6	0		52.4	0	0	0			0	26.6	10.6		37.2	4.7	0.1	5.7		10.4	5.2	94.8	

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	142	213	0	355	0	0	0	0	0	158	48	206	33	0	31	64	625
07:45 AM	96	236	0	332	0	0	0	0	0	169	64	233	37	0	38	75	640
08:00 AM	79	195	0	274	0	0	0	0	0	167	47	214	21	0	25	46	534
08:15 AM	87	129	0	216	0	0	0	0	0	173	51	224	20	0	22	42	482
Total Volume	404	773	0	1177	0	0	0	0	0	667	210	877	111	0	116	227	2281
% App. Total	34.3	65.7	0		0	0	0		0	76.1	23.9		48.9	0	51.1		
PHF	.711	.819	.000	.829	.000	.000	.000	.000	.000	.000	.964	.820	.941	.750	.000	.763	.891

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 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.	142	213	0	355	0	0	0	0	0	158	48	206	33	0	31	64	
+15 mins.	96	236	0	332	0	0	0	0	0	169	64	233	37	0	38	75	
+30 mins.	79	195	0	274	0	0	0	0	0	167	47	214	21	0	25	46	
+45 mins.	87	129	0	216	0	0	0	0	0	173	51	224	20	0	22	42	
Total Volume	404	773	0	1177	0	0	0	0	0	667	210	877	111	0	116	227	
% App. Total	34.3	65.7	0		0	0	0		0	76.1	23.9		48.9	0	51.1		
PHF	.711	.819	.000	.829	.000	.000	.000	.000	.000	.964	.820	.941	.750	.000	.763	.757	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

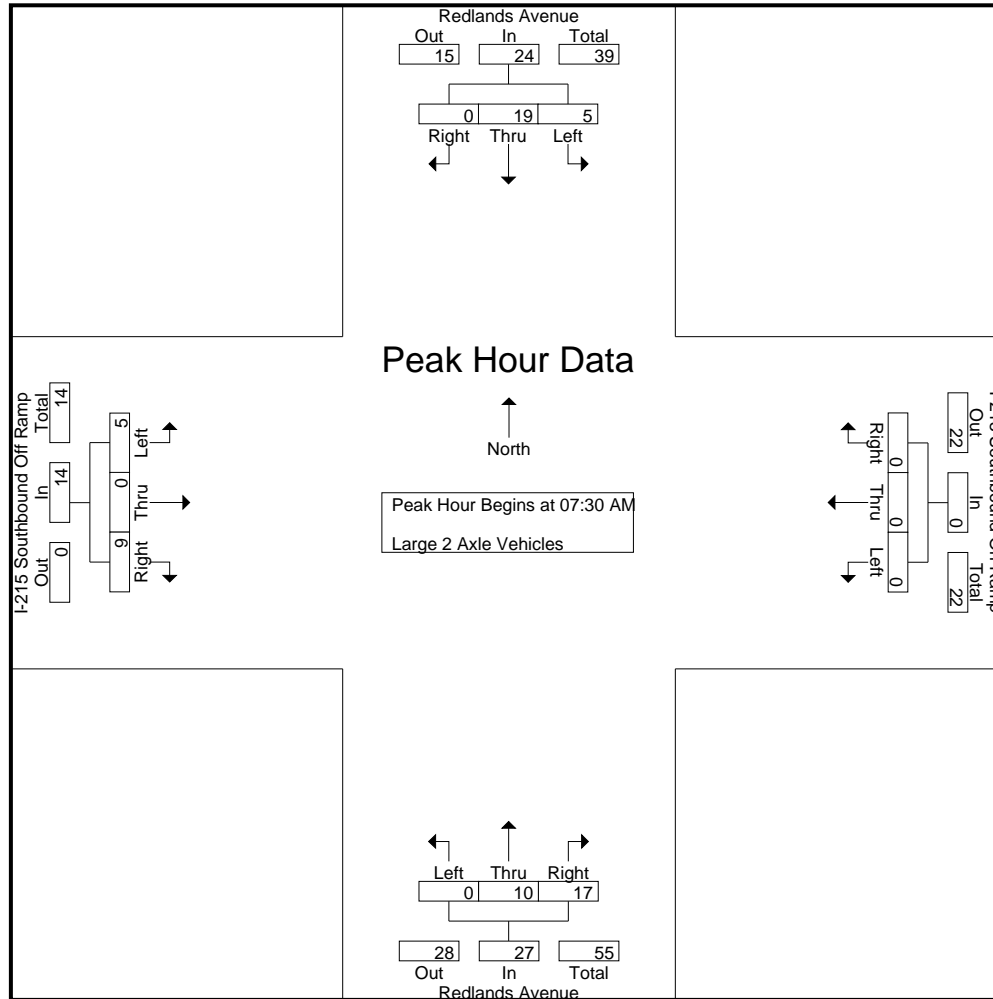
Groups Printed- Large 2 Axle Vehicles

Start Time	Redlands Avenue Southbound					I-215 Southbound On Ramp Westbound					Redlands Avenue Northbound					I-215 Southbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	3	4	0	0	7	0	0	0	0	0	0	2	1	0	3	0	0	2	2	2	2	2	12	14
07:15 AM	1	7	0	0	8	0	0	0	0	0	0	2	3	0	5	1	0	2	1	3	1	16	17	17
07:30 AM	1	7	0	0	8	0	0	0	0	0	0	2	4	1	6	0	0	3	3	3	4	17	21	21
07:45 AM	2	6	0	0	8	0	0	0	0	0	0	3	1	0	4	3	0	0	0	3	0	15	15	15
Total	7	24	0	0	31	0	0	0	0	0	0	9	9	1	18	4	0	7	6	11	7	60	67	67
08:00 AM	2	3	0	0	5	0	0	0	0	0	0	2	8	1	10	2	0	4	3	6	4	21	25	25
08:15 AM	0	3	0	0	3	0	0	0	0	0	0	3	4	0	7	0	0	2	1	2	1	12	13	13
08:30 AM	1	4	0	0	5	0	0	0	0	0	0	6	2	0	8	0	0	2	2	2	2	15	17	17
08:45 AM	2	3	0	0	5	0	0	0	0	0	0	8	4	0	12	0	0	4	4	4	4	21	25	25
Total	5	13	0	0	18	0	0	0	0	0	0	19	18	1	37	2	0	12	10	14	11	69	80	80
Grand Total	12	37	0	0	49	0	0	0	0	0	0	28	27	2	55	6	0	19	16	25	18	129	147	147
Apprch %	24.5	75.5	0			0	0	0			0	50.9	49.1			24	0	76						
Total %	9.3	28.7	0		38	0	0	0		0	0	21.7	20.9		42.6	4.7	0	14.7		19.4	12.2	87.8		

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	7	0	8	0	0	0	0	0	2	4	6	0	0	3	3	17
07:45 AM	2	6	0	8	0	0	0	0	0	3	1	4	3	0	0	3	15
08:00 AM	2	3	0	5	0	0	0	0	0	2	8	10	2	0	4	6	21
08:15 AM	0	3	0	3	0	0	0	0	0	3	4	7	0	0	2	2	12
Total Volume	5	19	0	24	0	0	0	0	0	10	17	27	5	0	9	14	65
% App. Total	20.8	79.2	0		0	0	0		0	37	63		35.7	0	64.3		
PHF	.625	.679	.000	.750	.000	.000	.000	.000	.000	.833	.531	.675	.417	.000	.563	.583	.774

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 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	7	0	8	0	0	0	0	0	2	4	6	0	0	3	3	
+15 mins.	2	6	0	8	0	0	0	0	0	3	1	4	3	0	0	3	
+30 mins.	2	3	0	5	0	0	0	0	0	2	8	10	2	0	4	6	
+45 mins.	0	3	0	3	0	0	0	0	0	3	4	7	0	0	2	2	
Total Volume	5	19	0	24	0	0	0	0	0	10	17	27	5	0	9	14	
% App. Total	20.8	79.2	0		0	0	0		0	37	63		35.7	0	64.3		
PHF	.625	.679	.000	.750	.000	.000	.000	.000	.000	.833	.531	.675	.417	.000	.563	.583	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

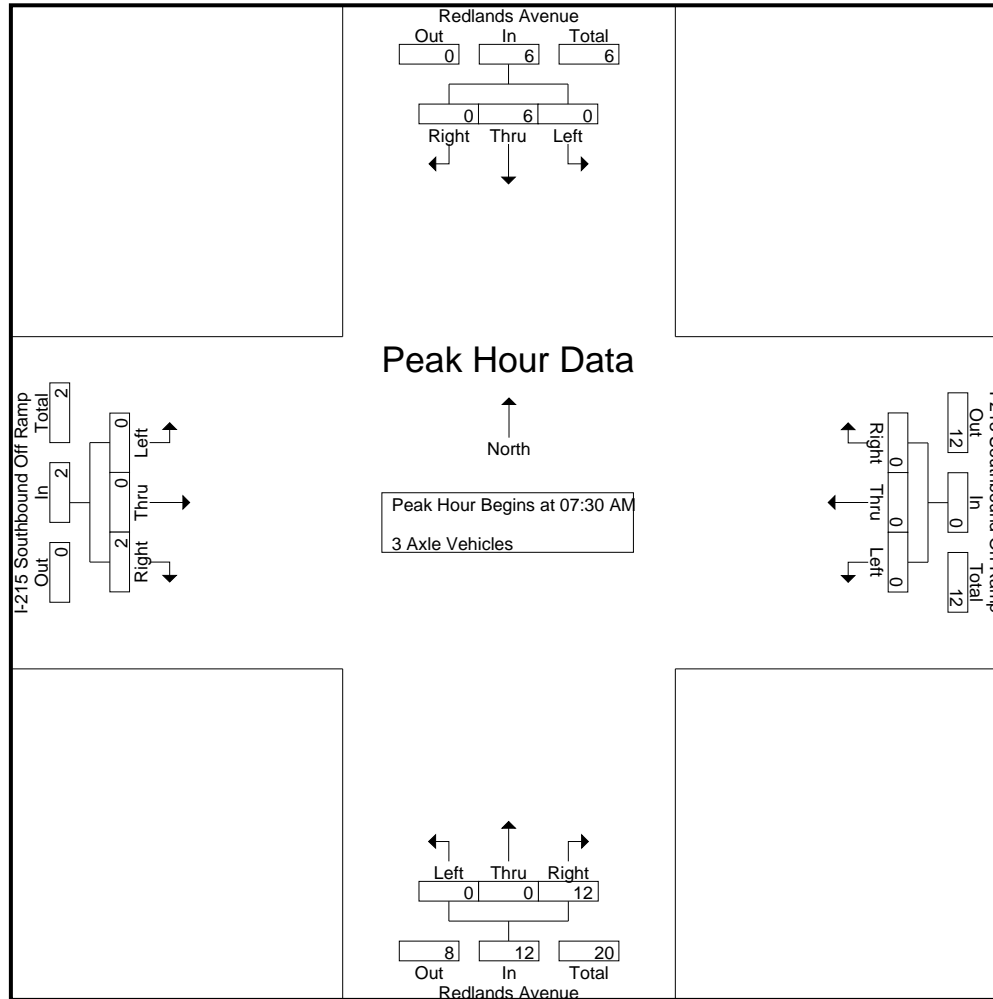
Groups Printed- 3 Axle Vehicles

Start Time	Redlands Avenue Southbound					I-215 Southbound On Ramp Westbound					Redlands Avenue Northbound					I-215 Southbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	3	0	4	0	0	1	1	1	1	1	6	7
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	1	0	1	1	2	1	1	6	7
07:30 AM	0	3	0	0	3	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	5	5
07:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	2
Total	0	6	0	0	6	0	0	0	0	0	0	3	7	0	10	1	0	2	2	3	2	19	21	
08:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	7	0	7	0	0	0	0	0	0	8	8	
08:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	0	0	2	1	2	1	5	6	
08:30 AM	0	3	0	0	3	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	0	6	6	
08:45 AM	0	6	0	0	6	0	0	0	0	0	0	2	4	0	6	0	0	0	0	0	0	12	12	
Total	0	11	0	0	11	0	0	0	0	0	0	2	15	0	17	1	0	2	1	3	1	31	32	
Grand Total	0	17	0	0	17	0	0	0	0	0	0	5	22	0	27	2	0	4	3	6	3	50	53	
Apprch %	0	100	0			0	0	0			0	18.5	81.5			33.3	0	66.7						
Total %	0	34	0		34	0	0	0		0	0	10	44		54	4	0	8		12	5.7	94.3		

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	3	0	3	0	0	0	0	0	0	2	2	0	0	0	0	5
07:45 AM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
08:00 AM	0	1	0	1	0	0	0	0	0	0	7	7	0	0	0	0	8
08:15 AM	0	1	0	1	0	0	0	0	0	0	2	2	0	0	2	2	5
Total Volume	0	6	0	6	0	0	0	0	0	0	12	12	0	0	2	2	20
% App. Total	0	100	0		0	0	0		0	0	100		0	0	100		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.429	.429	.000	.000	.250	.250	.625

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 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	0	3	0	0	0	0	0	0	2	2	0	0	0	0	
+15 mins.	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	
+30 mins.	0	1	0	1	0	0	0	0	0	0	7	7	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	0	0	2	2	0	0	2	2	
Total Volume	0	6	0	6	0	0	0	0	0	0	12	12	0	0	2	2	
% App. Total	0	100	0		0	0	0		0	0	100		0	0	100		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.429	.429	.000	.000	.250	.250	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

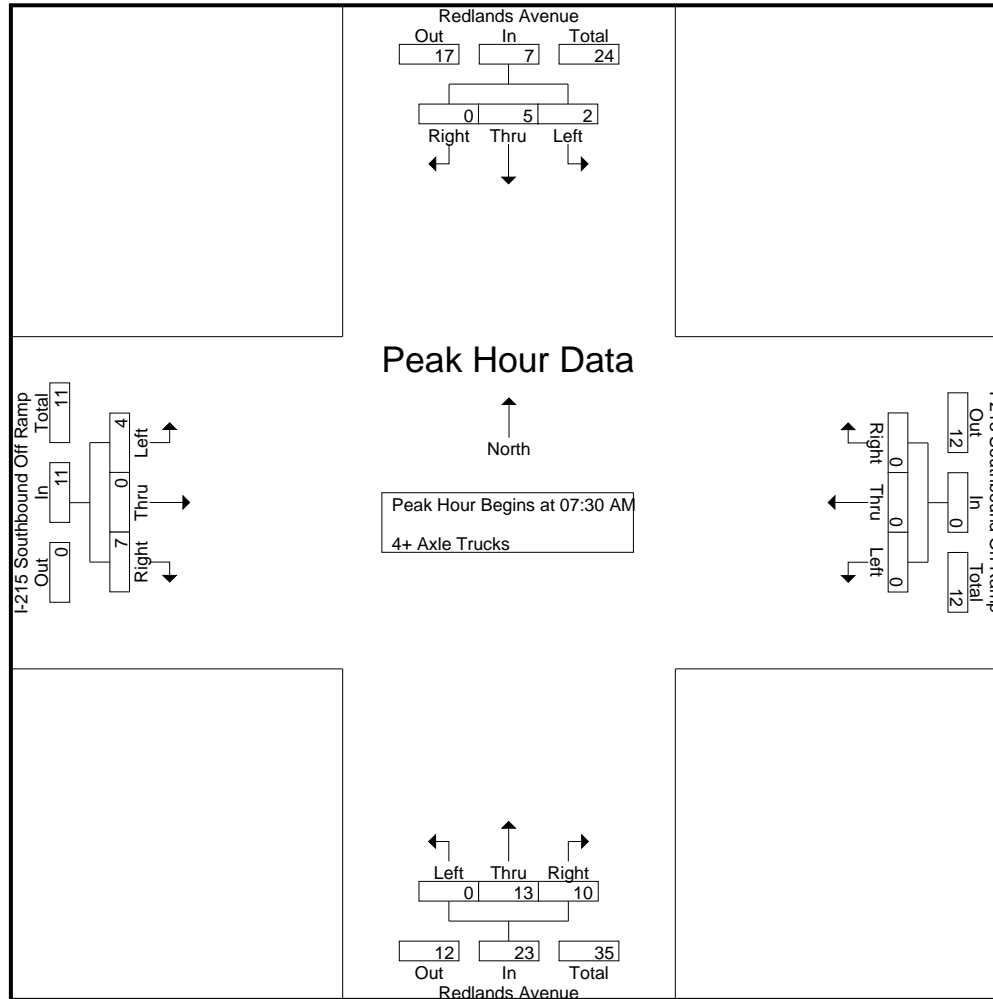
Groups Printed- 4+ Axle Trucks

Start Time	Redlands Avenue Southbound					I-215 Southbound On Ramp Westbound					Redlands Avenue Northbound					I-215 Southbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	1	3	0	0	4	0	0	0	0	0	0	1	1	0	2	0	0	3	2	3	2	9	11
07:15 AM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	2	1	2	1	7	8
07:30 AM	1	2	0	0	3	0	0	0	0	0	0	4	1	0	5	1	0	1	1	2	1	10	11
07:45 AM	1	0	0	0	1	0	0	0	0	0	0	1	4	0	5	0	0	2	0	2	0	8	8
Total	3	7	0	0	10	0	0	0	0	0	0	9	6	0	15	1	0	8	4	9	4	34	38
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	3	2	0	5	0	0	3	1	3	1	8	9
08:15 AM	0	3	0	0	3	0	0	0	0	0	0	5	3	0	8	3	0	1	0	4	0	15	15
08:30 AM	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	0	0	5	3	5	3	11	14
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4	0	0	0	0	0	0	4	4
Total	0	4	0	0	4	0	0	0	0	0	0	14	8	0	22	3	0	9	4	12	4	38	42
Grand Total	3	11	0	0	14	0	0	0	0	0	0	23	14	0	37	4	0	17	8	21	8	72	80
Apprch %	21.4	78.6	0			0	0	0			0	62.2	37.8			19	0	81					
Total %	4.2	15.3	0		19.4	0	0	0		0	0	31.9	19.4		51.4	5.6	0	23.6		29.2	10	90	

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 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	0	0	0	0	0	4	1	5	1	0	1	2	10
07:45 AM	1	0	0	1	0	0	0	0	0	1	4	5	0	0	2	2	8
08:00 AM	0	0	0	0	0	0	0	0	0	3	2	5	0	0	3	3	8
08:15 AM	0	3	0	3	0	0	0	0	0	5	3	8	3	0	1	4	15
Total Volume	2	5	0	7	0	0	0	0	0	13	10	23	4	0	7	11	41
% App. Total	28.6	71.4	0		0	0	0		0	56.5	43.5		36.4	0	63.6		
PHF	.500	.417	.000	.583	.000	.000	.000	.000	.000	.650	.625	.719	.333	.000	.583	.688	.683

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:30 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	0	0	0	0	0	4	1	5	1	0	1	2	
+15 mins.	1	0	0	1	0	0	0	0	0	1	4	5	0	0	2	2	
+30 mins.	0	0	0	0	0	0	0	0	0	3	2	5	0	0	3	3	
+45 mins.	0	3	0	3	0	0	0	0	0	5	3	8	3	0	1	4	
Total Volume	2	5	0	7	0	0	0	0	0	13	10	23	4	0	7	11	
% App. Total	28.6	71.4	0		0	0	0		0	56.5	43.5		36.4	0	63.6		
PHF	.500	.417	.000	.583	.000	.000	.000	.000	.000	.650	.625	.719	.333	.000	.583	.688	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

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

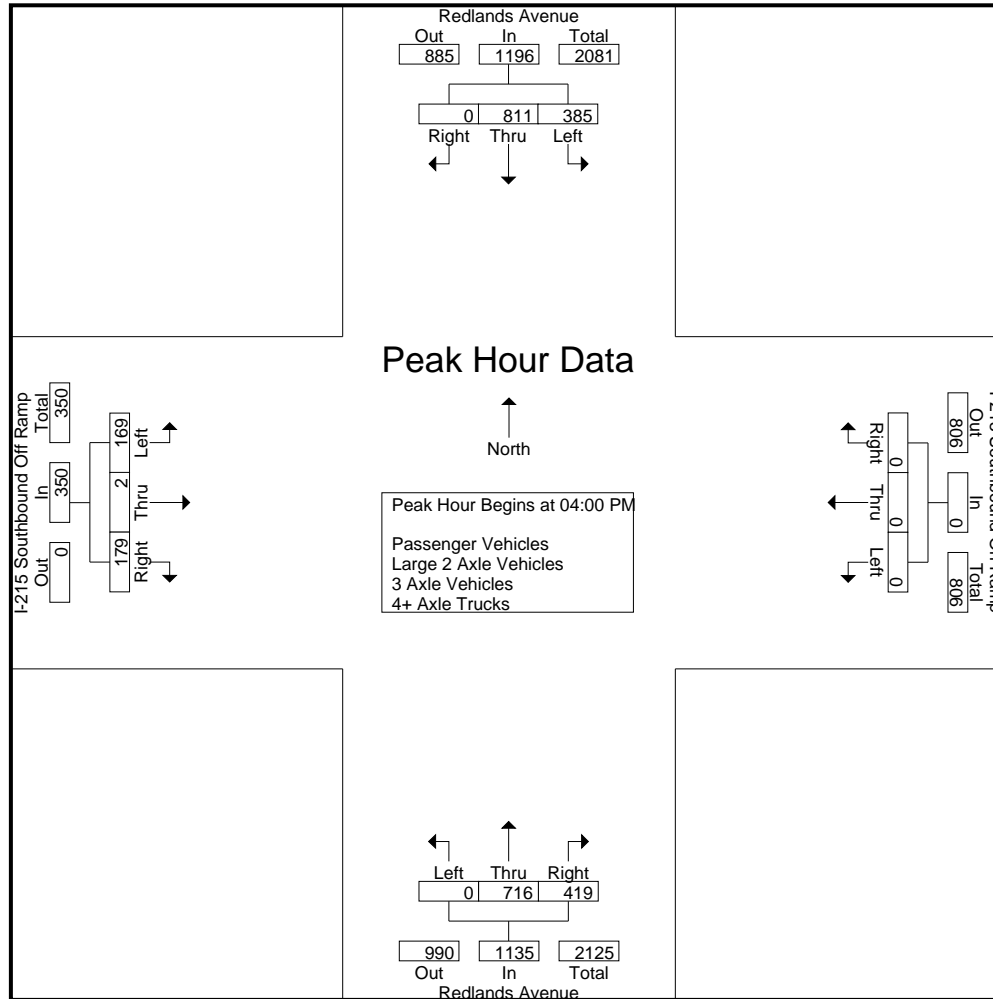
Start Time	Redlands Avenue Southbound					I-215 Southbound On Ramp Westbound					Redlands Avenue Northbound					I-215 Southbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	100	200	0	0	300	0	0	0	0	0	0	178	102	51	280	48	1	42	26	91	77	671	748
04:15 PM	90	232	0	0	322	0	0	0	0	0	0	168	106	20	274	37	1	44	29	82	49	678	727
04:30 PM	85	196	0	0	281	0	0	0	0	0	0	207	99	20	306	45	0	44	32	89	52	676	728
04:45 PM	110	183	0	0	293	0	0	0	0	0	0	163	112	24	275	39	0	49	32	88	56	656	712
Total	385	811	0	0	1196	0	0	0	0	0	0	716	419	115	1135	169	2	179	119	350	234	2681	2915
05:00 PM	102	191	0	0	293	0	0	0	0	0	0	180	107	22	287	20	0	53	38	73	60	653	713
05:15 PM	78	177	0	0	255	0	0	0	0	0	0	182	96	14	278	43	1	41	29	85	43	618	661
05:30 PM	82	166	0	0	248	0	0	0	0	0	0	199	77	11	276	30	0	35	26	65	37	589	626
05:45 PM	73	173	0	0	246	0	0	0	0	0	0	162	85	14	247	37	0	41	24	78	38	571	609
Total	335	707	0	0	1042	0	0	0	0	0	0	723	365	61	1088	130	1	170	117	301	178	2431	2609
Grand Total	720	1518	0	0	2238	0	0	0	0	0	0	1439	784	176	2223	299	3	349	236	651	412	5112	5524
Apprch %	32.2	67.8	0			0	0	0			0	64.7	35.3			45.9	0.5	53.6					
Total %	14.1	29.7	0		43.8	0	0	0			0	28.1	15.3		43.5	5.8	0.1	6.8		12.7	7.5	92.5	
Passenger Vehicles	711	1467	0		2178	0	0	0			0	1401	756		2328	293	3	320		840	0	0	5346
% Passenger Vehicles	98.8	96.6	0		97.3	0	0	0			0	97.4	96.4	97.2	97	98	100	91.7	94.9	94.7	0	0	96.8
Large 2 Axle Vehicles	8	30	0		38	0	0	0			0	21	25		49	5	0	10		21	0	0	108
% Large 2 Axle Vehicles	1.1	2	0		1.7	0	0	0			0	1.5	3.2	1.7	2	1.7	0	2.9	2.5	2.4	0	0	2
3 Axle Vehicles	0	18	0		18	0	0	0			0	3	2		6	1	0	4		7	0	0	31
% 3 Axle Vehicles	0	1.2	0		0.8	0	0	0			0	0.2	0.3	0.6	0.3	0.3	0	1.1	0.8	0.8	0	0	0.6
4+ Axle Trucks	1	3	0		4	0	0	0			0	14	1		16	0	0	15		19	0	0	39
% 4+ Axle Trucks	0.1	0.2	0		0.2	0	0	0			0	1	0.1	0.6	0.7	0	0	4.3	1.7	2.1	0	0	0.7

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	100	200	0	300	0	0	0	0	0	178	102	280	48	1	42	91	671
04:15 PM	90	232	0	322	0	0	0	0	0	168	106	274	37	1	44	82	678
04:30 PM	85	196	0	281	0	0	0	0	0	207	99	306	45	0	44	89	676
04:45 PM	110	183	0	293	0	0	0	0	0	163	112	275	39	0	49	88	656
Total Volume	385	811	0	1196	0	0	0	0	0	716	419	1135	169	2	179	350	2681
% App. Total	32.2	67.8	0		0	0	0			63.1	36.9		48.3	0.6	51.1		
PHF	.875	.874	.000	.929	.000	.000	.000	.000	.000	.865	.935	.927	.880	.500	.913	.962	.989

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

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:30 PM				04:00 PM				
+0 mins.	100	200	0	300	0	0	0	0	0	207	99	306	48	1	42	91	
+15 mins.	90	232	0	322	0	0	0	0	0	163	112	275	37	1	44	82	
+30 mins.	85	196	0	281	0	0	0	0	0	180	107	287	45	0	44	89	
+45 mins.	110	183	0	293	0	0	0	0	0	182	96	278	39	0	49	88	
Total Volume	385	811	0	1196	0	0	0	0	0	732	414	1146	169	2	179	350	
% App. Total	32.2	67.8	0		0	0	0		0	63.9	36.1		48.3	0.6	51.1		
PHF	.875	.874	.000	.929	.000	.000	.000	.000	.000	.884	.924	.936	.880	.500	.913	.962	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

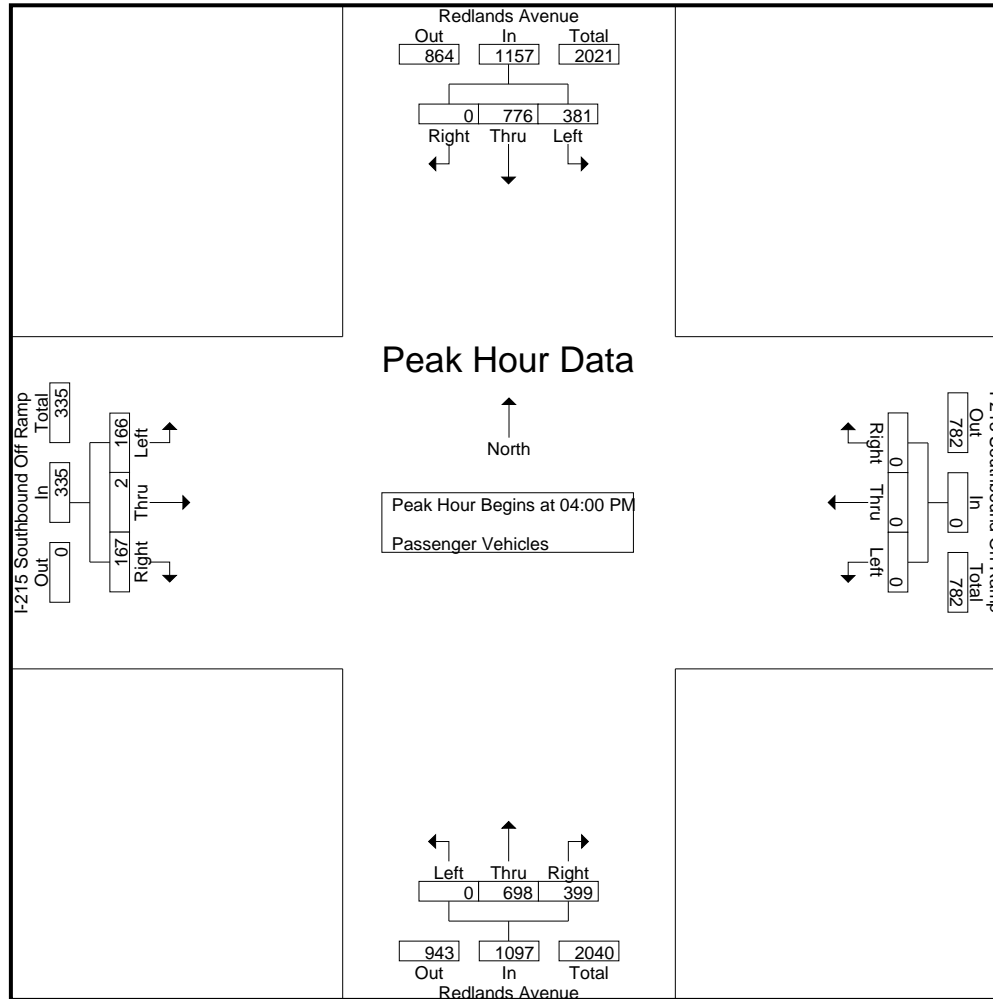
Groups Printed- Passenger Vehicles

Start Time	Redlands Avenue Southbound					I-215 Southbound On Ramp Westbound					Redlands Avenue Northbound					I-215 Southbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	100	193	0	0	293	0	0	0	0	0	0	175	98	49	273	48	1	34	23	83	72	649	721
04:15 PM	88	218	0	0	306	0	0	0	0	0	0	165	100	19	265	36	1	43	29	80	48	651	699
04:30 PM	85	187	0	0	272	0	0	0	0	0	0	201	95	19	296	44	0	42	31	86	50	654	704
04:45 PM	108	178	0	0	286	0	0	0	0	0	0	157	106	23	263	38	0	48	32	86	55	635	690
Total	381	776	0	0	1157	0	0	0	0	0	0	698	399	110	1097	166	2	167	115	335	225	2589	2814
05:00 PM	99	186	0	0	285	0	0	0	0	0	0	175	103	22	278	18	0	50	36	68	58	631	689
05:15 PM	78	175	0	0	253	0	0	0	0	0	0	175	95	14	270	42	1	37	27	80	41	603	644
05:30 PM	81	159	0	0	240	0	0	0	0	0	0	194	74	11	268	30	0	30	23	60	34	568	602
05:45 PM	72	171	0	0	243	0	0	0	0	0	0	159	85	14	244	37	0	36	23	73	37	560	597
Total	330	691	0	0	1021	0	0	0	0	0	0	703	357	61	1060	127	1	153	109	281	170	2362	2532
Grand Total	711	1467	0	0	2178	0	0	0	0	0	0	1401	756	171	2157	293	3	320	224	616	395	4951	5346
Apprch %	32.6	67.4	0			0	0	0			0	65	35			47.6	0.5	51.9					
Total %	14.4	29.6	0		44	0	0	0			0	28.3	15.3		43.6	5.9	0.1	6.5		12.4	7.4	92.6	

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:00 PM																		
04:00 PM	100	193	0	293	0	0	0	0	0	175	98	273	48	1	34	83	649	
04:15 PM	88	218	0	306	0	0	0	0	0	165	100	265	36	1	43	80	651	
04:30 PM	85	187	0	272	0	0	0	0	0	201	95	296	44	0	42	86	654	
04:45 PM	108	178	0	286	0	0	0	0	0	157	106	263	38	0	48	86	635	
Total Volume	381	776	0	1157	0	0	0	0	0	698	399	1097	166	2	167	335	2589	
% App. Total	32.9	67.1	0		0	0	0		0	63.6	36.4		49.6	0.6	49.9			
PHF	.882	.890	.000	.945	.000	.000	.000	.000	.000	.000	.868	.941	.927	.865	.500	.870	.974	.990

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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.	100	193	0	293	0	0	0	0	0	175	98	273	48	1	34	83	
+15 mins.	88	218	0	306	0	0	0	0	0	165	100	265	36	1	43	80	
+30 mins.	85	187	0	272	0	0	0	0	0	201	95	296	44	0	42	86	
+45 mins.	108	178	0	286	0	0	0	0	0	157	106	263	38	0	48	86	
Total Volume	381	776	0	1157	0	0	0	0	0	698	399	1097	166	2	167	335	
% App. Total	32.9	67.1	0		0	0	0		0	63.6	36.4		49.6	0.6	49.9		
PHF	.882	.890	.000	.945	.000	.000	.000	.000	.000	.868	.941	.927	.865	.500	.870	.974	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

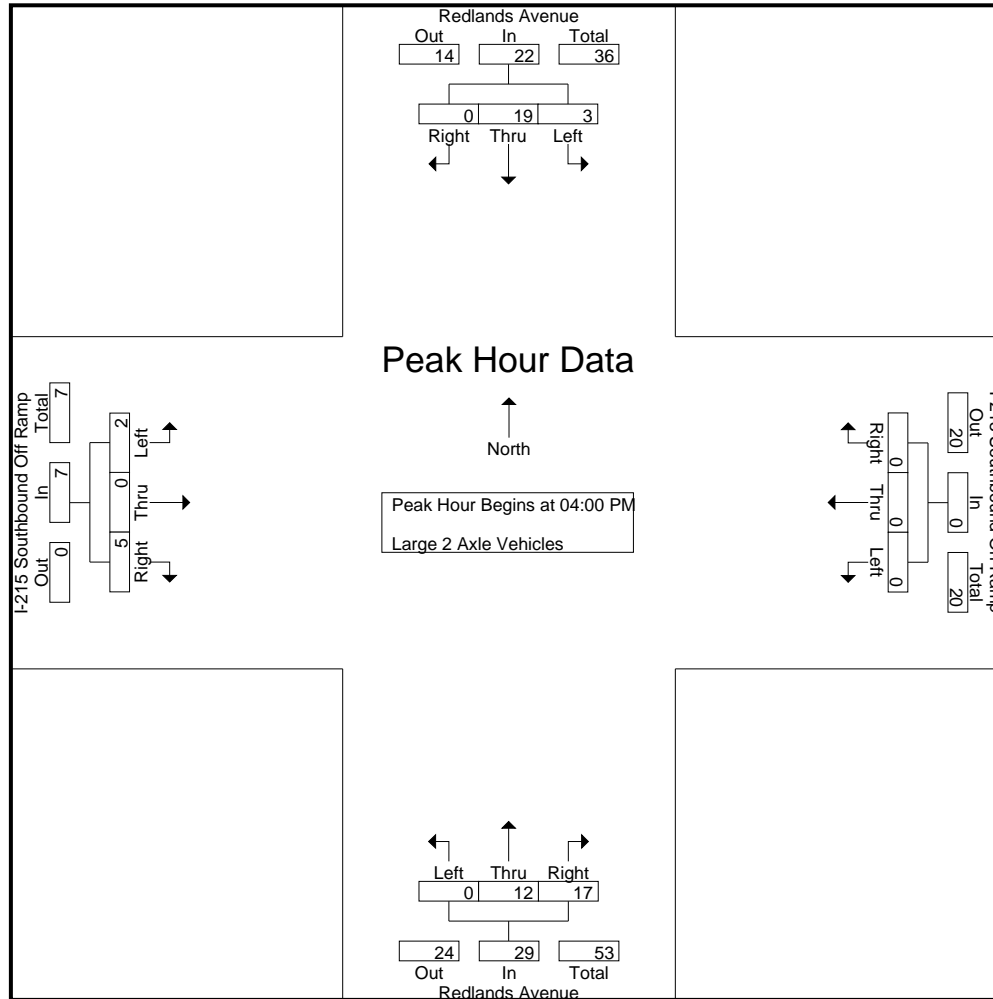
Groups Printed- Large 2 Axle Vehicles

Start Time	Redlands Avenue Southbound					I-215 Southbound On Ramp Westbound					Redlands Avenue Northbound					I-215 Southbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	3	0	0	3	0	0	0	0	0	0	3	2	1	5	0	0	3	2	3	3	11	14
04:15 PM	1	8	0	0	9	0	0	0	0	0	0	0	6	1	6	1	0	0	0	1	1	16	17
04:30 PM	0	5	0	0	5	0	0	0	0	0	0	5	3	0	8	0	0	1	1	1	1	14	15
04:45 PM	2	3	0	0	5	0	0	0	0	0	0	4	6	1	10	1	0	1	0	2	1	17	18
Total	3	19	0	0	22	0	0	0	0	0	0	12	17	3	29	2	0	5	3	7	6	58	64
05:00 PM	3	4	0	0	7	0	0	0	0	0	0	2	4	0	6	2	0	2	2	4	2	17	19
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	3	1	0	4	1	0	1	1	2	1	7	8
05:30 PM	1	4	0	0	5	0	0	0	0	0	0	3	3	0	6	0	0	1	0	1	0	12	12
05:45 PM	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	5	5
Total	5	11	0	0	16	0	0	0	0	0	0	9	8	0	17	3	0	5	3	8	3	41	44
Grand Total	8	30	0	0	38	0	0	0	0	0	0	21	25	3	46	5	0	10	6	15	9	99	108
Apprch %	21.1	78.9	0			0	0	0			0	45.7	54.3			33.3	0	66.7					
Total %	8.1	30.3	0		38.4	0	0	0		0	0	21.2	25.3		46.5	5.1	0	10.1		15.2	8.3	91.7	

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	3	0	3	0	0	0	0	0	3	2	5	0	0	3	3	11
04:15 PM	1	8	0	9	0	0	0	0	0	0	6	6	1	0	0	1	16
04:30 PM	0	5	0	5	0	0	0	0	0	5	3	8	0	0	1	1	14
04:45 PM	2	3	0	5	0	0	0	0	0	4	6	10	1	0	1	2	17
Total Volume	3	19	0	22	0	0	0	0	0	12	17	29	2	0	5	7	58
% App. Total	13.6	86.4	0		0	0	0		0	41.4	58.6		28.6	0	71.4		
PHF	.375	.594	.000	.611	.000	.000	.000	.000	.000	.600	.708	.725	.500	.000	.417	.583	.853

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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	3	0	3	0	0	0	0	0	3	2	5	0	0	3	3	
+15 mins.	1	8	0	9	0	0	0	0	0	0	6	6	1	0	0	1	
+30 mins.	0	5	0	5	0	0	0	0	0	5	3	8	0	0	1	1	
+45 mins.	2	3	0	5	0	0	0	0	0	4	6	10	1	0	1	2	
Total Volume	3	19	0	22	0	0	0	0	0	12	17	29	2	0	5	7	
% App. Total	13.6	86.4	0		0	0	0		0	41.4	58.6		28.6	0	71.4		
PHF	.375	.594	.000	.611	.000	.000	.000	.000	.000	.600	.708	.725	.500	.000	.417	.583	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

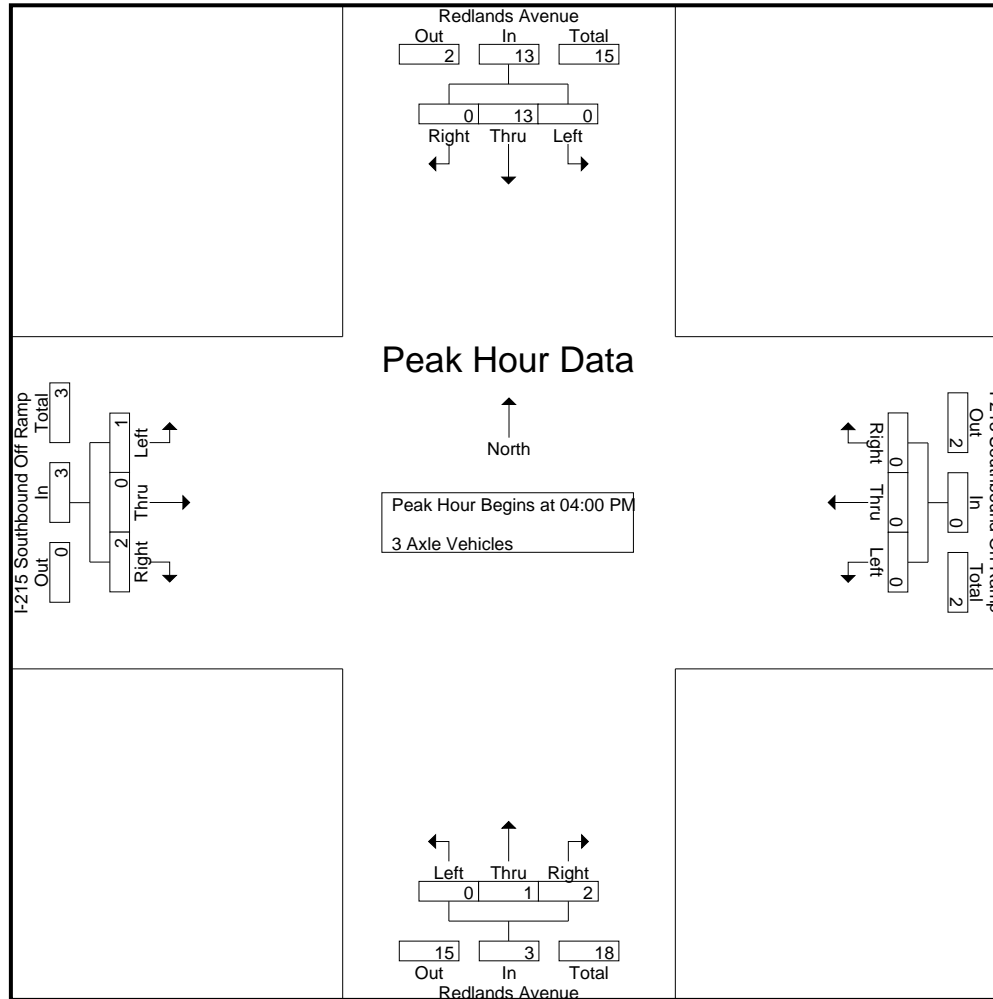
Groups Printed- 3 Axle Vehicles

Start Time	Redlands Avenue Southbound					I-215 Southbound On Ramp Westbound					Redlands Avenue Northbound					I-215 Southbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	2	1	2	0	0	2	0	2	1	7	8
04:15 PM	0	5	0	0	5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	6	6
04:30 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	4	4
04:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	13	0	0	13	0	0	0	0	0	0	1	2	1	3	1	0	2	0	3	1	19	20
05:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	1	3	4
05:30 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	4	5
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	0	0	2	2	2	2	9	11
Grand Total	0	18	0	0	18	0	0	0	0	0	0	3	2	1	5	1	0	4	2	5	3	28	31
Apprch %	0	100	0			0	0	0			0	60	40			20	0	80					
Total %	0	64.3	0		64.3	0	0	0		0	0	10.7	7.1		17.9	3.6	0	14.3		17.9	9.7	90.3	

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	3	0	3	0	0	0	0	0	0	2	2	0	0	2	2	7
04:15 PM	0	5	0	5	0	0	0	0	0	1	0	1	0	0	0	0	6
04:30 PM	0	3	0	3	0	0	0	0	0	0	0	0	1	0	0	1	4
04:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	13	0	13	0	0	0	0	0	1	2	3	1	0	2	3	19
% App. Total	0	100	0		0	0	0		0	33.3	66.7		33.3	0	66.7		
PHF	.000	.650	.000	.650	.000	.000	.000	.000	.000	.250	.250	.375	.250	.000	.250	.375	.679

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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	3	0	3	0	0	0	0	0	0	2	2	0	0	2	2	
+15 mins.	0	5	0	5	0	0	0	0	0	1	0	1	0	0	0	0	
+30 mins.	0	3	0	3	0	0	0	0	0	0	0	0	1	0	0	1	
+45 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	13	0	13	0	0	0	0	0	1	2	3	1	0	2	3	
% App. Total	0	100	0		0	0	0		0	33.3	66.7		33.3	0	66.7		
PHF	.000	.650	.000	.650	.000	.000	.000	.000	.000	.250	.250	.375	.250	.000	.250	.375	

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

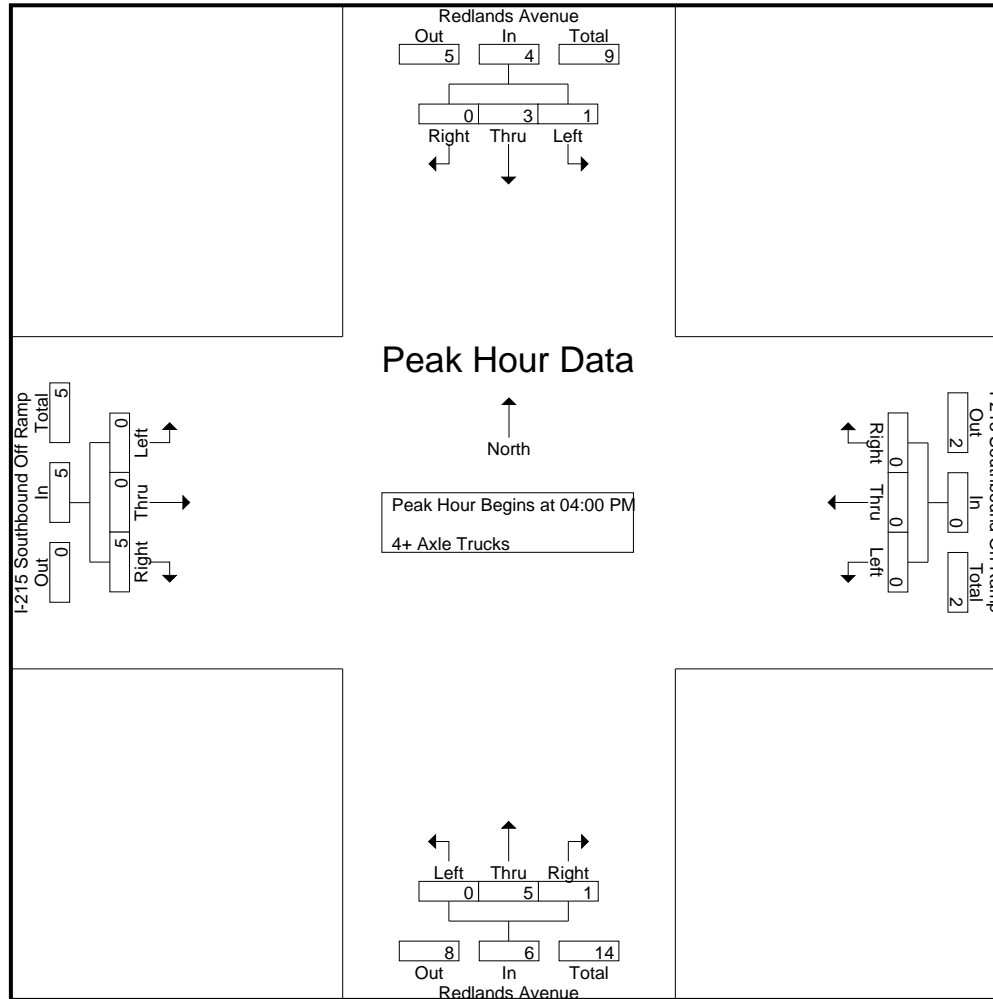
Groups Printed- 4+ Axle Trucks

Start Time	Redlands Avenue Southbound					I-215 Southbound On Ramp Westbound					Redlands Avenue Northbound					I-215 Southbound Off Ramp Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	1	3	1	4	5
04:15 PM	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	5	5
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	1	1	2	0	0	1	0	1	1	4	5
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	2
Total	1	3	0	0	4	0	0	0	0	0	0	5	1	1	6	0	0	5	1	5	2	15	17
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	3	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	2	0	2	0	5	5
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	3	2	3	2	5	7
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	4	1	4	1	6	7
Total	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	0	0	10	3	10	3	19	22
Grand Total	1	3	0	0	4	0	0	0	0	0	0	14	1	1	15	0	0	15	4	15	5	34	39
Apprch %	25	75	0			0	0	0			0	93.3	6.7			0	0	100					
Total %	2.9	8.8	0		11.8	0	0	0		0	0	41.2	2.9		44.1	0	0	44.1		44.1	12.8	87.2	

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3	3	4
04:15 PM	1	1	0	2	0	0	0	0	0	2	0	2	0	0	1	1	5
04:30 PM	0	1	0	1	0	0	0	0	0	1	1	2	0	0	1	1	4
04:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total Volume	1	3	0	4	0	0	0	0	0	5	1	6	0	0	5	5	15
% App. Total	25	75	0		0	0	0		0	83.3	16.7		0	0	100		
PHF	.250	.750	.000	.500	.000	.000	.000	.000	.000	.625	.250	.750	.000	.000	.417	.417	.750

City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



City of Perris
 N/S: Redlands Avenue
 E/W: I-215 Southbound Ramps
 Weather: Clear

File Name : 03_PER_Redlands_215S PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 3

Start Time	Redlands Avenue Southbound				I-215 Southbound On Ramp Westbound				Redlands Avenue Northbound				I-215 Southbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 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	0	0	0	0	0	0	0	0	0	0	0	3	3
+15 mins.	1	1	0	2	0	0	0	0	0	2	0	2	0	0	1	1	1
+30 mins.	0	1	0	1	0	0	0	0	0	1	1	2	0	0	1	1	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0
Total Volume	1	3	0	4	0	0	0	0	0	5	1	6	0	0	5	5	5
% App. Total	25	75	0		0	0	0		0	83.3	16.7		0	0	100		
PHF	.250	.750	.000	.500	.000	.000	.000	.000	.000	.625	.250	.750	.000	.000	.417	.417	.417

Location: Perris
 N/S: Redlands Avenue
 E/W: I-215 SB Ramps



Date: 2/3/2022
 Day: Thursday

PEDESTRIANS

	North Leg Redlands Avenue	East Leg I-215 SB Ramps	South Leg Redlands Avenue	West Leg I-215 SB 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	0	0
8:00 AM	0	0	0	1	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	1	1
TOTAL VOLUMES:	0	0	0	3	3

	North Leg Redlands Avenue	East Leg I-215 SB Ramps	South Leg Redlands Avenue	West Leg I-215 SB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	3	3
4:15 PM	0	0	0	4	4
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	2	2
5:15 PM	0	0	0	2	2
5:30 PM	0	0	0	2	2
5:45 PM	0	0	0	1	1
TOTAL VOLUMES:	0	0	0	14	14

Location: Perris
 N/S: Redlands Avenue
 E/W: I-215 SB Ramps



Date: 2/3/2022
 Day: Thursday

BICYCLES

	Southbound Redlands Avenue			Westbound I-215 SB Ramps			Northbound Redlands Avenue			Eastbound I-215 SB 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 Redlands Avenue			Westbound I-215 SB Ramps			Northbound Redlands Avenue			Eastbound I-215 SB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	2	0	0	0	0	0	0	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	2	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	3	0	0	0	0	0	2	0	0	0	0	5

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

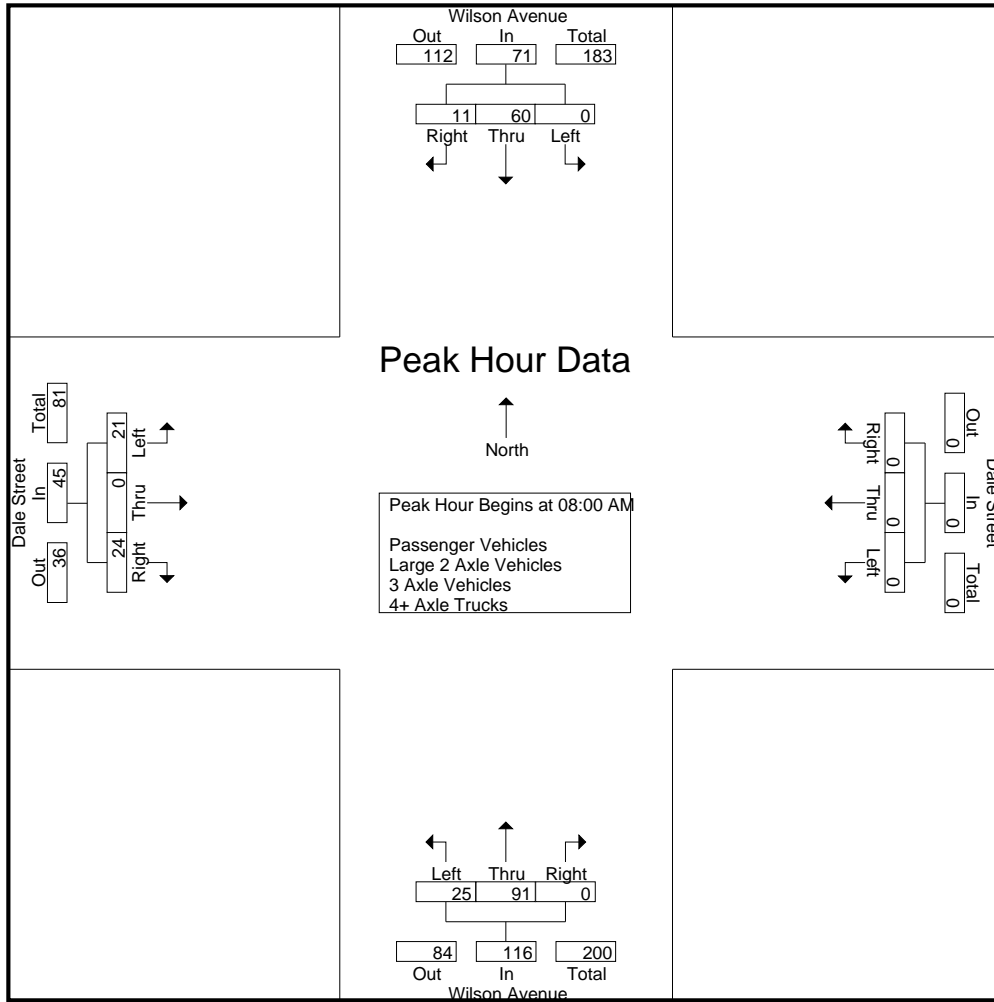
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Wilson Avenue Southbound				Dale Street Westbound				Wilson Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	11	2	13	0	0	0	0	3	28	0	31	3	0	6	9	53
07:15 AM	0	23	5	28	0	0	0	0	2	24	0	26	4	0	4	8	62
07:30 AM	0	21	3	24	0	0	0	0	6	14	0	20	2	0	8	10	54
07:45 AM	0	7	6	13	0	0	0	0	8	19	0	27	6	0	6	12	52
Total	0	62	16	78	0	0	0	0	19	85	0	104	15	0	24	39	221
08:00 AM	0	16	1	17	0	0	0	0	6	20	0	26	2	0	7	9	52
08:15 AM	0	13	4	17	0	0	0	0	8	17	0	25	5	0	11	16	58
08:30 AM	0	21	4	25	0	0	0	0	6	22	0	28	10	0	3	13	66
08:45 AM	0	10	2	12	0	0	0	0	5	32	0	37	4	0	3	7	56
Total	0	60	11	71	0	0	0	0	25	91	0	116	21	0	24	45	232
Grand Total	0	122	27	149	0	0	0	0	44	176	0	220	36	0	48	84	453
Apprch %	0	81.9	18.1		0	0	0		20	80	0		42.9	0	57.1		
Total %	0	26.9	6	32.9	0	0	0	0	9.7	38.9	0	48.6	7.9	0	10.6	18.5	
Passenger Vehicles	0	120	27	147	0	0	0	0	43	175	0	218	36	0	48	84	449
% Passenger Vehicles	0	98.4	100	98.7	0	0	0	0	97.7	99.4	0	99.1	100	0	100	100	99.1
Large 2 Axle Vehicles	0	2	0	2	0	0	0	0	1	1	0	2	0	0	0	0	4
% Large 2 Axle Vehicles	0	1.6	0	1.3	0	0	0	0	2.3	0.6	0	0.9	0	0	0	0	0.9
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Wilson Avenue Southbound				Dale Street Westbound				Wilson Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	16	1	17	0	0	0	0	6	20	0	26	2	0	7	9	52
08:15 AM	0	13	4	17	0	0	0	0	8	17	0	25	5	0	11	16	58
08:30 AM	0	21	4	25	0	0	0	0	6	22	0	28	10	0	3	13	66
08:45 AM	0	10	2	12	0	0	0	0	5	32	0	37	4	0	3	7	56
Total Volume	0	60	11	71	0	0	0	0	25	91	0	116	21	0	24	45	232
% App. Total	0	84.5	15.5		0	0	0		21.6	78.4	0		46.7	0	53.3		
PHF	.000	.714	.688	.710	.000	.000	.000	.000	.781	.711	.000	.784	.525	.000	.545	.703	.879

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				08:00 AM				07:45 AM			
+0 mins.	0	23	5	28	0	0	0	0	6	20	0	26	6	0	6	12
+15 mins.	0	21	3	24	0	0	0	0	8	17	0	25	2	0	7	9
+30 mins.	0	7	6	13	0	0	0	0	6	22	0	28	5	0	11	16
+45 mins.	0	16	1	17	0	0	0	0	5	32	0	37	10	0	3	13
Total Volume	0	67	15	82	0	0	0	0	25	91	0	116	23	0	27	50
% App. Total	0	81.7	18.3		0	0	0	0	21.6	78.4	0		46	0	54	
PHF	.000	.728	.625	.732	.000	.000	.000	.000	.781	.711	.000	.784	.575	.000	.614	.781

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

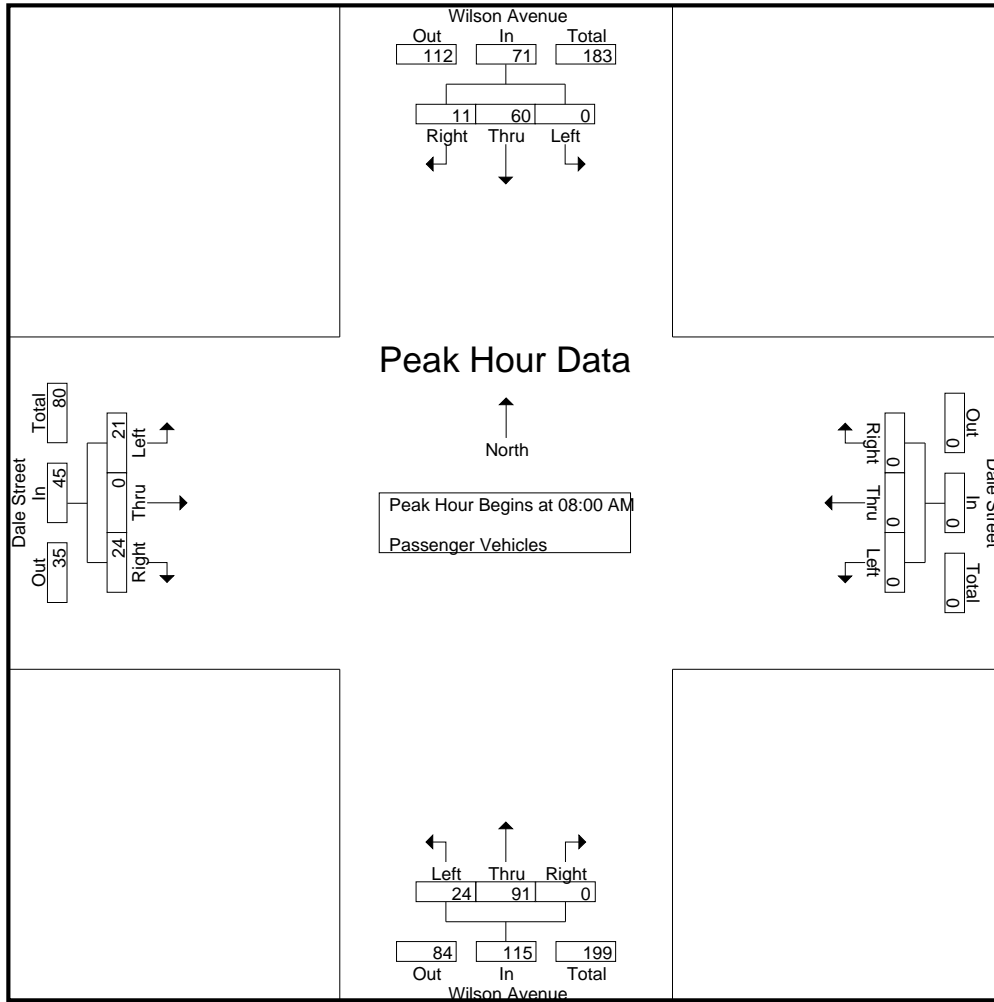
Groups Printed- Passenger Vehicles

Start Time	Wilson Avenue Southbound				Dale Street Westbound				Wilson Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	10	2	12	0	0	0	0	3	28	0	31	3	0	6	9	52
07:15 AM	0	23	5	28	0	0	0	0	2	24	0	26	4	0	4	8	62
07:30 AM	0	20	3	23	0	0	0	0	6	13	0	19	2	0	8	10	52
07:45 AM	0	7	6	13	0	0	0	0	8	19	0	27	6	0	6	12	52
Total	0	60	16	76	0	0	0	0	19	84	0	103	15	0	24	39	218
08:00 AM	0	16	1	17	0	0	0	0	6	20	0	26	2	0	7	9	52
08:15 AM	0	13	4	17	0	0	0	0	7	17	0	24	5	0	11	16	57
08:30 AM	0	21	4	25	0	0	0	0	6	22	0	28	10	0	3	13	66
08:45 AM	0	10	2	12	0	0	0	0	5	32	0	37	4	0	3	7	56
Total	0	60	11	71	0	0	0	0	24	91	0	115	21	0	24	45	231
Grand Total	0	120	27	147	0	0	0	0	43	175	0	218	36	0	48	84	449
Apprch %	0	81.6	18.4		0	0	0		19.7	80.3	0		42.9	0	57.1		
Total %	0	26.7	6	32.7	0	0	0	0	9.6	39	0	48.6	8	0	10.7	18.7	

Start Time	Wilson Avenue Southbound				Dale Street Westbound				Wilson Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	16	1	17	0	0	0	0	6	20	0	26	2	0	7	9	52
08:15 AM	0	13	4	17	0	0	0	0	7	17	0	24	5	0	11	16	57
08:30 AM	0	21	4	25	0	0	0	0	6	22	0	28	10	0	3	13	66
08:45 AM	0	10	2	12	0	0	0	0	5	32	0	37	4	0	3	7	56
Total Volume	0	60	11	71	0	0	0	0	24	91	0	115	21	0	24	45	231
% App. Total	0	84.5	15.5		0	0	0		20.9	79.1	0		46.7	0	53.3		
PHF	.000	.714	.688	.710	.000	.000	.000	.000	.857	.711	.000	.777	.525	.000	.545	.703	.875

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
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Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM							
+0 mins.	0	16	1	17	0	0	0	0	6	20	0	26	2	0	7	9
+15 mins.	0	13	4	17	0	0	0	0	7	17	0	24	5	0	11	16
+30 mins.	0	21	4	25	0	0	0	0	6	22	0	28	10	0	3	13
+45 mins.	0	10	2	12	0	0	0	0	5	32	0	37	4	0	3	7
Total Volume	0	60	11	71	0	0	0	0	24	91	0	115	21	0	24	45
% App. Total	0	84.5	15.5		0	0	0	0	20.9	79.1	0		46.7	0	53.3	
PHF	.000	.714	.688	.710	.000	.000	.000	.000	.857	.711	.000	.777	.525	.000	.545	.703

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

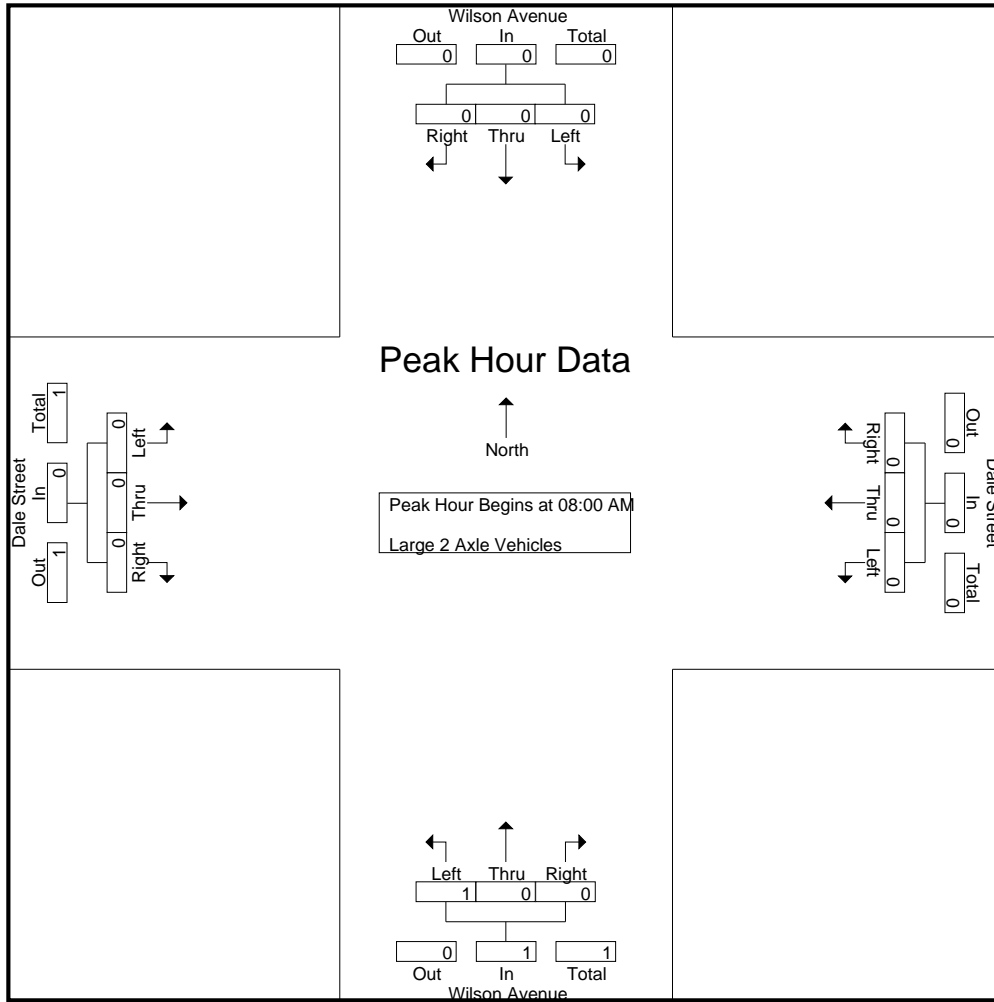
Groups Printed- Large 2 Axle Vehicles

Start Time	Wilson Avenue Southbound				Dale Street Westbound				Wilson Avenue Northbound				Dale Street Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Grand Total	0	2	0	2	0	0	0	0	0	1	1	0	2	0	0	0	0	4
Apprch %	0	100	0		0	0	0			50	50	0		0	0	0		
Total %	0	50	0	50	0	0	0	0	0	25	25	0	50	0	0	0	0	

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

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

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

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

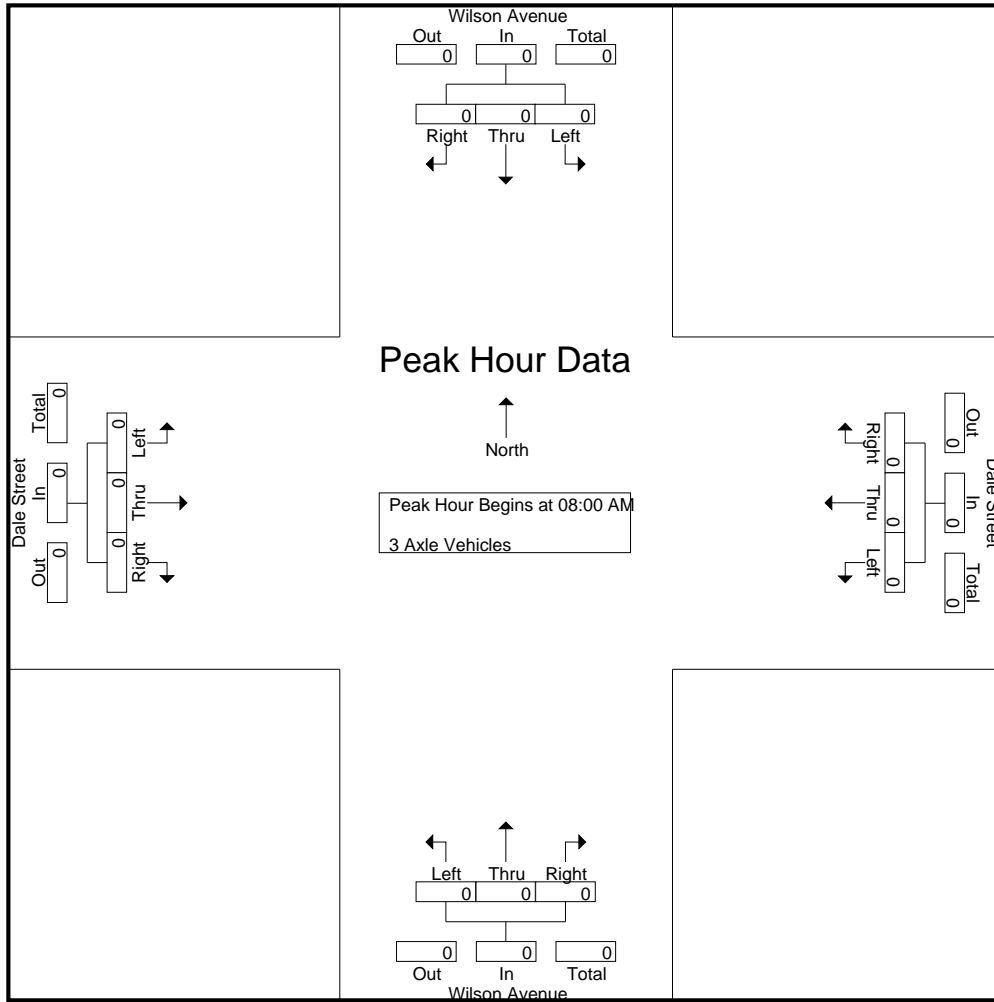
Groups Printed- 3 Axle Vehicles

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

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

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

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

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

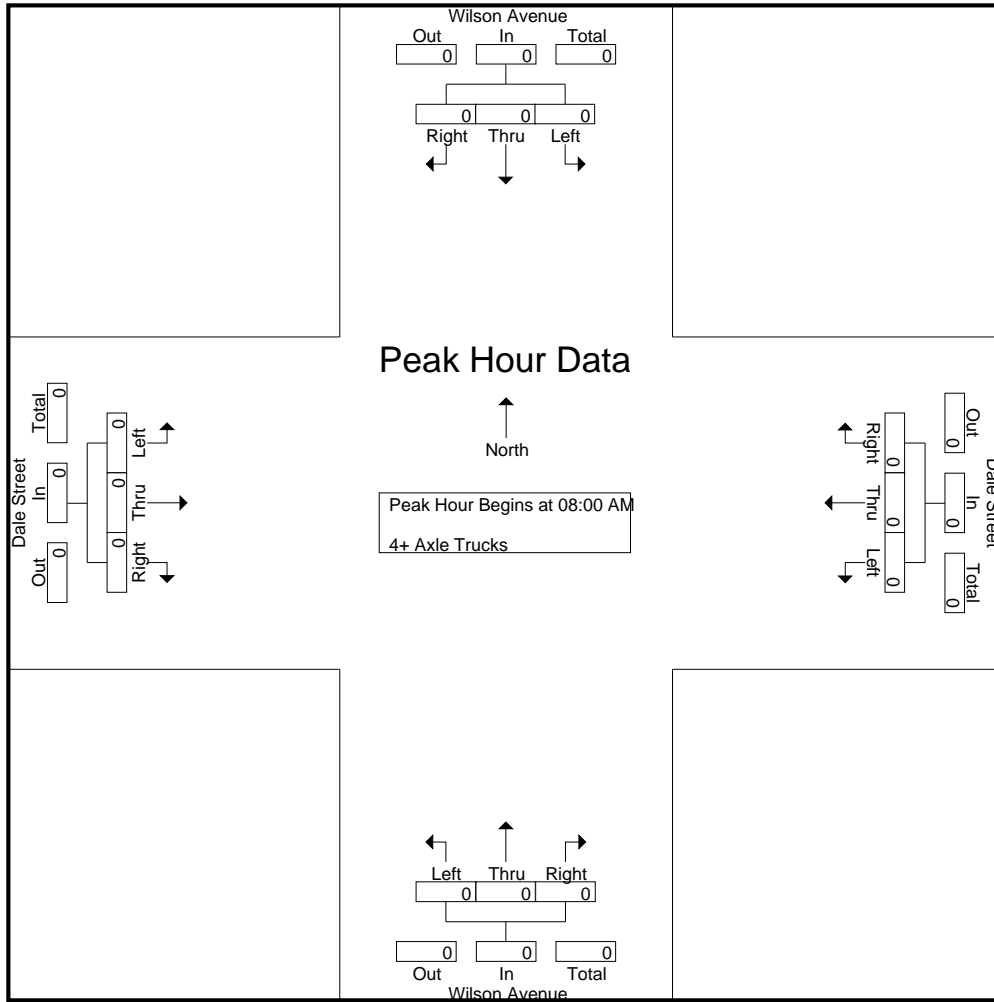
Groups Printed- 4+ Axle Trucks

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

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

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

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

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

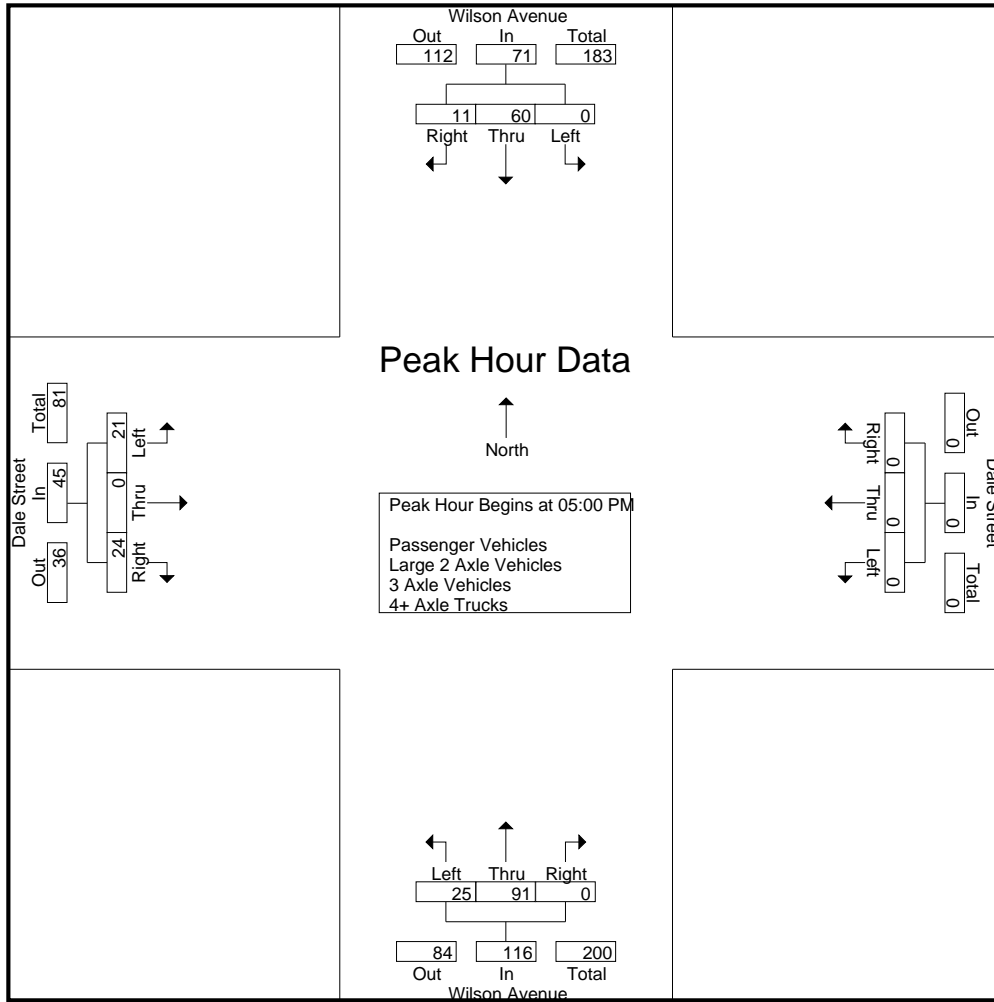
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Wilson Avenue Southbound				Dale Street Westbound				Wilson Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	11	2	13	0	0	0	0	3	28	0	31	3	0	6	9	53
04:15 PM	0	23	5	28	0	0	0	0	2	24	0	26	4	0	4	8	62
04:30 PM	0	21	3	24	0	0	0	0	6	14	0	20	2	0	8	10	54
04:45 PM	0	7	6	13	0	0	0	0	8	19	0	27	6	0	6	12	52
Total	0	62	16	78	0	0	0	0	19	85	0	104	15	0	24	39	221
05:00 PM	0	16	1	17	0	0	0	0	6	20	0	26	2	0	7	9	52
05:15 PM	0	13	4	17	0	0	0	0	8	17	0	25	5	0	11	16	58
05:30 PM	0	21	4	25	0	0	0	0	6	22	0	28	10	0	3	13	66
05:45 PM	0	10	2	12	0	0	0	0	5	32	0	37	4	0	3	7	56
Total	0	60	11	71	0	0	0	0	25	91	0	116	21	0	24	45	232
Grand Total	0	122	27	149	0	0	0	0	44	176	0	220	36	0	48	84	453
Apprch %	0	81.9	18.1		0	0	0		20	80	0		42.9	0	57.1		
Total %	0	26.9	6	32.9	0	0	0	0	9.7	38.9	0	48.6	7.9	0	10.6	18.5	
Passenger Vehicles	0	120	27	147	0	0	0	0	43	175	0	218	36	0	48	84	449
% Passenger Vehicles	0	98.4	100	98.7	0	0	0	0	97.7	99.4	0	99.1	100	0	100	100	99.1
Large 2 Axle Vehicles	0	2	0	2	0	0	0	0	1	1	0	2	0	0	0	0	4
% Large 2 Axle Vehicles	0	1.6	0	1.3	0	0	0	0	2.3	0.6	0	0.9	0	0	0	0	0.9
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Wilson Avenue Southbound				Dale Street Westbound				Wilson Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	16	1	17	0	0	0	0	6	20	0	26	2	0	7	9	52
05:15 PM	0	13	4	17	0	0	0	0	8	17	0	25	5	0	11	16	58
05:30 PM	0	21	4	25	0	0	0	0	6	22	0	28	10	0	3	13	66
05:45 PM	0	10	2	12	0	0	0	0	5	32	0	37	4	0	3	7	56
Total Volume	0	60	11	71	0	0	0	0	25	91	0	116	21	0	24	45	232
% App. Total	0	84.5	15.5		0	0	0		21.6	78.4	0		46.7	0	53.3		
PHF	.000	.714	.688	.710	.000	.000	.000	.000	.781	.711	.000	.784	.525	.000	.545	.703	.879

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

	04:15 PM				04:00 PM				05:00 PM				04:45 PM			
+0 mins.	0	23	5	28	0	0	0	0	6	20	0	26	6	0	6	12
+15 mins.	0	21	3	24	0	0	0	0	8	17	0	25	2	0	7	9
+30 mins.	0	7	6	13	0	0	0	0	6	22	0	28	5	0	11	16
+45 mins.	0	16	1	17	0	0	0	0	5	32	0	37	10	0	3	13
Total Volume	0	67	15	82	0	0	0	0	25	91	0	116	23	0	27	50
% App. Total	0	81.7	18.3		0	0	0	0	21.6	78.4	0		46	0	54	
PHF	.000	.728	.625	.732	.000	.000	.000	.000	.781	.711	.000	.784	.575	.000	.614	.781

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

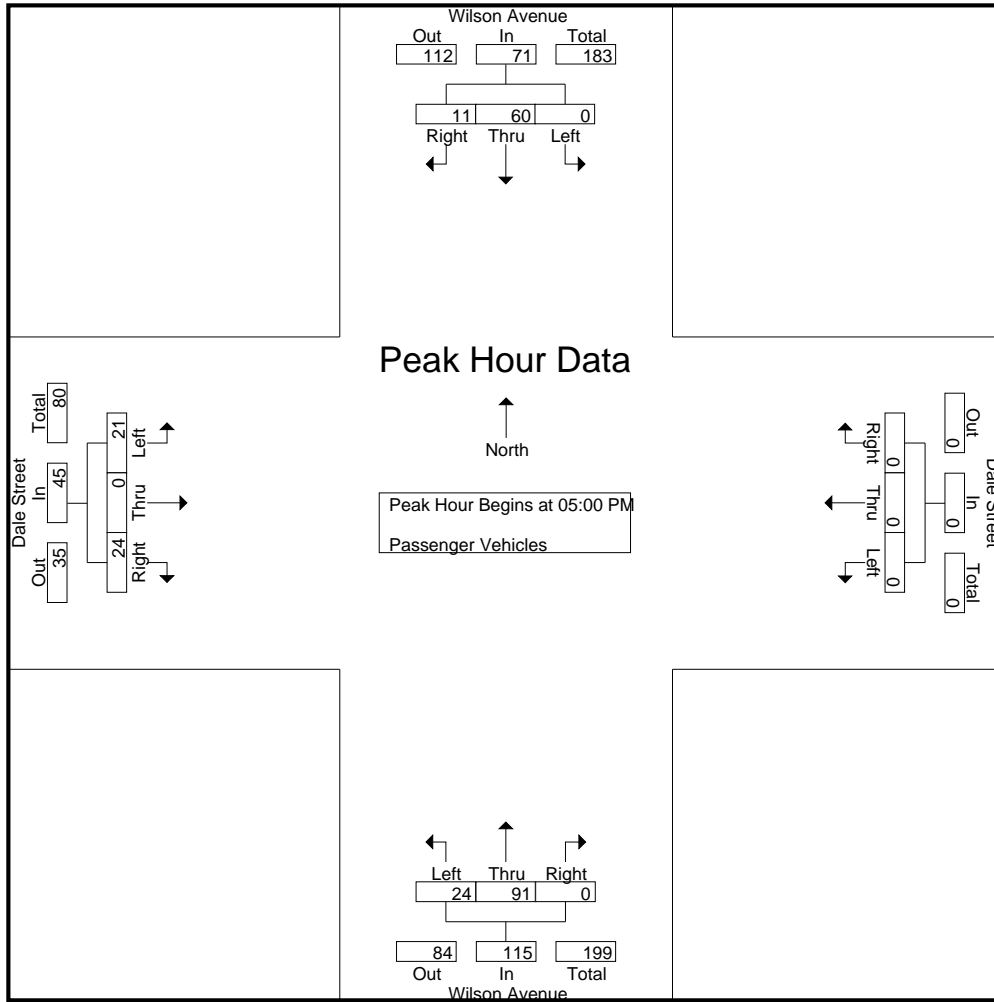
Groups Printed- Passenger Vehicles

Start Time	Wilson Avenue Southbound				Dale Street Westbound				Wilson Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	10	2	12	0	0	0	0	3	28	0	31	3	0	6	9	52
04:15 PM	0	23	5	28	0	0	0	0	2	24	0	26	4	0	4	8	62
04:30 PM	0	20	3	23	0	0	0	0	6	13	0	19	2	0	8	10	52
04:45 PM	0	7	6	13	0	0	0	0	8	19	0	27	6	0	6	12	52
Total	0	60	16	76	0	0	0	0	19	84	0	103	15	0	24	39	218
05:00 PM	0	16	1	17	0	0	0	0	6	20	0	26	2	0	7	9	52
05:15 PM	0	13	4	17	0	0	0	0	7	17	0	24	5	0	11	16	57
05:30 PM	0	21	4	25	0	0	0	0	6	22	0	28	10	0	3	13	66
05:45 PM	0	10	2	12	0	0	0	0	5	32	0	37	4	0	3	7	56
Total	0	60	11	71	0	0	0	0	24	91	0	115	21	0	24	45	231
Grand Total	0	120	27	147	0	0	0	0	43	175	0	218	36	0	48	84	449
Apprch %	0	81.6	18.4		0	0	0		19.7	80.3	0		42.9	0	57.1		
Total %	0	26.7	6	32.7	0	0	0	0	9.6	39	0	48.6	8	0	10.7	18.7	

Start Time	Wilson Avenue Southbound				Dale Street Westbound				Wilson Avenue Northbound				Dale Street Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	16	1	17	0	0	0	0	6	20	0	26	2	0	7	9	52
05:15 PM	0	13	4	17	0	0	0	0	7	17	0	24	5	0	11	16	57
05:30 PM	0	21	4	25	0	0	0	0	6	22	0	28	10	0	3	13	66
05:45 PM	0	10	2	12	0	0	0	0	5	32	0	37	4	0	3	7	56
Total Volume	0	60	11	71	0	0	0	0	24	91	0	115	21	0	24	45	231
% App. Total	0	84.5	15.5		0	0	0		20.9	79.1	0		46.7	0	53.3		
PHF	.000	.714	.688	.710	.000	.000	.000	.000	.857	.711	.000	.777	.525	.000	.545	.703	.875

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

	05:00 PM				05:00 PM				05:00 PM							
+0 mins.	0	16	1	17	0	0	0	0	6	20	0	26	2	0	7	9
+15 mins.	0	13	4	17	0	0	0	0	7	17	0	24	5	0	11	16
+30 mins.	0	21	4	25	0	0	0	0	6	22	0	28	10	0	3	13
+45 mins.	0	10	2	12	0	0	0	0	5	32	0	37	4	0	3	7
Total Volume	0	60	11	71	0	0	0	0	24	91	0	115	21	0	24	45
% App. Total	0	84.5	15.5		0	0	0	0	20.9	79.1	0		46.7	0	53.3	
PHF	.000	.714	.688	.710	.000	.000	.000	.000	.857	.711	.000	.777	.525	.000	.545	.703

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

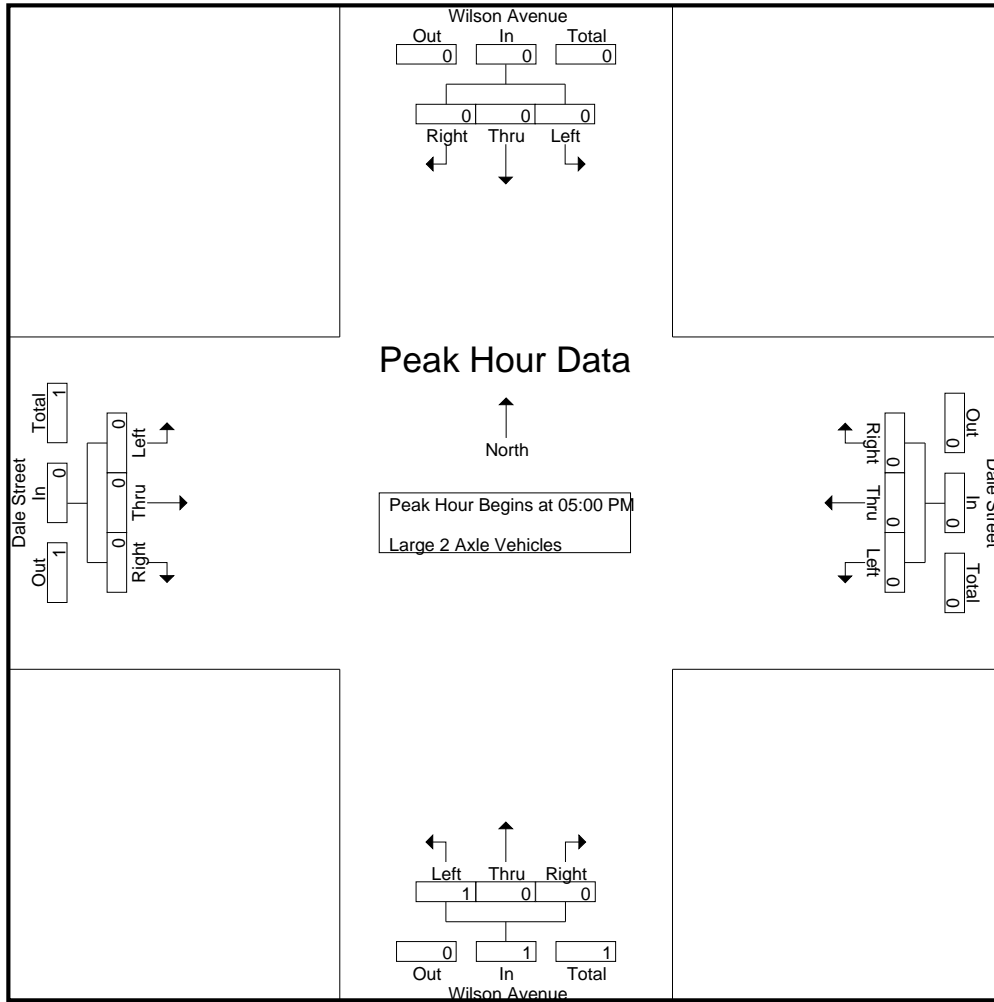
Groups Printed- Large 2 Axle Vehicles

Start Time	Wilson Avenue Southbound				Dale Street Westbound				Wilson Avenue Northbound				Dale Street Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Grand Total	0	2	0	2	0	0	0	0	0	1	1	0	2	0	0	0	0	4
Apprch %	0	100	0		0	0	0			50	50	0		0	0	0		
Total %	0	50	0	50	0	0	0	0	0	25	25	0	50	0	0	0	0	

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

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

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

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

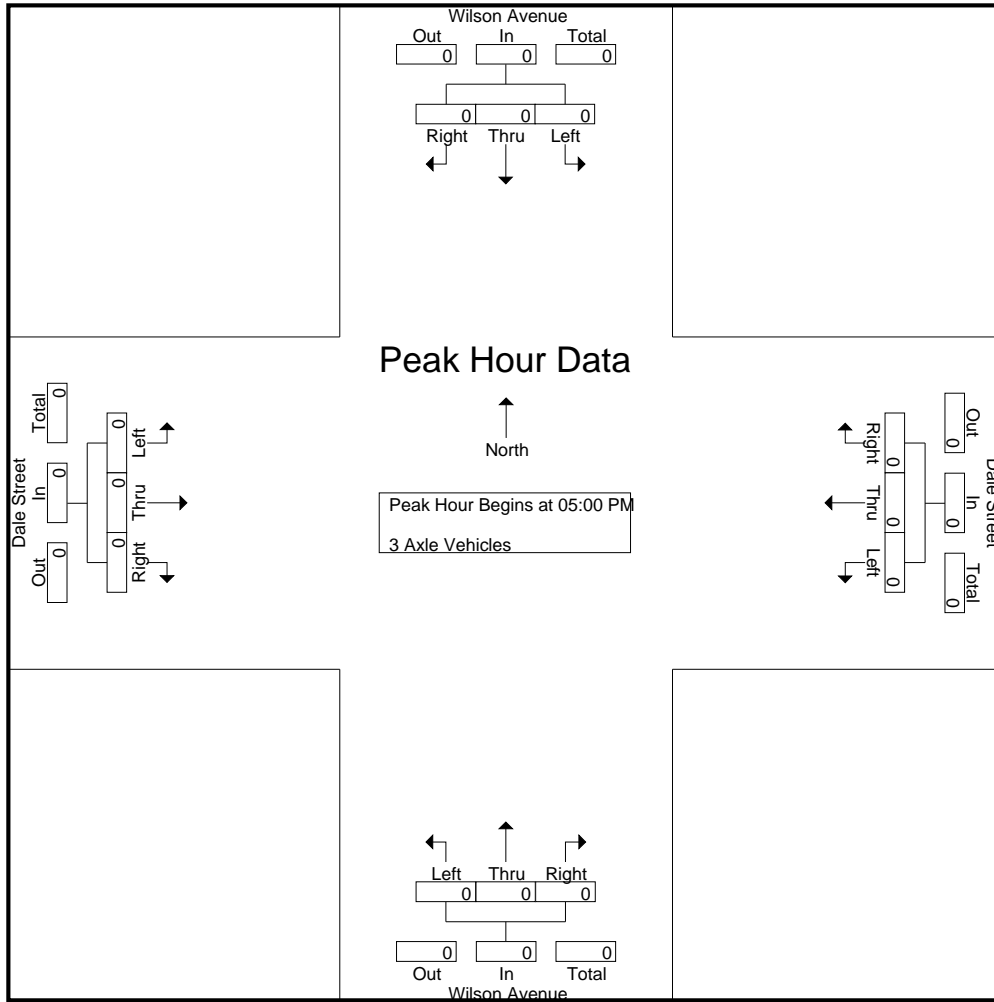
Groups Printed- 3 Axle Vehicles

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

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

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

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

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

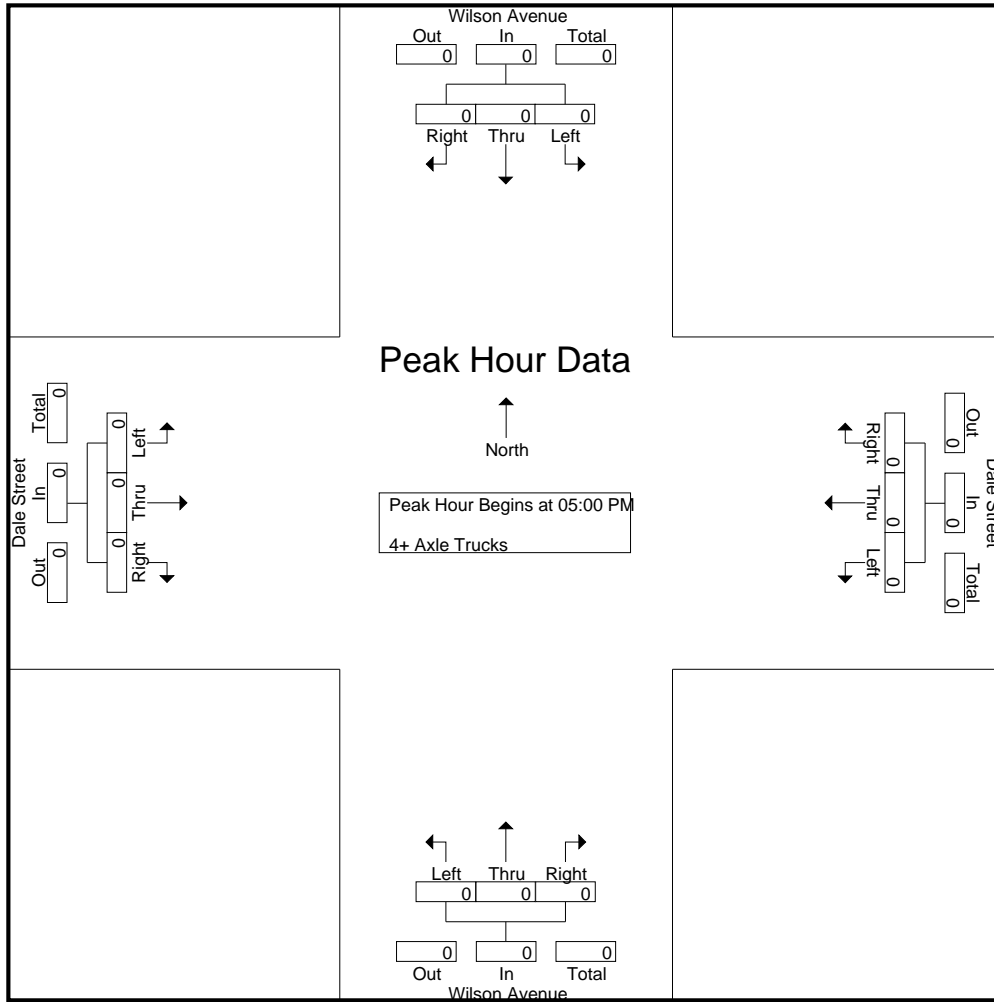
Groups Printed- 4+ Axle Trucks

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

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

City of Perris
 N/S: Wilson Avenue
 E/W: Dale Street
 Weather: Clear

File Name : 06_PER_Wil_Dale PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

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

Location: Perris
 N/S: Wilson Avenue
 E/W: Dale Street



Date: 2/10/2022
 Day: Thursday

PEDESTRIANS

	North Leg Wilson Avenue	East Leg Dale Street	South Leg Wilson Avenue	West Leg Dale Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	1	1	1	3
7:30 AM	1	0	0	3	4
7:45 AM	0	0	0	0	0
8:00 AM	4	0	1	1	6
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	2	0	0	3	5
TOTAL VOLUMES:	7	1	2	8	18

	North Leg Wilson Avenue	East Leg Dale Street	South Leg Wilson Avenue	West Leg Dale Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	2	0	0	1	3
4:30 PM	0	0	1	0	1
4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	1	1
5:30 PM	0	0	0	4	4
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	3	0	1	6	10

Location: Perris
 N/S: Wilson Avenue
 E/W: Dale Street



Date: 2/10/2022
 Day: Thursday

BICYCLES

	Southbound Wilson Avenue			Westbound Dale Street			Northbound Wilson Avenue			Eastbound Dale Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	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	1	0	0	0	0	0	0	0	0	0	1	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	0	0	0	0	1	3

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

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

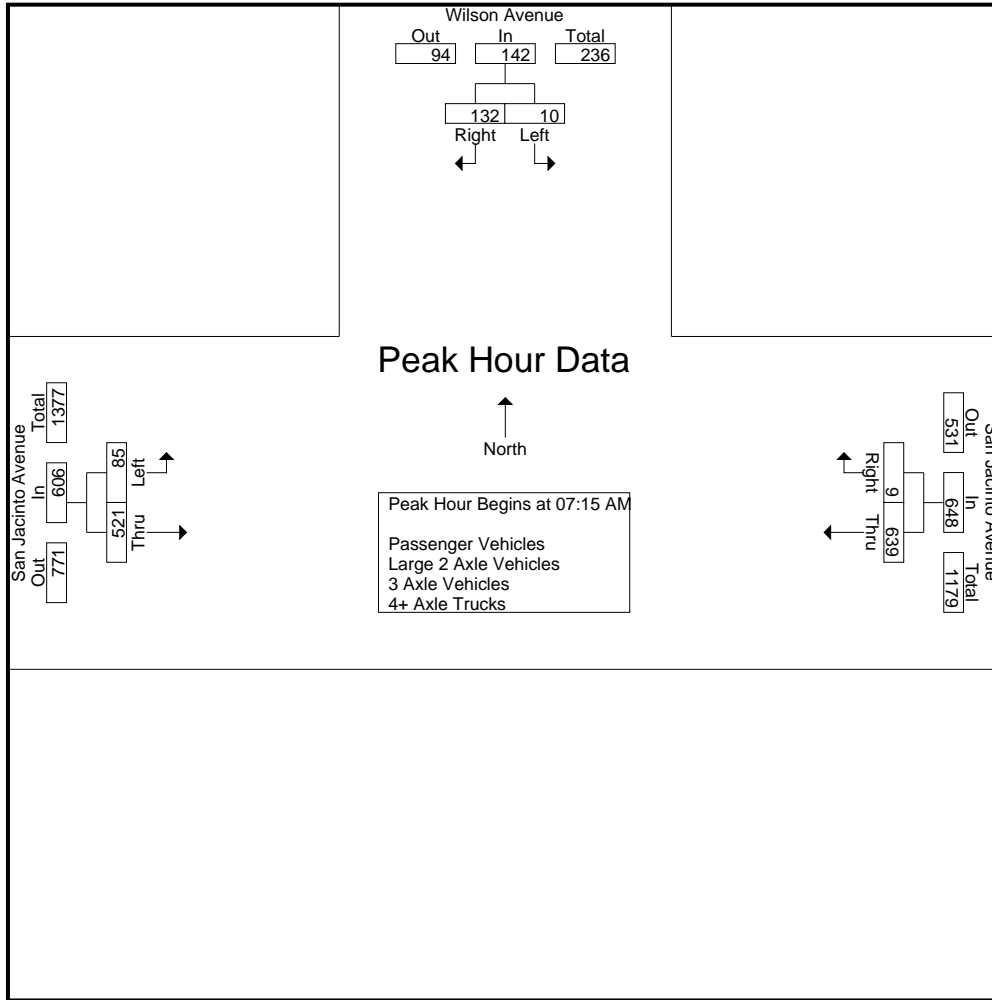
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	3	36	39	119	0	119	7	100	107	265
07:15 AM	5	17	22	154	2	156	9	123	132	310
07:30 AM	3	45	48	180	1	181	17	124	141	370
07:45 AM	0	44	44	178	4	182	34	159	193	419
Total	11	142	153	631	7	638	67	506	573	1364
08:00 AM	2	26	28	127	2	129	25	115	140	297
08:15 AM	2	10	12	114	2	116	14	99	113	241
08:30 AM	3	19	22	111	4	115	12	62	74	211
08:45 AM	4	14	18	92	2	94	14	67	81	193
Total	11	69	80	444	10	454	65	343	408	942
Grand Total	22	211	233	1075	17	1092	132	849	981	2306
Apprch %	9.4	90.6		98.4	1.6		13.5	86.5		
Total %	1	9.2	10.1	46.6	0.7	47.4	5.7	36.8	42.5	
Passenger Vehicles	22	207	229	1012	17	1029	131	771	902	2160
% Passenger Vehicles	100	98.1	98.3	94.1	100	94.2	99.2	90.8	91.9	93.7
Large 2 Axle Vehicles	0	4	4	14	0	14	1	18	19	37
% Large 2 Axle Vehicles	0	1.9	1.7	1.3	0	1.3	0.8	2.1	1.9	1.6
3 Axle Vehicles	0	0	0	9	0	9	0	9	9	18
% 3 Axle Vehicles	0	0	0	0.8	0	0.8	0	1.1	0.9	0.8
4+ Axle Trucks	0	0	0	40	0	40	0	51	51	91
% 4+ Axle Trucks	0	0	0	3.7	0	3.7	0	6	5.2	3.9

Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	5	17	22	154	2	156	9	123	132	310
07:30 AM	3	45	48	180	1	181	17	124	141	370
07:45 AM	0	44	44	178	4	182	34	159	193	419
08:00 AM	2	26	28	127	2	129	25	115	140	297
Total Volume	10	132	142	639	9	648	85	521	606	1396
% App. Total	7	93		98.6	1.4		14	86		
PHF	.500	.733	.740	.888	.563	.890	.625	.819	.785	.833

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

	07:00 AM			07:15 AM			07:15 AM		
+0 mins.	3	36	39	154	2	156	9	123	132
+15 mins.	5	17	22	180	1	181	17	124	141
+30 mins.	3	45	48	178	4	182	34	159	193
+45 mins.	0	44	44	127	2	129	25	115	140
Total Volume	11	142	153	639	9	648	85	521	606
% App. Total	7.2	92.8		98.6	1.4		14	86	
PHF	.550	.789	.797	.888	.563	.890	.625	.819	.785

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

Groups Printed- Passenger Vehicles

Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	3	35	38	108	0	108	7	90	97	243
07:15 AM	5	17	22	143	2	145	9	114	123	290
07:30 AM	3	44	47	173	1	174	17	117	134	355
07:45 AM	0	44	44	171	4	175	34	147	181	400
Total	11	140	151	595	7	602	67	468	535	1288
08:00 AM	2	26	28	121	2	123	24	107	131	282
08:15 AM	2	9	11	109	2	111	14	86	100	222
08:30 AM	3	18	21	99	4	103	12	52	64	188
08:45 AM	4	14	18	88	2	90	14	58	72	180
Total	11	67	78	417	10	427	64	303	367	872
Grand Total	22	207	229	1012	17	1029	131	771	902	2160
Apprch %	9.6	90.4		98.3	1.7		14.5	85.5		
Total %	1	9.6	10.6	46.9	0.8	47.6	6.1	35.7	41.8	

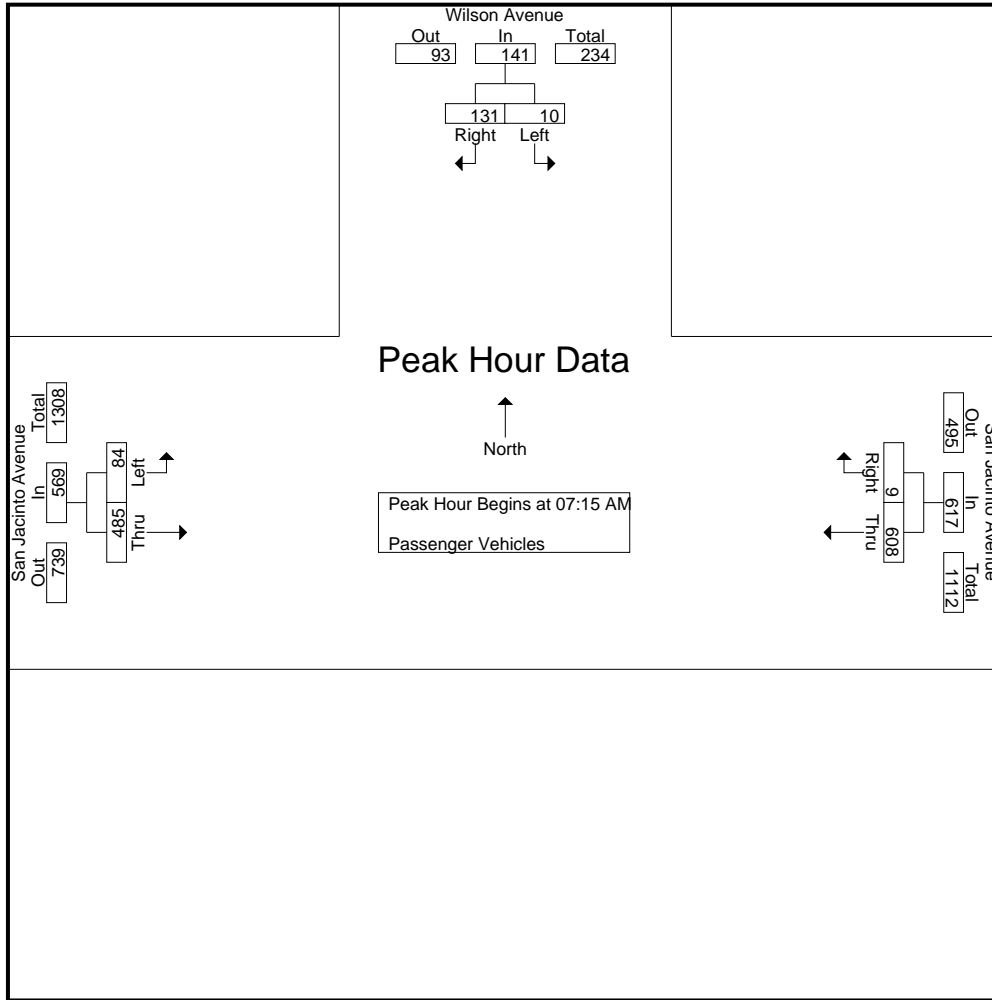
Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:15 AM	5	17	22	143	2	145	9	114	123	290
07:30 AM	3	44	47	173	1	174	17	117	134	355
07:45 AM	0	44	44	171	4	175	34	147	181	400
08:00 AM	2	26	28	121	2	123	24	107	131	282
Total Volume	10	131	141	608	9	617	84	485	569	1327
% App. Total	7.1	92.9		98.5	1.5		14.8	85.2		
PHF	.500	.744	.750	.879	.563	.881	.618	.825	.786	.829

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

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	5	17	22	143	2	145	9	114	123
+15 mins.	3	44	47	173	1	174	17	117	134
+30 mins.	0	44	44	171	4	175	34	147	181
+45 mins.	2	26	28	121	2	123	24	107	131
Total Volume	10	131	141	608	9	617	84	485	569
% App. Total	7.1	92.9		98.5	1.5		14.8	85.2	
PHF	.500	.744	.750	.879	.563	.881	.618	.825	.786

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	1	1	1	0	1	0	2	2	4
07:15 AM	0	0	0	2	0	2	0	3	3	5
07:30 AM	0	1	1	4	0	4	0	1	1	6
07:45 AM	0	0	0	1	0	1	0	2	2	3
Total	0	2	2	8	0	8	0	8	8	18
08:00 AM	0	0	0	2	0	2	1	3	4	6
08:15 AM	0	1	1	1	0	1	0	3	3	5
08:30 AM	0	1	1	2	0	2	0	3	3	6
08:45 AM	0	0	0	1	0	1	0	1	1	2
Total	0	2	2	6	0	6	1	10	11	19
Grand Total	0	4	4	14	0	14	1	18	19	37
Apprch %	0	100		100	0		5.3	94.7		
Total %	0	10.8	10.8	37.8	0	37.8	2.7	48.6	51.4	

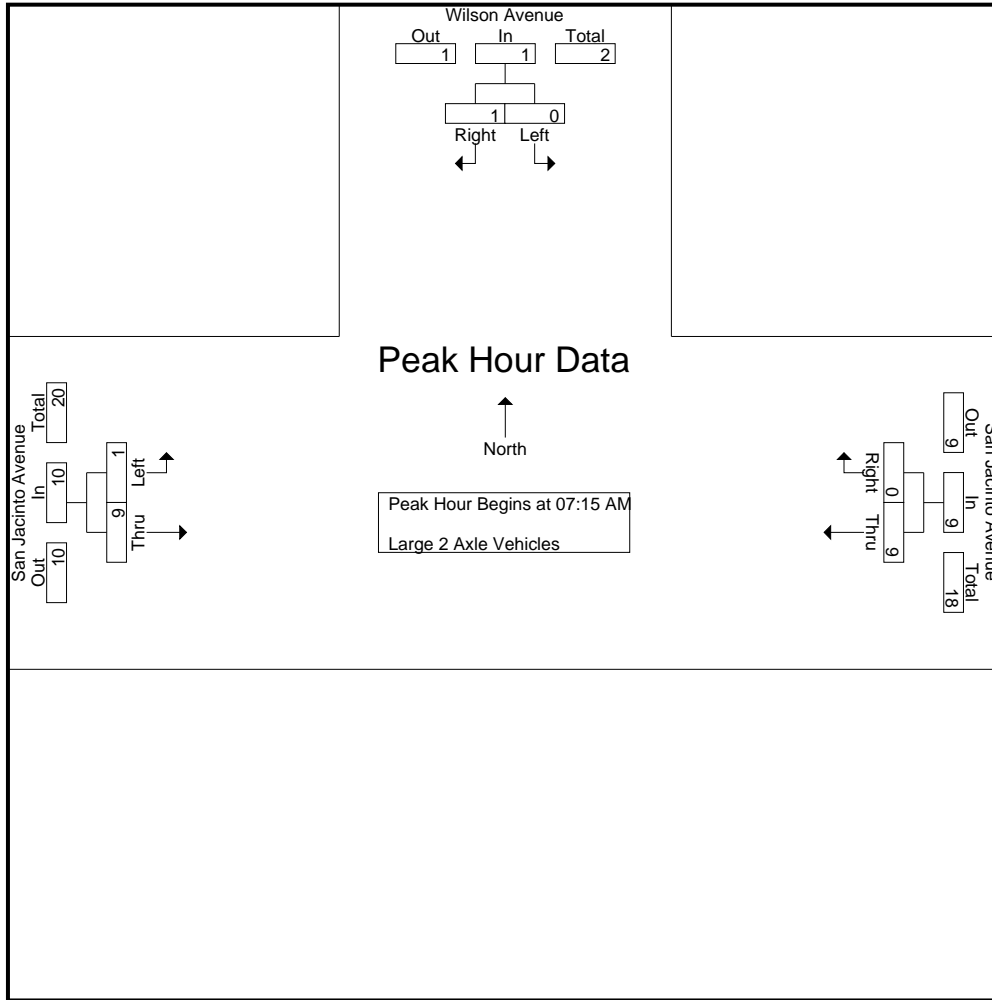
Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:15 AM	0	0	0	2	0	2	0	3	3	5
07:30 AM	0	1	1	4	0	4	0	1	1	6
07:45 AM	0	0	0	1	0	1	0	2	2	3
08:00 AM	0	0	0	2	0	2	1	3	4	6
Total Volume	0	1	1	9	0	9	1	9	10	20
% App. Total	0	100		100	0		10	90		
PHF	.000	.250	.250	.563	.000	.563	.250	.750	.625	.833

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

Peak Hour for Entire Intersection Begins at 07:15 AM

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	2	0	2	0	3	3
+15 mins.	0	1	1	4	0	4	0	1	1
+30 mins.	0	0	0	1	0	1	0	2	2
+45 mins.	0	0	0	2	0	2	1	3	4
Total Volume	0	1	1	9	0	9	1	9	10
% App. Total	0	100		100	0		10	90	
PHF	.000	.250	.250	.563	.000	.563	.250	.750	.625

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

Groups Printed- 3 Axle Vehicles

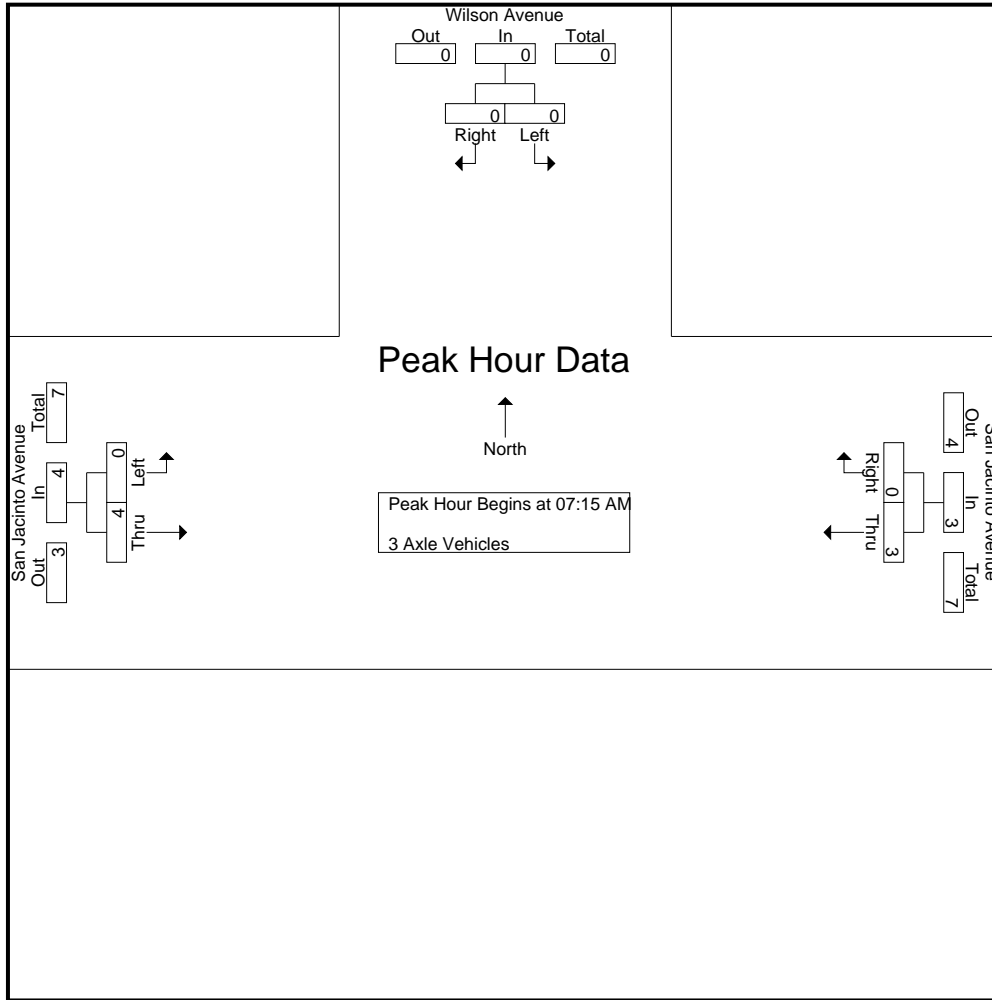
Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	0	0	3	0	3	0	0	0	3
07:15 AM	0	0	0	1	0	1	0	2	2	3
07:30 AM	0	0	0	0	0	0	0	1	1	1
07:45 AM	0	0	0	2	0	2	0	1	1	3
Total	0	0	0	6	0	6	0	4	4	10
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	2	2	2
08:30 AM	0	0	0	3	0	3	0	1	1	4
08:45 AM	0	0	0	0	0	0	0	2	2	2
Total	0	0	0	3	0	3	0	5	5	8
Grand Total	0	0	0	9	0	9	0	9	9	18
Apprch %	0	0		100	0		0	100		
Total %	0	0		50	0	50	0	50	50	

Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:15 AM	0	0	0	1	0	1	0	2	2	3
07:30 AM	0	0	0	0	0	0	0	1	1	1
07:45 AM	0	0	0	2	0	2	0	1	1	3
08:00 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	3	0	3	0	4	4	7
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.375	.000	.375	.000	.500	.500	.583

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

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	1	0	1	0	2	2
+15 mins.	0	0	0	0	0	0	0	1	1
+30 mins.	0	0	0	2	0	2	0	1	1
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	3	0	3	0	4	4
% App. Total	0	0	0	100	0	100	0	100	100
PHF	.000	.000	.000	.375	.000	.375	.000	.500	.500

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

Groups Printed- 4+ Axle Trucks

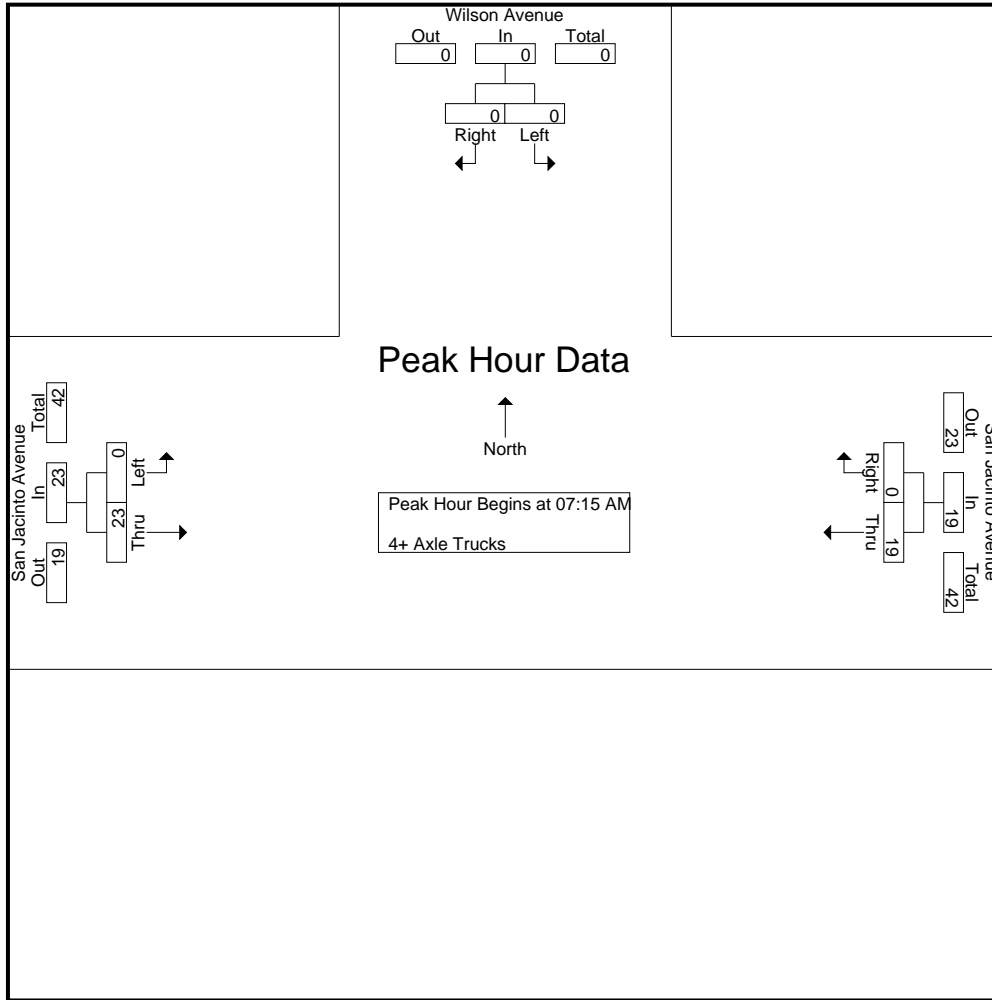
Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	0	0	7	0	7	0	8	8	15
07:15 AM	0	0	0	8	0	8	0	4	4	12
07:30 AM	0	0	0	3	0	3	0	5	5	8
07:45 AM	0	0	0	4	0	4	0	9	9	13
Total	0	0	0	22	0	22	0	26	26	48
08:00 AM	0	0	0	4	0	4	0	5	5	9
08:15 AM	0	0	0	4	0	4	0	8	8	12
08:30 AM	0	0	0	7	0	7	0	6	6	13
08:45 AM	0	0	0	3	0	3	0	6	6	9
Total	0	0	0	18	0	18	0	25	25	43
Grand Total	0	0	0	40	0	40	0	51	51	91
Apprch %	0	0		100	0		0	100		
Total %	0	0		44	0	44	0	56	56	

Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:15 AM	0	0	0	8	0	8	0	4	4	12
07:30 AM	0	0	0	3	0	3	0	5	5	8
07:45 AM	0	0	0	4	0	4	0	9	9	13
08:00 AM	0	0	0	4	0	4	0	5	5	9
Total Volume	0	0	0	19	0	19	0	23	23	42
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.594	.000	.594	.000	.639	.639	.808

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

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J AM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	8	0	8	0	4	4
+15 mins.	0	0	0	3	0	3	0	5	5
+30 mins.	0	0	0	4	0	4	0	9	9
+45 mins.	0	0	0	4	0	4	0	5	5
Total Volume	0	0	0	19	0	19	0	23	23
% App. Total	0	0	0	100	0	100	0	100	100
PHF	.000	.000	.000	.594	.000	.594	.000	.639	.639

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

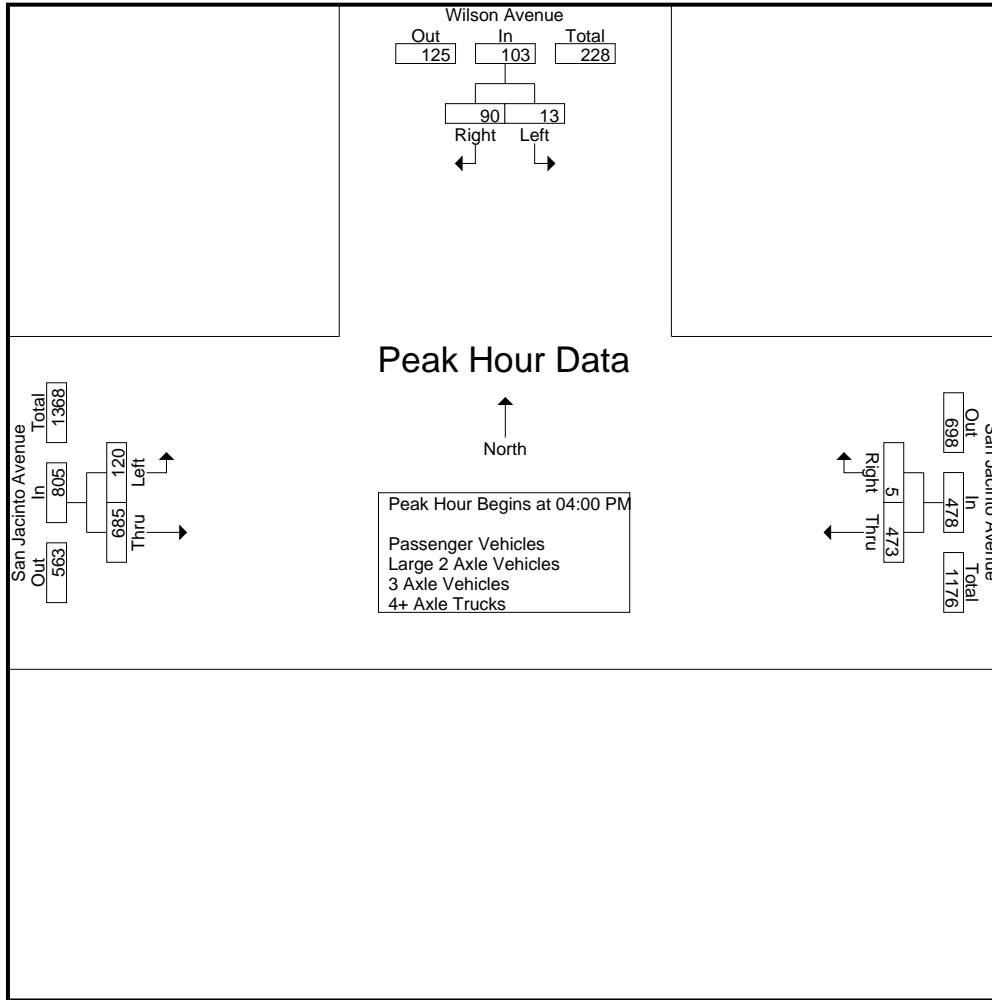
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	2	15	17	126	3	129	39	164	203	349
04:15 PM	6	23	29	102	0	102	28	163	191	322
04:30 PM	2	31	33	145	1	146	26	177	203	382
04:45 PM	3	21	24	100	1	101	27	181	208	333
Total	13	90	103	473	5	478	120	685	805	1386
05:00 PM	1	21	22	97	2	99	29	182	211	332
05:15 PM	1	26	27	95	3	98	32	169	201	326
05:30 PM	6	24	30	95	2	97	28	201	229	356
05:45 PM	4	10	14	93	6	99	44	147	191	304
Total	12	81	93	380	13	393	133	699	832	1318
Grand Total	25	171	196	853	18	871	253	1384	1637	2704
Apprch %	12.8	87.2		97.9	2.1		15.5	84.5		
Total %	0.9	6.3	7.2	31.5	0.7	32.2	9.4	51.2	60.5	
Passenger Vehicles	24	169	193	831	18	849	250	1355	1605	2647
% Passenger Vehicles	96	98.8	98.5	97.4	100	97.5	98.8	97.9	98	97.9
Large 2 Axle Vehicles	1	2	3	10	0	10	3	21	24	37
% Large 2 Axle Vehicles	4	1.2	1.5	1.2	0	1.1	1.2	1.5	1.5	1.4
3 Axle Vehicles	0	0	0	7	0	7	0	7	7	14
% 3 Axle Vehicles	0	0	0	0.8	0	0.8	0	0.5	0.4	0.5
4+ Axle Trucks	0	0	0	5	0	5	0	1	1	6
% 4+ Axle Trucks	0	0	0	0.6	0	0.6	0	0.1	0.1	0.2

Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	2	15	17	126	3	129	39	164	203	349
04:15 PM	6	23	29	102	0	102	28	163	191	322
04:30 PM	2	31	33	145	1	146	26	177	203	382
04:45 PM	3	21	24	100	1	101	27	181	208	333
Total Volume	13	90	103	473	5	478	120	685	805	1386
% App. Total	12.6	87.4		99	1		14.9	85.1		
PHF	.542	.726	.780	.816	.417	.818	.769	.946	.968	.907

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J PM
 Site Code : 05122121
 Start Date : 2/10/2022
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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			04:00 PM			04:45 PM		
+0 mins.	6	23	29	126	3	129	27	181	208
+15 mins.	2	31	33	102	0	102	29	182	211
+30 mins.	3	21	24	145	1	146	32	169	201
+45 mins.	1	21	22	100	1	101	28	201	229
Total Volume	12	96	108	473	5	478	116	733	849
% App. Total	11.1	88.9		99	1		13.7	86.3	
PHF	.500	.774	.818	.816	.417	.818	.906	.912	.927

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

Groups Printed- Passenger Vehicles

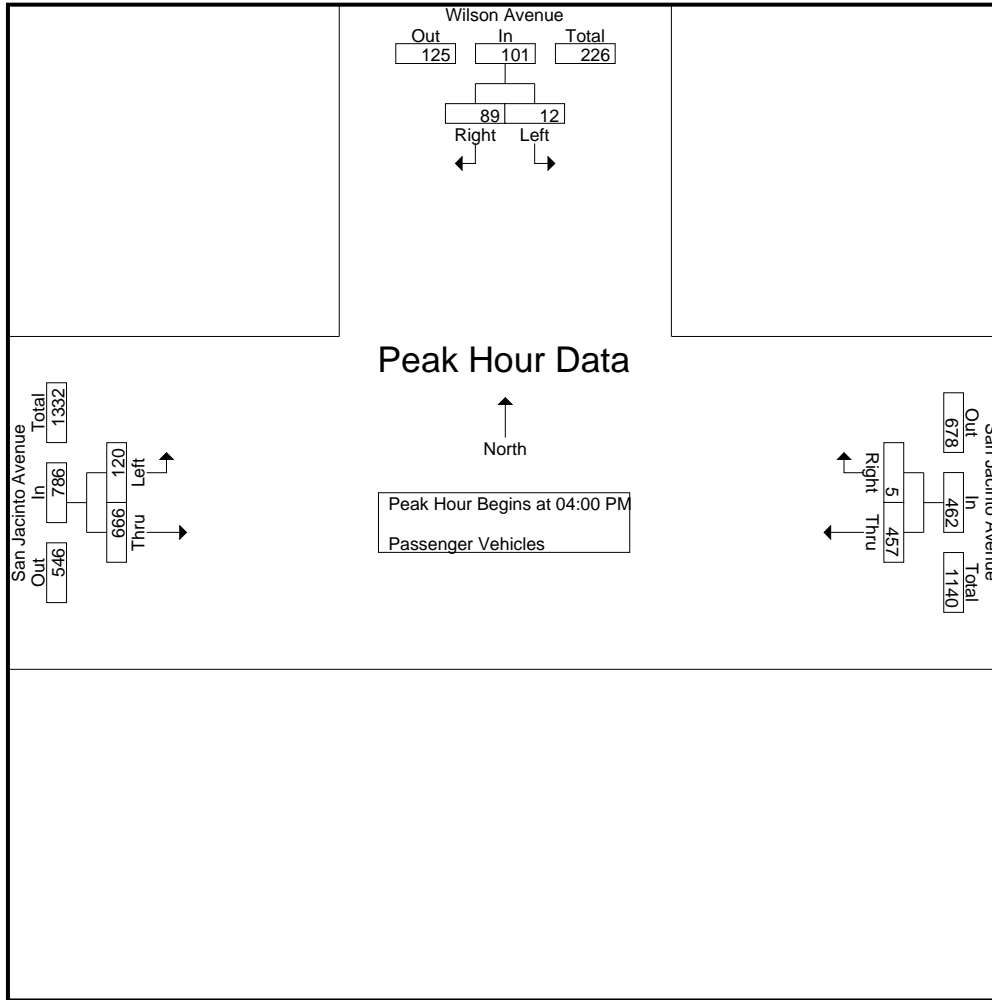
Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	2	15	17	121	3	124	39	161	200	341
04:15 PM	5	23	28	97	0	97	28	154	182	307
04:30 PM	2	30	32	142	1	143	26	173	199	374
04:45 PM	3	21	24	97	1	98	27	178	205	327
Total	12	89	101	457	5	462	120	666	786	1349
05:00 PM	1	21	22	94	2	96	28	179	207	325
05:15 PM	1	26	27	94	3	97	31	168	199	323
05:30 PM	6	24	30	95	2	97	28	199	227	354
05:45 PM	4	9	13	91	6	97	43	143	186	296
Total	12	80	92	374	13	387	130	689	819	1298
Grand Total	24	169	193	831	18	849	250	1355	1605	2647
Apprch %	12.4	87.6		97.9	2.1		15.6	84.4		
Total %	0.9	6.4	7.3	31.4	0.7	32.1	9.4	51.2	60.6	

Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	2	15	17	121	3	124	39	161	200	341
04:15 PM	5	23	28	97	0	97	28	154	182	307
04:30 PM	2	30	32	142	1	143	26	173	199	374
04:45 PM	3	21	24	97	1	98	27	178	205	327
Total Volume	12	89	101	457	5	462	120	666	786	1349
% App. Total	11.9	88.1		98.9	1.1		15.3	84.7		
PHF	.600	.742	.789	.805	.417	.808	.769	.935	.959	.902

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

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	2	15	17	121	3	124	39	161	200
+15 mins.	5	23	28	97	0	97	28	154	182
+30 mins.	2	30	32	142	1	143	26	173	199
+45 mins.	3	21	24	97	1	98	27	178	205
Total Volume	12	89	101	457	5	462	120	666	786
% App. Total	11.9	88.1		98.9	1.1		15.3	84.7	
PHF	.600	.742	.789	.805	.417	.808	.769	.935	.959

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	0	0	0	3	0	3	0	1	1	4
04:15 PM	1	0	1	3	0	3	0	6	6	10
04:30 PM	0	1	1	1	0	1	0	2	2	4
04:45 PM	0	0	0	0	0	0	0	3	3	3
Total	1	1	2	7	0	7	0	12	12	21
05:00 PM	0	0	0	1	0	1	1	3	4	5
05:15 PM	0	0	0	1	0	1	1	1	2	3
05:30 PM	0	0	0	0	0	0	0	1	1	1
05:45 PM	0	1	1	1	0	1	1	4	5	7
Total	0	1	1	3	0	3	3	9	12	16
Grand Total	1	2	3	10	0	10	3	21	24	37
Apprch %	33.3	66.7		100	0		12.5	87.5		
Total %	2.7	5.4	8.1	27	0	27	8.1	56.8	64.9	

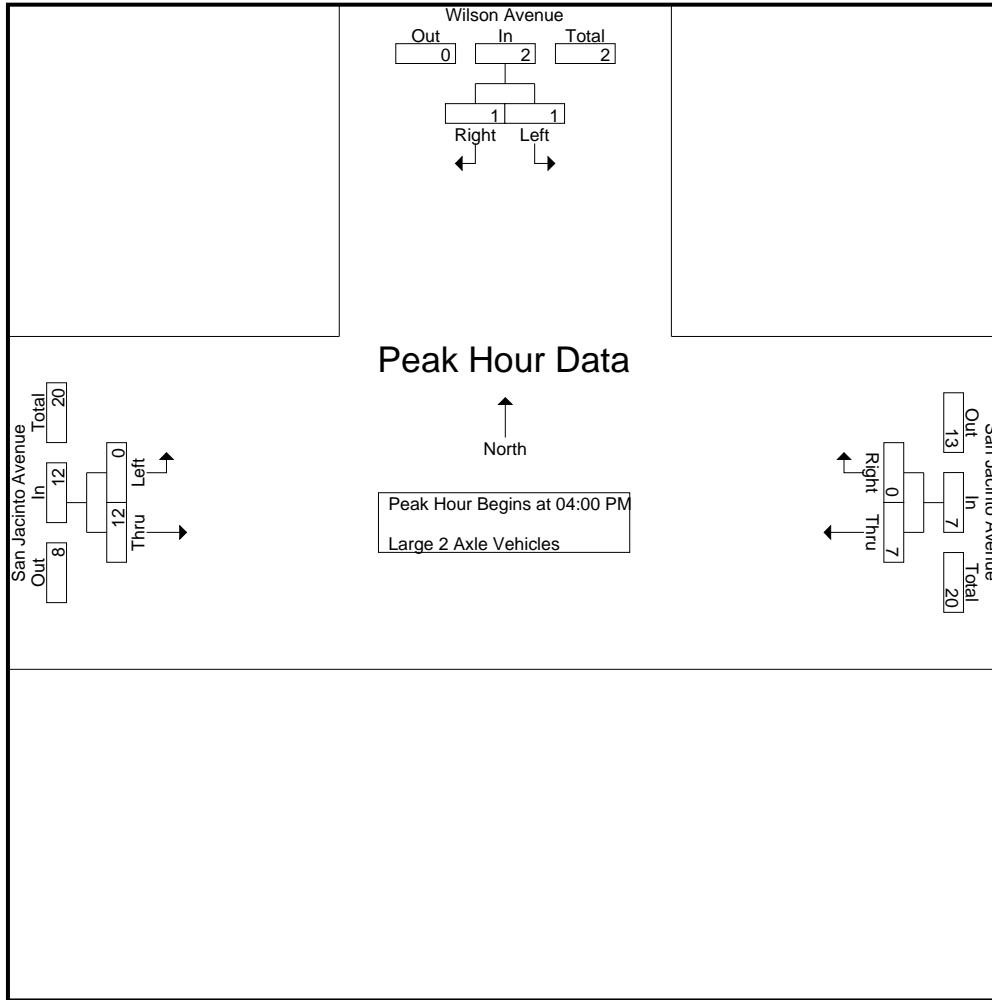
Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	0	0	0	3	0	3	0	1	1	4
04:15 PM	1	0	1	3	0	3	0	6	6	10
04:30 PM	0	1	1	1	0	1	0	2	2	4
04:45 PM	0	0	0	0	0	0	0	3	3	3
Total Volume	1	1	2	7	0	7	0	12	12	21
% App. Total	50	50		100	0		0	100		
PHF	.250	.250	.500	.583	.000	.583	.000	.500	.500	.525

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

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J PM
 Site Code : 05122121
 Start Date : 2/10/2022
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	3	0	3	0	1	1
+15 mins.	1	0	1	3	0	3	0	6	6
+30 mins.	0	1	1	1	0	1	0	2	2
+45 mins.	0	0	0	0	0	0	0	3	3
Total Volume	1	1	2	7	0	7	0	12	12
% App. Total	50	50		100	0		0	100	
PHF	.250	.250	.500	.583	.000	.583	.000	.500	.500

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	0	0	0	1	0	1	0	2	2	3
04:15 PM	0	0	0	1	0	1	0	3	3	4
04:30 PM	0	0	0	0	0	0	0	1	1	1
04:45 PM	0	0	0	2	0	2	0	0	0	2
Total	0	0	0	4	0	4	0	6	6	10
05:00 PM	0	0	0	2	0	2	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	1	1	1
05:45 PM	0	0	0	1	0	1	0	0	0	1
Total	0	0	0	3	0	3	0	1	1	4
Grand Total	0	0	0	7	0	7	0	7	7	14
Apprch %	0	0		100	0		0	100		
Total %	0	0		50	0	50	0	50	50	

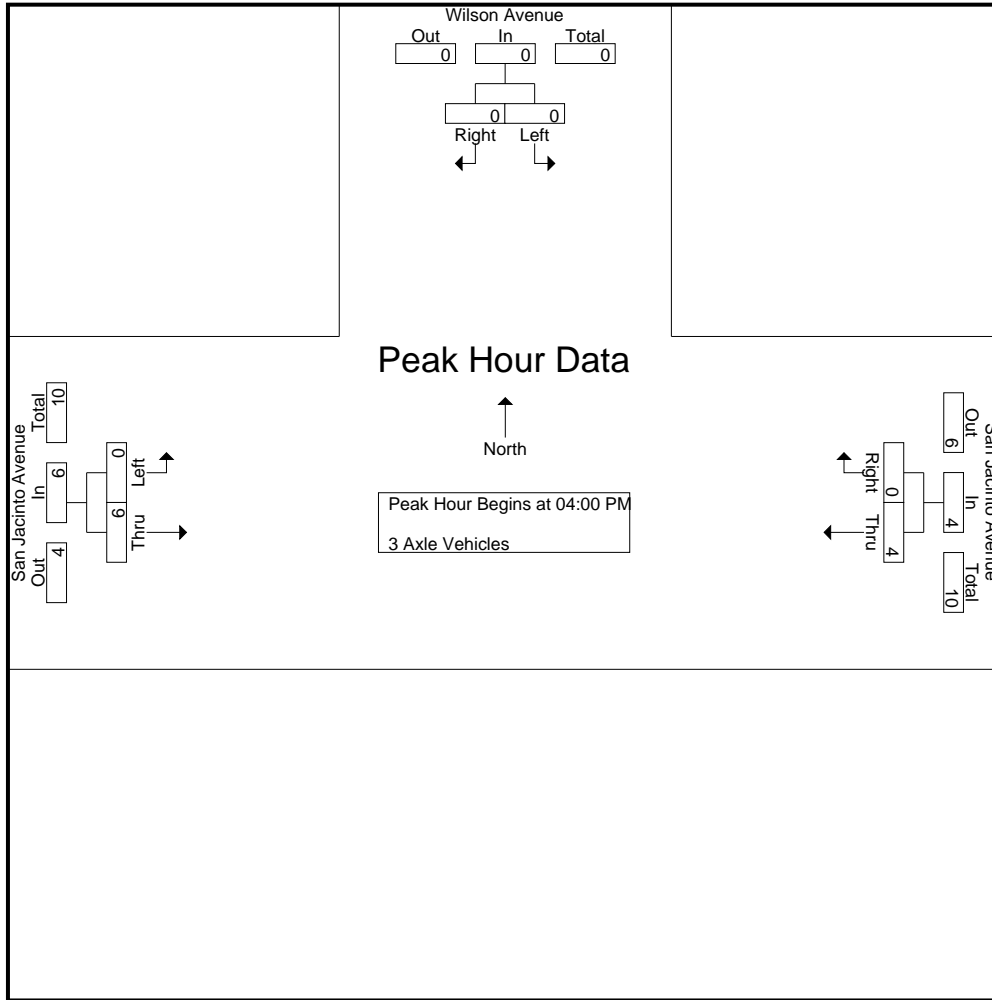
Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	0	0	0	1	0	1	0	2	2	3
04:15 PM	0	0	0	1	0	1	0	3	3	4
04:30 PM	0	0	0	0	0	0	0	1	1	1
04:45 PM	0	0	0	2	0	2	0	0	0	2
Total Volume	0	0	0	4	0	4	0	6	6	10
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.500	.000	.500	.000	.500	.500	.625

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

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	1	0	1	0	2	2
+15 mins.	0	0	0	1	0	1	0	3	3
+30 mins.	0	0	0	0	0	0	0	1	1
+45 mins.	0	0	0	2	0	2	0	0	0
Total Volume	0	0	0	4	0	4	0	6	6
% App. Total	0	0	0	100	0	100	0	100	0
PHF	.000	.000	.000	.500	.000	.500	.000	.500	.500

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 1

Groups Printed- 4+ Axle Trucks

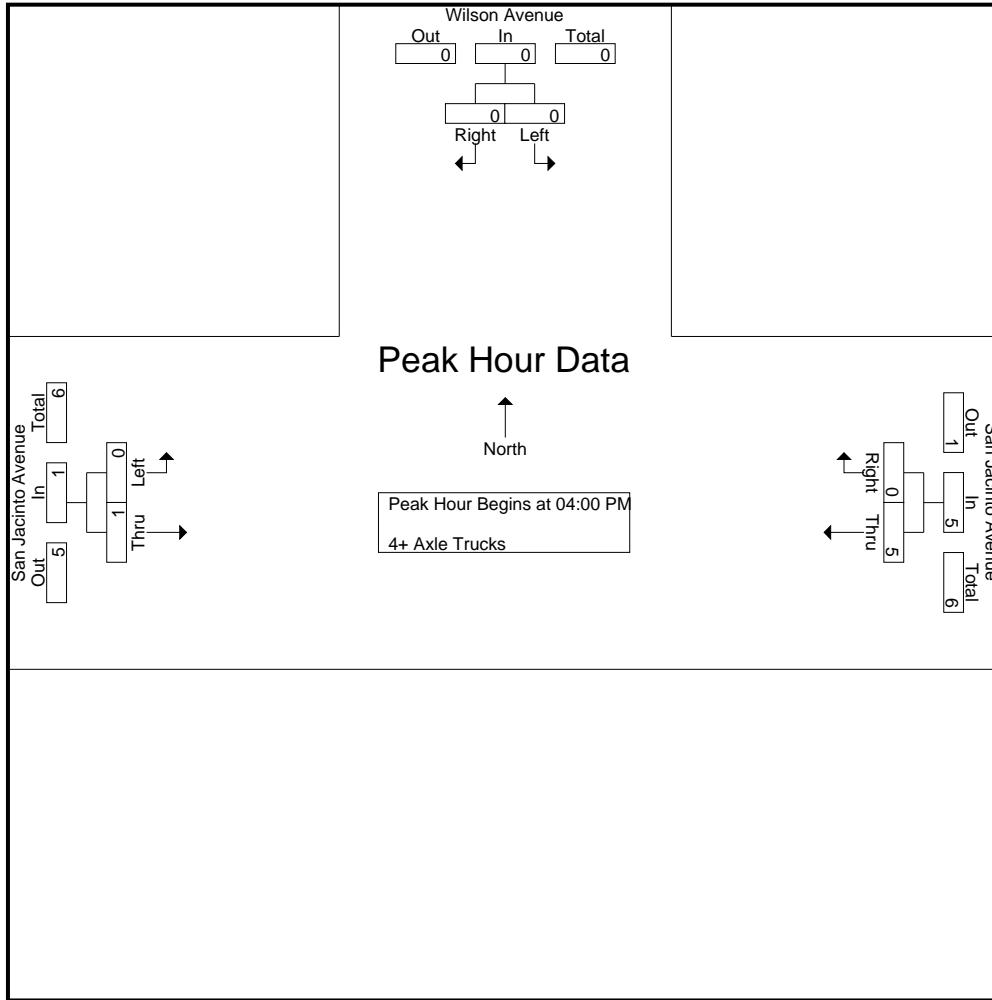
Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	0	0	0	1	0	1	0	0	0	1
04:15 PM	0	0	0	1	0	1	0	0	0	1
04:30 PM	0	0	0	2	0	2	0	1	1	3
04:45 PM	0	0	0	1	0	1	0	0	0	1
Total	0	0	0	5	0	5	0	1	1	6
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	5	0	5	0	1	1	6
Apprch %	0	0		100	0		0	100		
Total %	0	0		83.3	0	83.3	0	16.7	16.7	

Start Time	Wilson Avenue Southbound			San Jacinto Avenue Westbound			San Jacinto Avenue Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	0	0	0	1	0	1	0	0	0	1
04:15 PM	0	0	0	1	0	1	0	0	0	1
04:30 PM	0	0	0	2	0	2	0	1	1	3
04:45 PM	0	0	0	1	0	1	0	0	0	1
Total Volume	0	0	0	5	0	5	0	1	1	6
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.625	.000	.625	.000	.250	.250	.500

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

City of Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 07_PER_Wil_San J PM
 Site Code : 05122121
 Start Date : 2/10/2022
 Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	1	0	1	0	0	0
+15 mins.	0	0	0	1	0	1	0	0	0
+30 mins.	0	0	0	2	0	2	0	1	1
+45 mins.	0	0	0	1	0	1	0	0	0
Total Volume	0	0	0	5	0	5	0	1	1
% App. Total	0	0	0	100	0	100	0	100	100
PHF	.000	.000	.000	.625	.000	.625	.000	.250	.250

Location: Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue



Date: 2/10/2022
 Day: Thursday

PEDESTRIANS

	North Leg Wilson Avenue	East Leg San Jacinto Avenue	South Leg Dead End	West Leg San Jacinto Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	1	0	0	0	1
7:15 AM	0	0	0	0	0
7:30 AM	1	0	0	0	1
7:45 AM	1	0	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:	3	0	0	0	3

	North Leg Wilson Avenue	East Leg San Jacinto Avenue	South Leg Dead End	West Leg San Jacinto 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	1	0	0	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	0	0	0	1

Location: Perris
 N/S: Wilson Avenue
 E/W: San Jacinto Avenue



Date: 2/10/2022
 Day: Thursday

BICYCLES

	Southbound Wilson Avenue			Westbound San Jacinto Avenue			Northbound Dead End			Eastbound San Jacinto Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	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	1	0	0	0	0	0	0	0	1	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	2	0	0	0	0	0	0	0	1	0	3

	Southbound Wilson Avenue			Westbound San Jacinto Avenue			Northbound Dead End			Eastbound San Jacinto Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

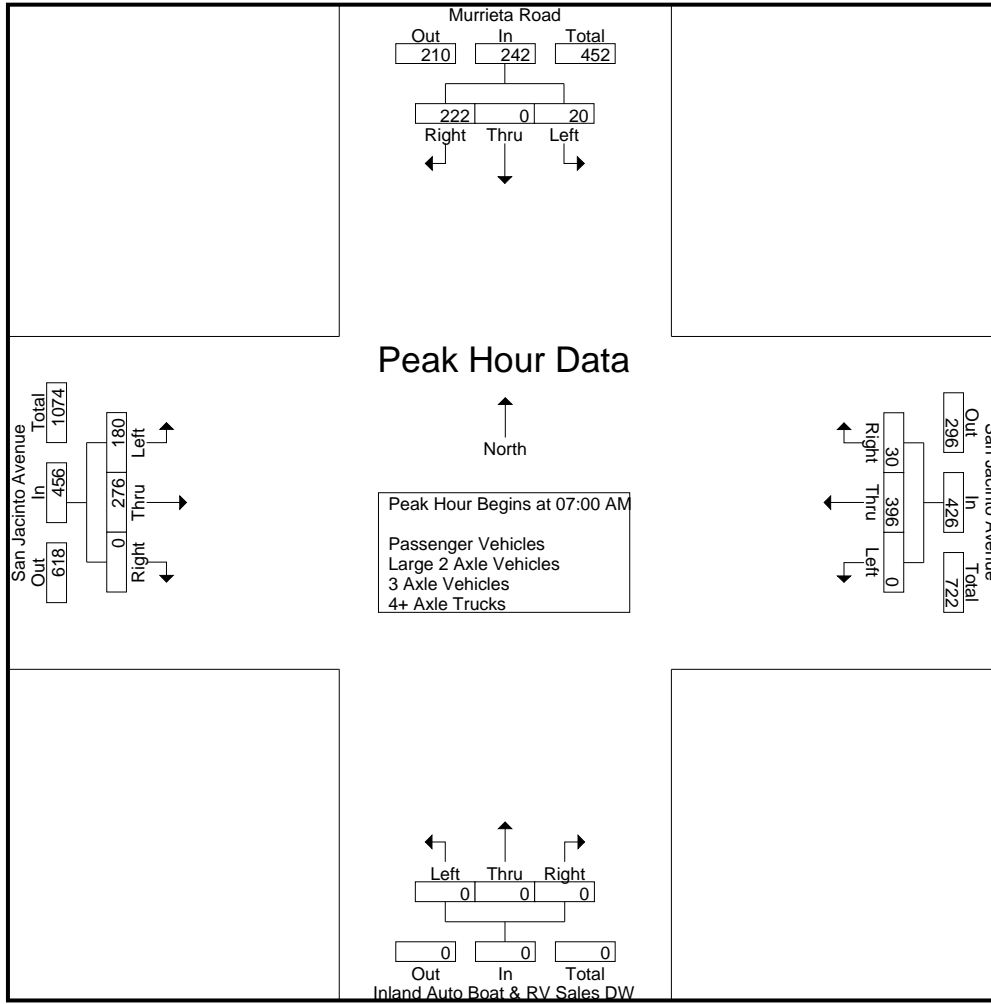
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	4	0	33	37	0	81	7	88	0	0	0	0	39	64	0	103	228
07:15 AM	6	0	38	44	0	99	8	107	0	0	0	0	44	84	0	128	279
07:30 AM	5	0	78	83	0	107	7	114	0	0	0	0	30	61	0	91	288
07:45 AM	5	0	73	78	0	109	8	117	0	0	0	0	67	67	0	134	329
Total	20	0	222	242	0	396	30	426	0	0	0	0	180	276	0	456	1124
08:00 AM	4	0	48	52	0	69	5	74	0	1	0	1	36	58	0	94	221
08:15 AM	1	0	38	39	0	72	2	74	0	0	0	0	35	64	1	100	213
08:30 AM	3	0	25	28	0	71	1	72	0	0	0	0	23	47	0	70	170
08:45 AM	3	0	26	29	0	64	1	65	1	0	0	1	17	43	0	60	155
Total	11	0	137	148	0	276	9	285	1	1	0	2	111	212	1	324	759
Grand Total	31	0	359	390	0	672	39	711	1	1	0	2	291	488	1	780	1883
Apprch %	7.9	0	92.1		0	94.5	5.5		50	50	0		37.3	62.6	0.1		
Total %	1.6	0	19.1	20.7	0	35.7	2.1	37.8	0.1	0.1	0	0.1	15.5	25.9	0.1	41.4	
Passenger Vehicles	31	0	353	384	0	648	39	687	0	1	0	1	289	458	0	747	1819
% Passenger Vehicles	100	0	98.3	98.5	0	96.4	100	96.6	0	100	0	50	99.3	93.9	0	95.8	96.6
Large 2 Axle Vehicles	0	0	6	6	0	19	0	19	0	0	0	0	2	20	0	22	47
% Large 2 Axle Vehicles	0	0	1.7	1.5	0	2.8	0	2.7	0	0	0	0	0.7	4.1	0	2.8	2.5
3 Axle Vehicles	0	0	0	0	0	3	0	3	1	0	0	1	0	4	0	4	8
% 3 Axle Vehicles	0	0	0	0	0	0.4	0	0.4	100	0	0	50	0	0.8	0	0.5	0.4
4+ Axle Trucks	0	0	0	0	0	2	0	2	0	0	0	0	0	6	1	7	9
% 4+ Axle Trucks	0	0	0	0	0	0.3	0	0.3	0	0	0	0	0	1.2	100	0.9	0.5

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	4	0	33	37	0	81	7	88	0	0	0	0	39	64	0	103	228
07:15 AM	6	0	38	44	0	99	8	107	0	0	0	0	44	84	0	128	279
07:30 AM	5	0	78	83	0	107	7	114	0	0	0	0	30	61	0	91	288
07:45 AM	5	0	73	78	0	109	8	117	0	0	0	0	67	67	0	134	329
Total Volume	20	0	222	242	0	396	30	426	0	0	0	0	180	276	0	456	1124
% App. Total	8.3	0	91.7		0	93	7		0	0	0		39.5	60.5	0		
PHF	.833	.000	.712	.729	.000	.908	.938	.910	.000	.000	.000	.000	.672	.821	.000	.851	.854

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J AM
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				08:00 AM				07:00 AM			
+0 mins.	6	0	38	44	0	81	7	88	0	1	0	1	39	64	0	103
+15 mins.	5	0	78	83	0	99	8	107	0	0	0	0	44	84	0	128
+30 mins.	5	0	73	78	0	107	7	114	0	0	0	0	30	61	0	91
+45 mins.	4	0	48	52	0	109	8	117	1	0	0	1	67	67	0	134
Total Volume	20	0	237	257	0	396	30	426	1	1	0	2	180	276	0	456
% App. Total	7.8	0	92.2		0	93	7		50	50	0		39.5	60.5	0	
PHF	.833	.000	.760	.774	.000	.908	.938	.910	.250	.250	.000	.500	.672	.821	.000	.851

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

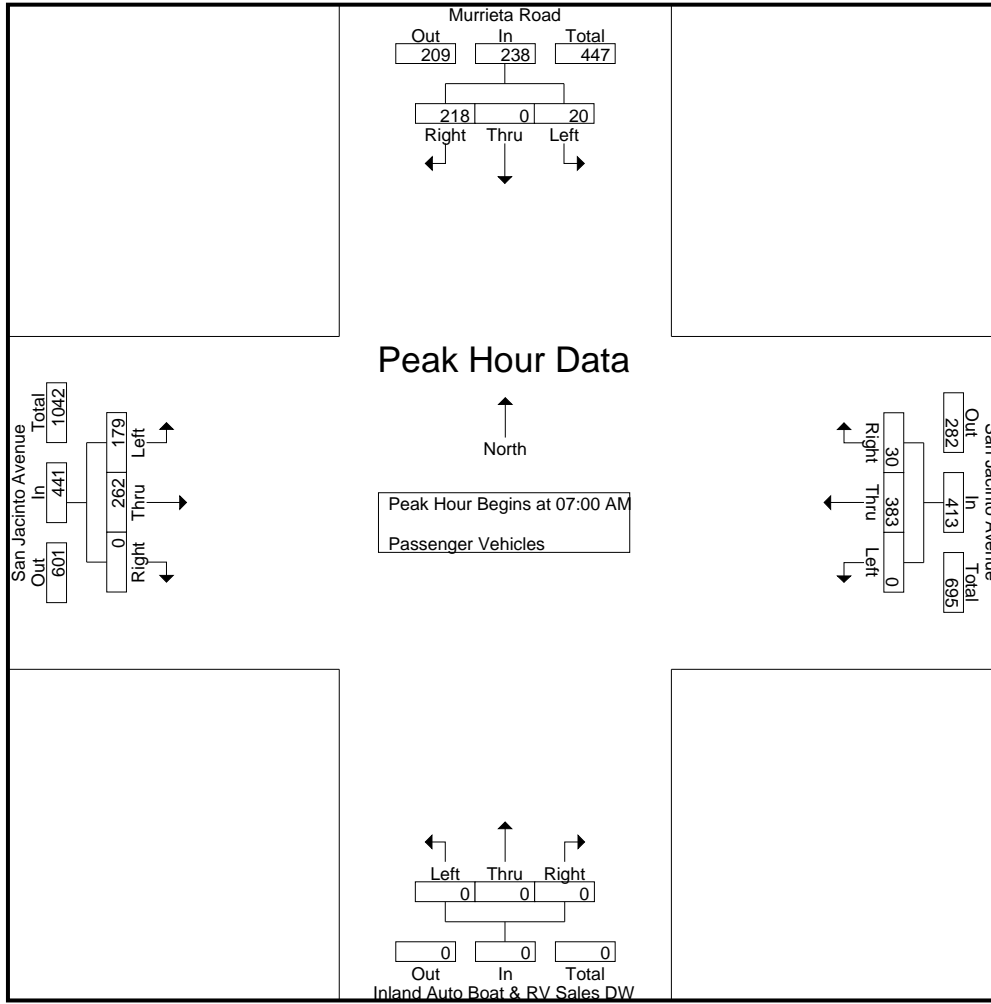
Groups Printed- Passenger Vehicles

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	4	0	32	36	0	78	7	85	0	0	0	0	38	64	0	102	223
07:15 AM	6	0	38	44	0	95	8	103	0	0	0	0	44	79	0	123	270
07:30 AM	5	0	76	81	0	104	7	111	0	0	0	0	30	56	0	86	278
07:45 AM	5	0	72	77	0	106	8	114	0	0	0	0	67	63	0	130	321
Total	20	0	218	238	0	383	30	413	0	0	0	0	179	262	0	441	1092
08:00 AM	4	0	48	52	0	69	5	74	0	1	0	1	36	54	0	90	217
08:15 AM	1	0	38	39	0	69	2	71	0	0	0	0	35	60	0	95	205
08:30 AM	3	0	25	28	0	67	1	68	0	0	0	0	22	43	0	65	161
08:45 AM	3	0	24	27	0	60	1	61	0	0	0	0	17	39	0	56	144
Total	11	0	135	146	0	265	9	274	0	1	0	1	110	196	0	306	727
Grand Total	31	0	353	384	0	648	39	687	0	1	0	1	289	458	0	747	1819
Apprch %	8.1	0	91.9		0	94.3	5.7		0	100	0		38.7	61.3	0		
Total %	1.7	0	19.4	21.1	0	35.6	2.1	37.8	0	0.1	0	0.1	15.9	25.2	0	41.1	

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	4	0	32	36	0	78	7	85	0	0	0	0	38	64	0	102	223
07:15 AM	6	0	38	44	0	95	8	103	0	0	0	0	44	79	0	123	270
07:30 AM	5	0	76	81	0	104	7	111	0	0	0	0	30	56	0	86	278
07:45 AM	5	0	72	77	0	106	8	114	0	0	0	0	67	63	0	130	321
Total Volume	20	0	218	238	0	383	30	413	0	0	0	0	179	262	0	441	1092
% App. Total	8.4	0	91.6		0	92.7	7.3		0	0	0		40.6	59.4	0		
PHF	.833	.000	.717	.735	.000	.903	.938	.906	.000	.000	.000	.000	.668	.829	.000	.848	.850

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J AM
 Site Code : 05122096
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	4	0	32	36	0	78	7	85	0	0	0	0	38	64	0	102
+15 mins.	6	0	38	44	0	95	8	103	0	0	0	0	44	79	0	123
+30 mins.	5	0	76	81	0	104	7	111	0	0	0	0	30	56	0	86
+45 mins.	5	0	72	77	0	106	8	114	0	0	0	0	67	63	0	130
Total Volume	20	0	218	238	0	383	30	413	0	0	0	0	179	262	0	441
% App. Total	8.4	0	91.6		0	92.7	7.3		0	0	0		40.6	59.4	0	
PHF	.833	.000	.717	.735	.000	.903	.938	.906	.000	.000	.000	.000	.668	.829	.000	.848

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

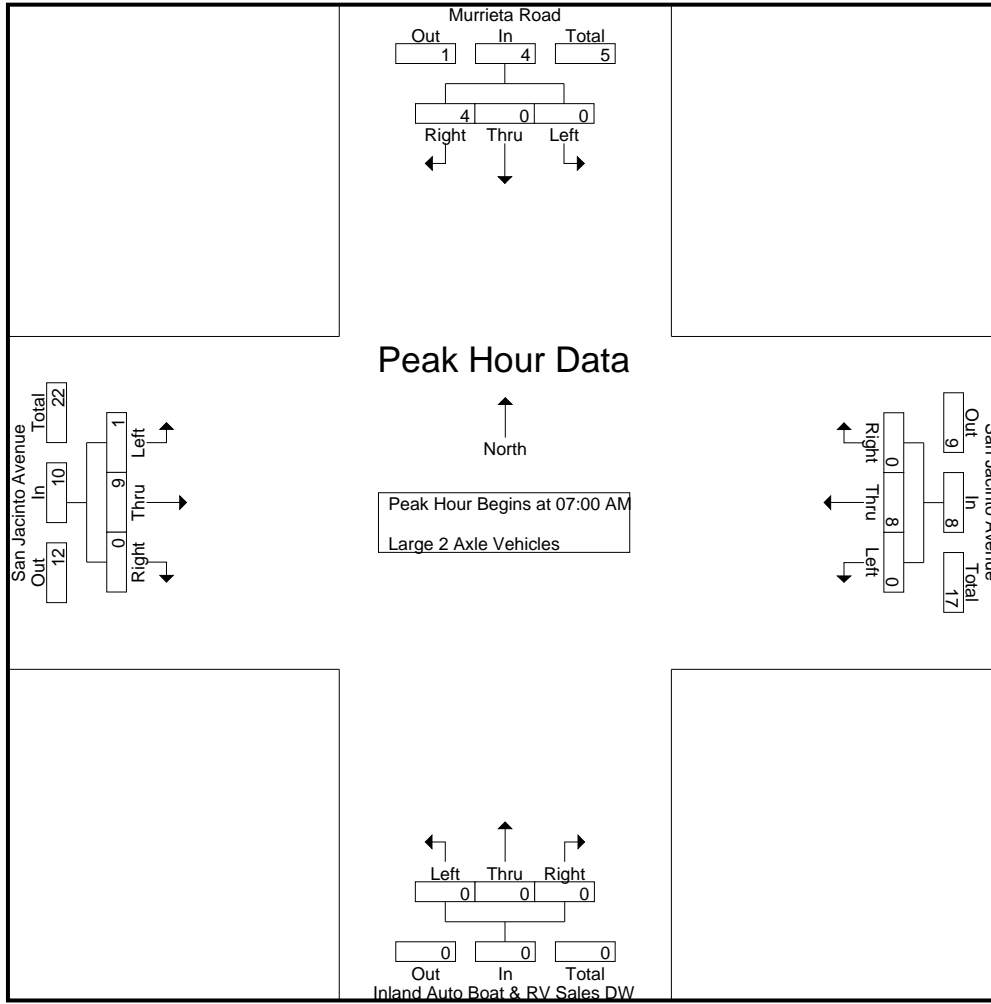
Groups Printed- Large 2 Axle Vehicles

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	2
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
07:30 AM	0	0	2	2	0	1	0	1	0	0	0	0	0	3	0	3	6
07:45 AM	0	0	1	1	0	3	0	3	0	0	0	0	0	3	0	3	7
Total	0	0	4	4	0	8	0	8	0	0	0	0	1	9	0	10	22
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
08:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
08:30 AM	0	0	0	0	0	4	0	4	0	0	0	0	1	3	0	4	8
08:45 AM	0	0	2	2	0	4	0	4	0	0	0	0	0	3	0	3	9
Total	0	0	2	2	0	11	0	11	0	0	0	0	1	11	0	12	25
Grand Total	0	0	6	6	0	19	0	19	0	0	0	0	2	20	0	22	47
Apprch %	0	0	100		0	100	0		0	0	0		9.1	90.9	0		
Total %	0	0	12.8	12.8	0	40.4	0	40.4	0	0	0	0	4.3	42.6	0	46.8	

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	2
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3	7
07:30 AM	0	0	2	2	0	1	0	1	0	0	0	0	0	3	0	3	6
07:45 AM	0	0	1	1	0	3	0	3	0	0	0	0	0	3	0	3	7
Total Volume	0	0	4	4	0	8	0	8	0	0	0	0	1	9	0	10	22
% App. Total	0	0	100		0	100	0		0	0	0		10	90	0		
PHF	.000	.000	.500	.500	.000	.500	.000	.500	.000	.000	.000	.000	.250	.750	.000	.833	.786

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J AM
 Site Code : 05122096
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1
+15 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	3	0	3
+30 mins.	0	0	2	2	0	1	0	1	0	0	0	0	0	3	0	3
+45 mins.	0	0	1	1	0	3	0	3	0	0	0	0	0	3	0	3
Total Volume	0	0	4	4	0	8	0	8	0	0	0	0	1	9	0	10
% App. Total	0	0	100		0	100	0		0	0	0		10	90	0	
PHF	.000	.000	.500	.500	.000	.500	.000	.500	.000	.000	.000	.000	.250	.750	.000	.833

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

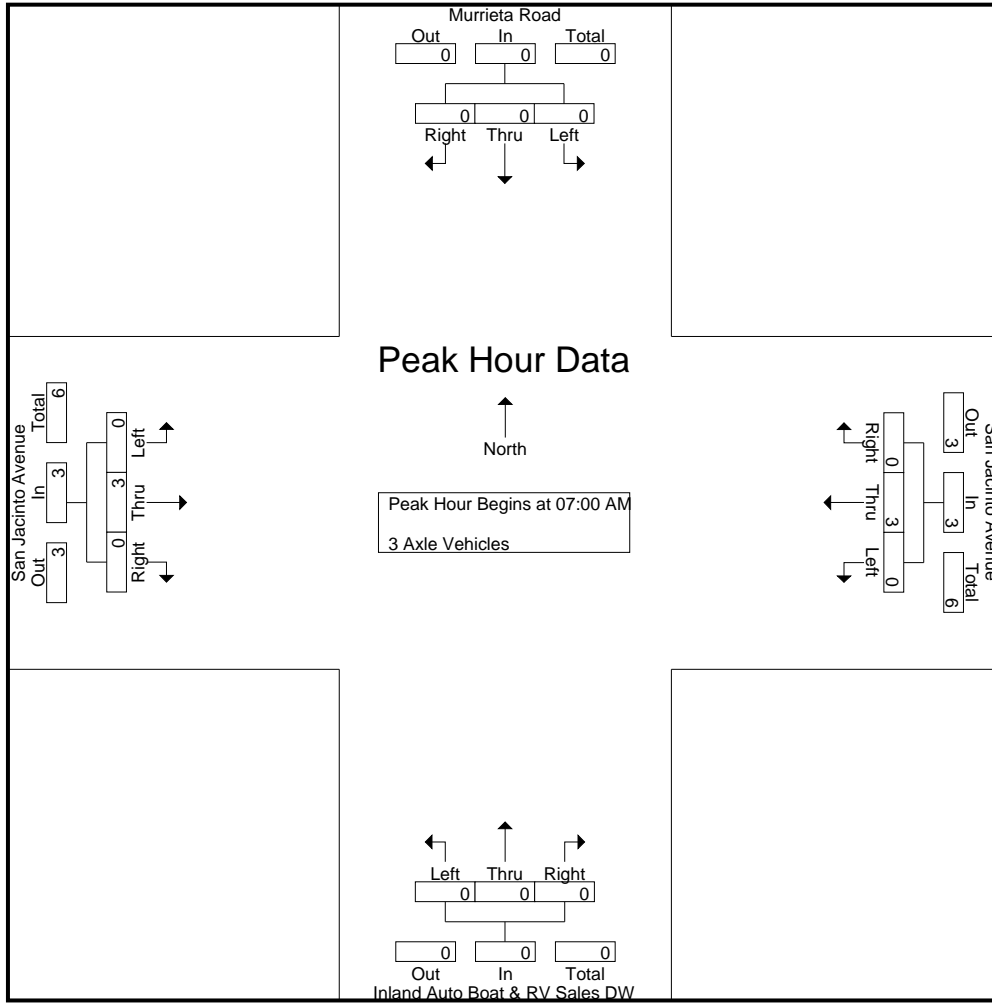
Groups Printed- 3 Axle Vehicles

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
Grand Total	0	0	0	0	0	3	0	3	1	0	0	1	0	4	0	4	8
Apprch %	0	0	0		0	100	0		100	0	0		0	100	0		
Total %	0	0	0		0	37.5	0	37.5	12.5	0	0	12.5	0	50	0	50	

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.375	.000	.375	.750

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

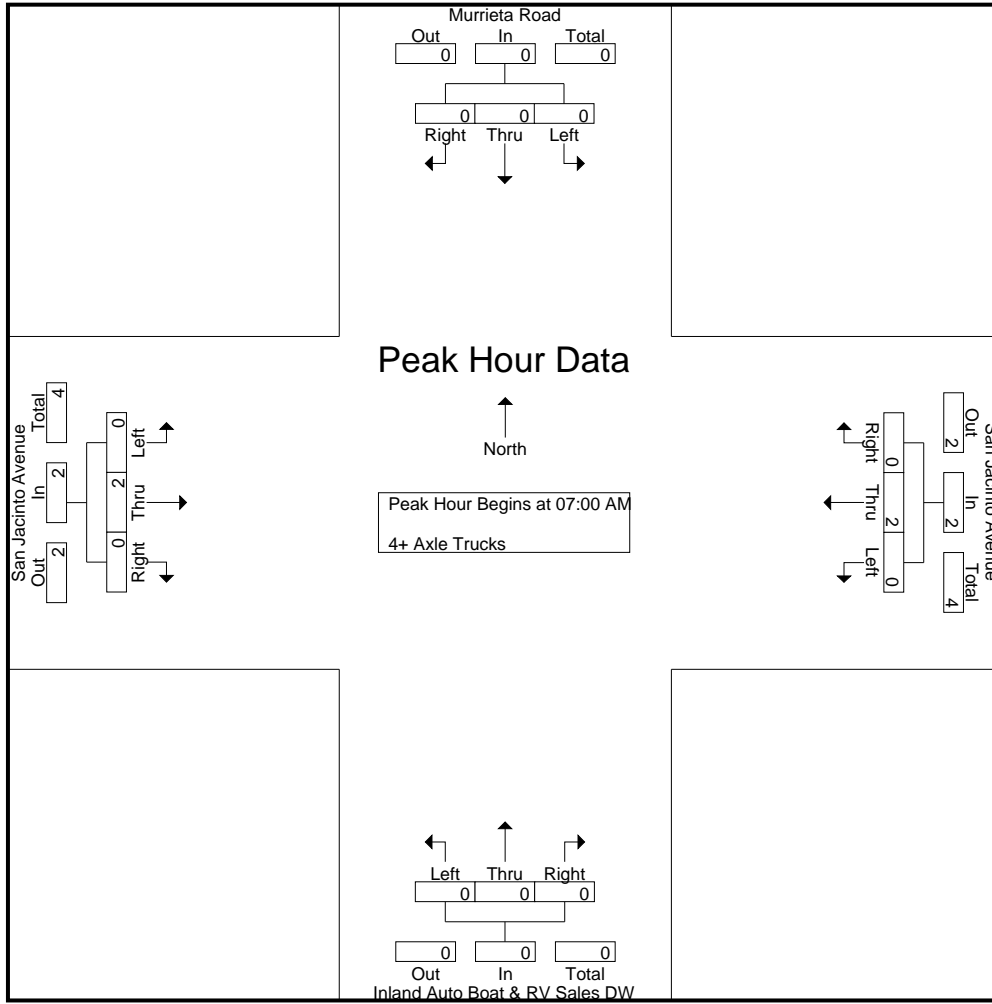
Groups Printed- 4+ Axle Trucks

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	5	5
Grand Total	0	0	0	0	0	2	0	2	0	0	0	0	0	6	1	7	9
Apprch %	0	0	0		0	100	0		0	0	0		0	85.7	14.3		
Total %	0	0	0		0	22.2	0	22.2	0	0	0		0	66.7	11.1	77.8	

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.333

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J AM
 Site Code : 05122096
 Start Date : 2/3/2022
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

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

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

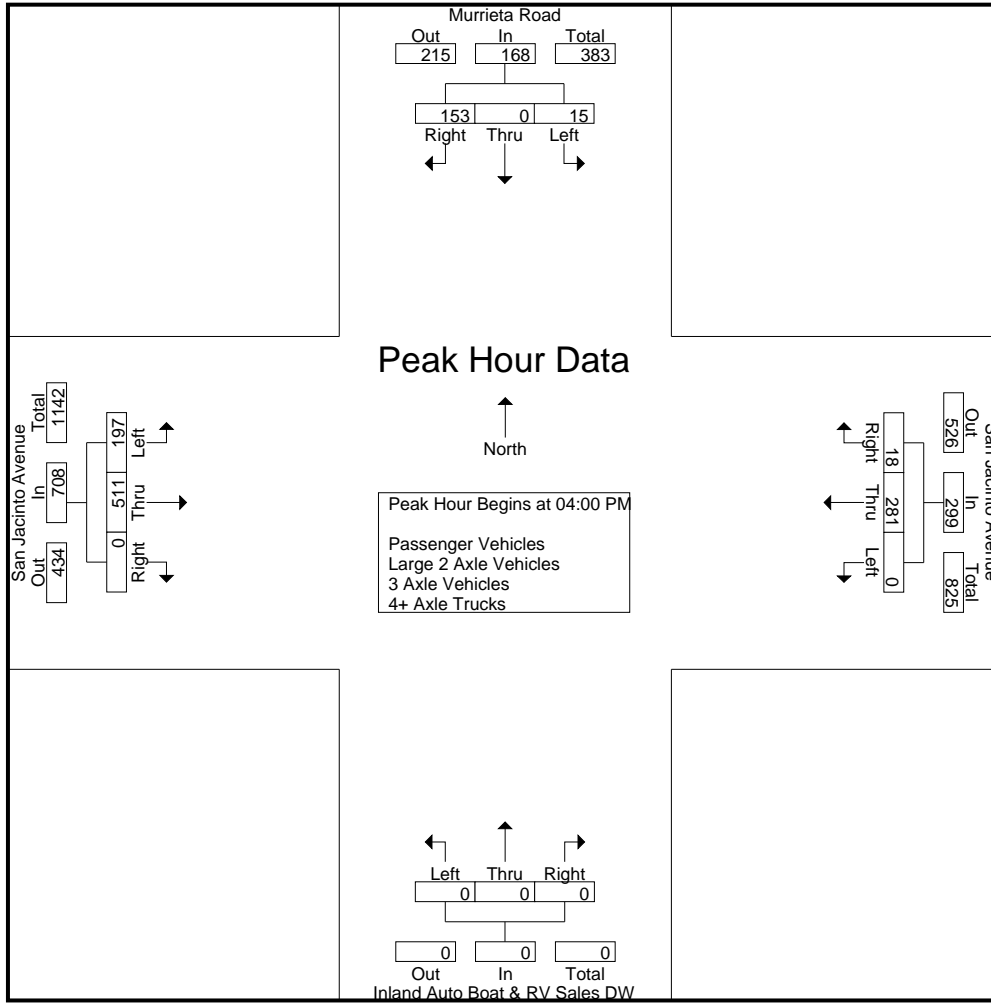
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	3	0	45	48	0	104	2	106	0	0	0	0	43	130	0	173	327
04:15 PM	5	0	38	43	0	63	8	71	0	0	0	0	52	119	0	171	285
04:30 PM	2	0	33	35	0	51	2	53	0	0	0	0	57	131	0	188	276
04:45 PM	5	0	37	42	0	63	6	69	0	0	0	0	45	131	0	176	287
Total	15	0	153	168	0	281	18	299	0	0	0	0	197	511	0	708	1175
05:00 PM	7	0	28	35	0	72	3	75	0	0	0	0	60	130	0	190	300
05:15 PM	1	0	28	29	0	52	3	55	0	0	0	0	53	128	0	181	265
05:30 PM	1	0	34	35	0	60	4	64	0	1	0	1	41	135	0	176	276
05:45 PM	3	0	21	24	0	80	2	82	0	0	0	0	49	107	0	156	262
Total	12	0	111	123	0	264	12	276	0	1	0	1	203	500	0	703	1103
Grand Total	27	0	264	291	0	545	30	575	0	1	0	1	400	1011	0	1411	2278
Apprch %	9.3	0	90.7		0	94.8	5.2		0	100	0		28.3	71.7	0		
Total %	1.2	0	11.6	12.8	0	23.9	1.3	25.2	0	0	0	0	17.6	44.4	0	61.9	
Passenger Vehicles	27	0	258	285	0	520	29	549	0	1	0	1	391	969	0	1360	2195
% Passenger Vehicles	100	0	97.7	97.9	0	95.4	96.7	95.5	0	100	0	100	97.8	95.8	0	96.4	96.4
Large 2 Axle Vehicles	0	0	4	4	0	18	1	19	0	0	0	0	8	40	0	48	71
% Large 2 Axle Vehicles	0	0	1.5	1.4	0	3.3	3.3	3.3	0	0	0	0	2	4	0	3.4	3.1
3 Axle Vehicles	0	0	2	2	0	4	0	4	0	0	0	0	0	1	0	1	7
% 3 Axle Vehicles	0	0	0.8	0.7	0	0.7	0	0.7	0	0	0	0	0	0.1	0	0.1	0.3
4+ Axle Trucks	0	0	0	0	0	3	0	3	0	0	0	0	1	1	0	2	5
% 4+ Axle Trucks	0	0	0	0	0	0.6	0	0.5	0	0	0	0	0.2	0.1	0	0.1	0.2

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	3	0	45	48	0	104	2	106	0	0	0	0	43	130	0	173	327
04:15 PM	5	0	38	43	0	63	8	71	0	0	0	0	52	119	0	171	285
04:30 PM	2	0	33	35	0	51	2	53	0	0	0	0	57	131	0	188	276
04:45 PM	5	0	37	42	0	63	6	69	0	0	0	0	45	131	0	176	287
Total Volume	15	0	153	168	0	281	18	299	0	0	0	0	197	511	0	708	1175
% App. Total	8.9	0	91.1		0	94	6		0	0	0		27.8	72.2	0		
PHF	.750	.000	.850	.875	.000	.675	.563	.705	.000	.000	.000	.000	.864	.975	.000	.941	.898

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



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

	04:00 PM				04:00 PM				04:45 PM				04:30 PM			
+0 mins.	3	0	45	48	0	104	2	106	0	0	0	0	57	131	0	188
+15 mins.	5	0	38	43	0	63	8	71	0	0	0	0	45	131	0	176
+30 mins.	2	0	33	35	0	51	2	53	0	0	0	0	60	130	0	190
+45 mins.	5	0	37	42	0	63	6	69	0	1	0	1	53	128	0	181
Total Volume	15	0	153	168	0	281	18	299	0	1	0	1	215	520	0	735
% App. Total	8.9	0	91.1		0	94	6		0	100	0		29.3	70.7	0	
PHF	.750	.000	.850	.875	.000	.675	.563	.705	.000	.250	.000	.250	.896	.992	.000	.967

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

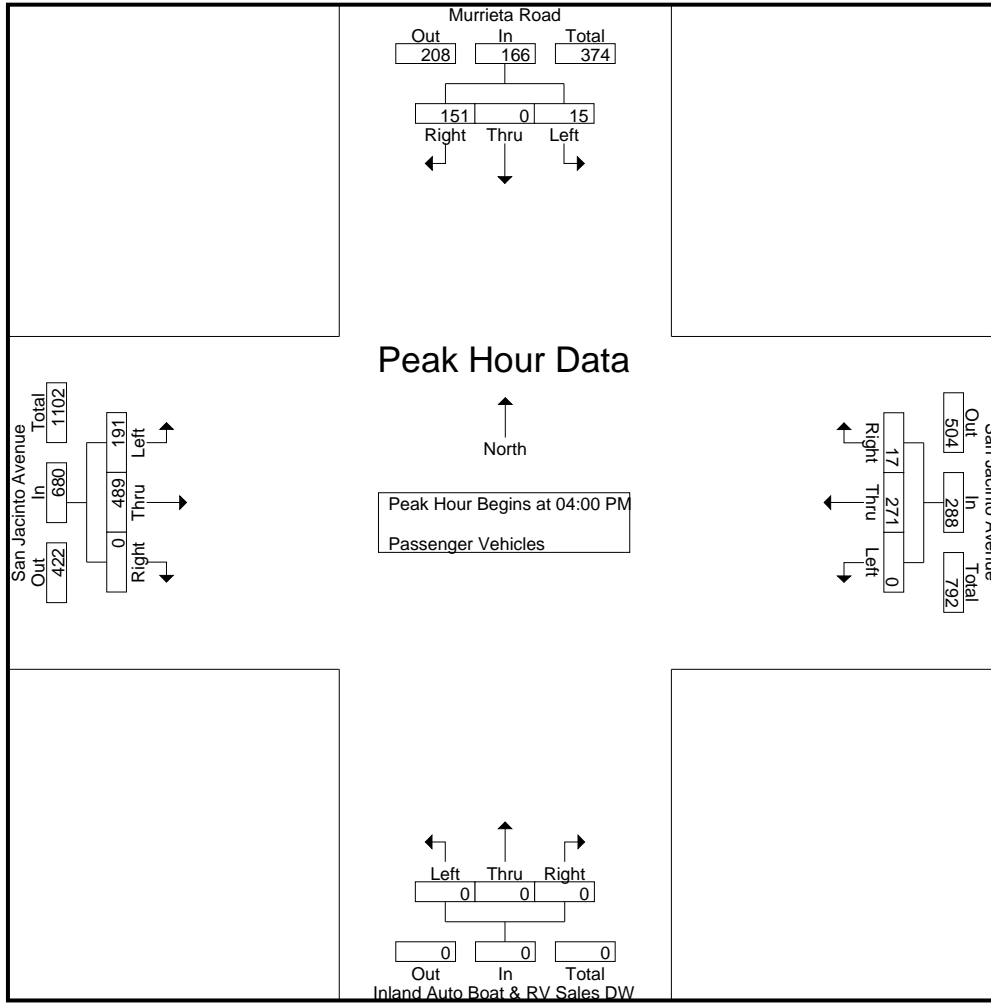
Groups Printed- Passenger Vehicles

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	3	0	44	47	0	99	2	101	0	0	0	0	41	126	0	167	315
04:15 PM	5	0	38	43	0	60	7	67	0	0	0	0	50	115	0	165	275
04:30 PM	2	0	32	34	0	51	2	53	0	0	0	0	56	126	0	182	269
04:45 PM	5	0	37	42	0	61	6	67	0	0	0	0	44	122	0	166	275
Total	15	0	151	166	0	271	17	288	0	0	0	0	191	489	0	680	1134
05:00 PM	7	0	27	34	0	67	3	70	0	0	0	0	59	122	0	181	285
05:15 PM	1	0	28	29	0	52	3	55	0	0	0	0	52	124	0	176	260
05:30 PM	1	0	31	32	0	57	4	61	0	1	0	1	40	128	0	168	262
05:45 PM	3	0	21	24	0	73	2	75	0	0	0	0	49	106	0	155	254
Total	12	0	107	119	0	249	12	261	0	1	0	1	200	480	0	680	1061
Grand Total	27	0	258	285	0	520	29	549	0	1	0	1	391	969	0	1360	2195
Apprch %	9.5	0	90.5		0	94.7	5.3		0	100	0		28.8	71.2	0		
Total %	1.2	0	11.8	13	0	23.7	1.3	25	0	0	0	0	17.8	44.1	0	62	

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	3	0	44	47	0	99	2	101	0	0	0	0	41	126	0	167	315
04:15 PM	5	0	38	43	0	60	7	67	0	0	0	0	50	115	0	165	275
04:30 PM	2	0	32	34	0	51	2	53	0	0	0	0	56	126	0	182	269
04:45 PM	5	0	37	42	0	61	6	67	0	0	0	0	44	122	0	166	275
Total Volume	15	0	151	166	0	271	17	288	0	0	0	0	191	489	0	680	1134
% App. Total	9	0	91		0	94.1	5.9		0	0	0		28.1	71.9	0		
PHF	.750	.000	.858	.883	.000	.684	.607	.713	.000	.000	.000	.000	.853	.970	.000	.934	.900

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	3	0	44	47	0	99	2	101	0	0	0	0	41	126	0	167
+15 mins.	5	0	38	43	0	60	7	67	0	0	0	0	50	115	0	165
+30 mins.	2	0	32	34	0	51	2	53	0	0	0	0	56	126	0	182
+45 mins.	5	0	37	42	0	61	6	67	0	0	0	0	44	122	0	166
Total Volume	15	0	151	166	0	271	17	288	0	0	0	0	191	489	0	680
% App. Total	9	0	91		0	94.1	5.9		0	0	0		28.1	71.9	0	
PHF	.750	.000	.858	.883	.000	.684	.607	.713	.000	.000	.000	.000	.853	.970	.000	.934

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

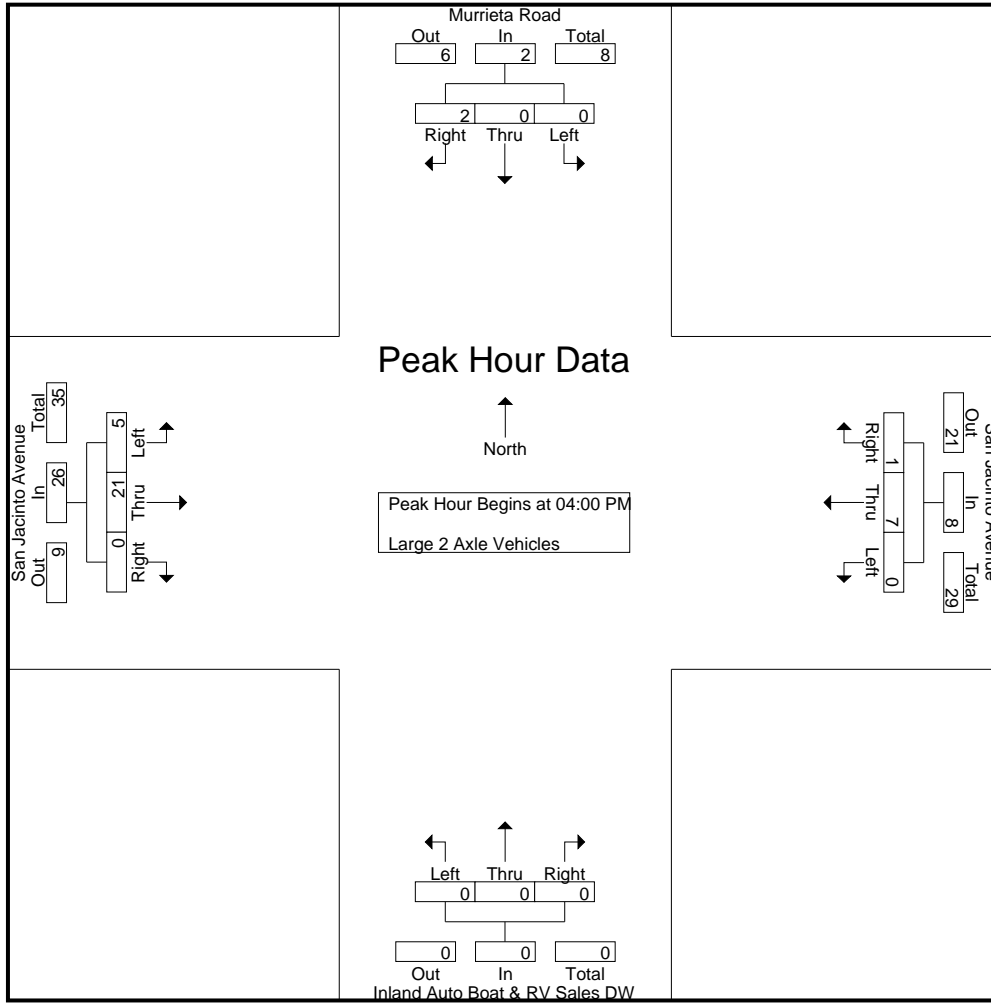
Groups Printed- Large 2 Axle Vehicles

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	1	1	0	4	0	4	0	0	0	0	2	4	0	6	11
04:15 PM	0	0	0	0	0	2	1	3	0	0	0	0	1	3	0	4	7
04:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	5	0	6	7
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	1	9	0	10	11
Total	0	0	2	2	0	7	1	8	0	0	0	0	5	21	0	26	36
05:00 PM	0	0	0	0	0	4	0	4	0	0	0	0	1	7	0	8	12
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	5	5
05:30 PM	0	0	2	2	0	1	0	1	0	0	0	0	1	7	0	8	11
05:45 PM	0	0	0	0	0	6	0	6	0	0	0	0	0	1	0	1	7
Total	0	0	2	2	0	11	0	11	0	0	0	0	3	19	0	22	35
Grand Total	0	0	4	4	0	18	1	19	0	0	0	0	8	40	0	48	71
Apprch %	0	0	100		0	94.7	5.3		0	0	0		16.7	83.3	0		
Total %	0	0	5.6	5.6	0	25.4	1.4	26.8	0	0	0	0	11.3	56.3	0	67.6	

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	1	1	0	4	0	4	0	0	0	0	2	4	0	6	11
04:15 PM	0	0	0	0	0	2	1	3	0	0	0	0	1	3	0	4	7
04:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	1	5	0	6	7
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	1	9	0	10	11
Total Volume	0	0	2	2	0	7	1	8	0	0	0	0	5	21	0	26	36
% App. Total	0	0	100		0	87.5	12.5		0	0	0		19.2	80.8	0		
PHF	.000	.000	.500	.500	.000	.438	.250	.500	.000	.000	.000	.000	.625	.583	.000	.650	.818

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	1	1	0	4	0	4	0	0	0	0	2	4	0	6
+15 mins.	0	0	0	0	0	2	1	3	0	0	0	0	1	3	0	4
+30 mins.	0	0	1	1	0	0	0	0	0	0	0	0	1	5	0	6
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	1	9	0	10
Total Volume	0	0	2	2	0	7	1	8	0	0	0	0	5	21	0	26
% App. Total	0	0	100		0	87.5	12.5		0	0	0		19.2	80.8	0	
PHF	.000	.000	.500	.500	.000	.438	.250	.500	.000	.000	.000	.000	.625	.583	.000	.650

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

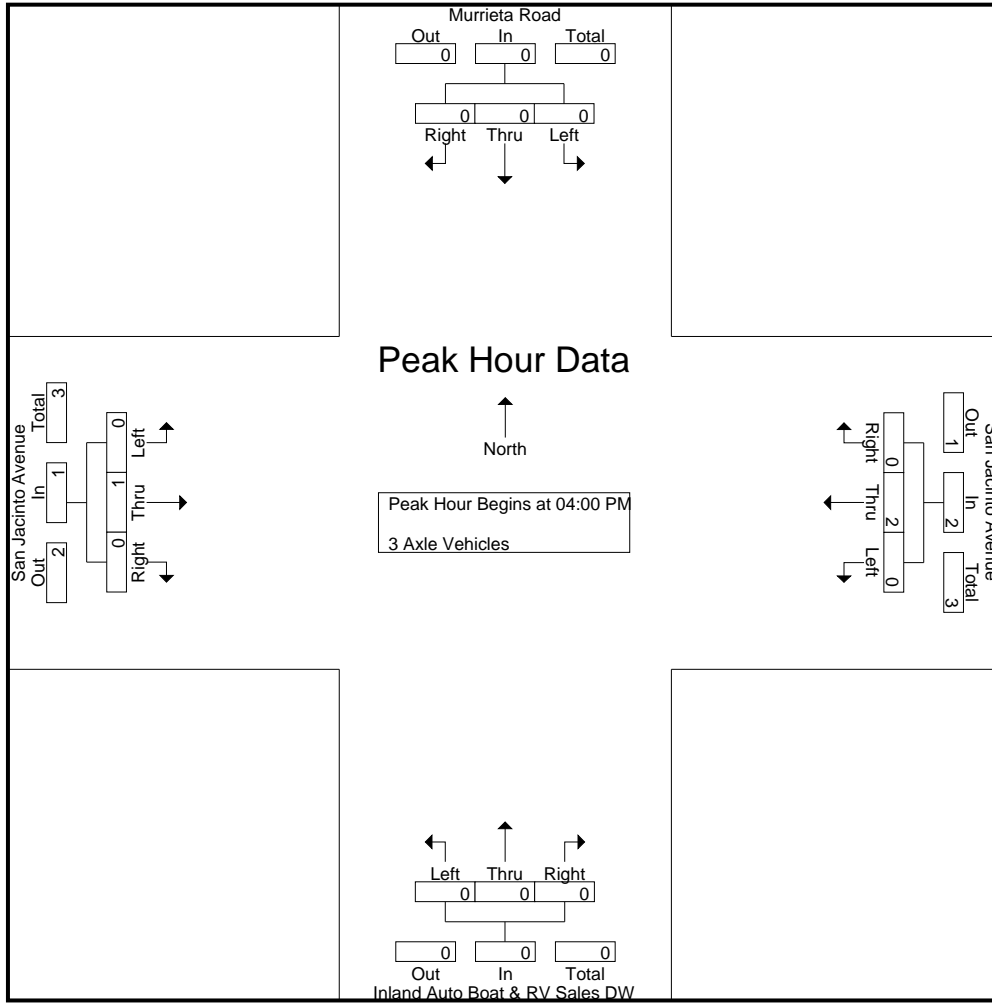
Groups Printed- 3 Axle Vehicles

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3	
05:00 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	2	0	2	0	2	0	0	0	0	0	0	0	0	0	4
Grand Total	0	0	2	2	0	4	0	4	0	0	0	0	0	1	0	1	7	
Apprch %	0	0	100		0	100	0		0	0	0		0	100	0			
Total %	0	0	28.6	28.6	0	57.1	0	57.1	0	0	0	0	0	14.3	0	14.3		

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:00 PM																		
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3	
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0			
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.375	

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
% App. Total	0	0	0	0	0	100	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 1

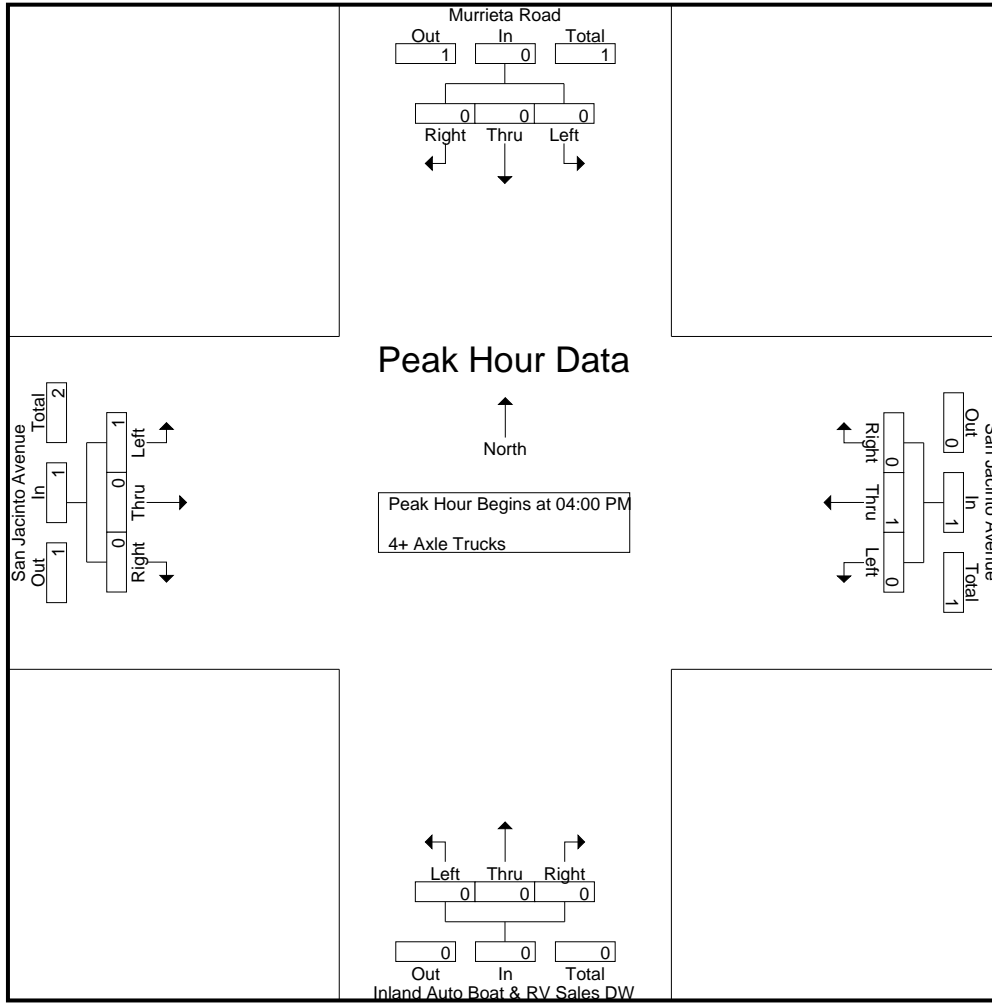
Groups Printed- 4+ Axle Trucks

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Grand Total	0	0	0	0	0	3	0	3	0	0	0	0	1	1	0	2	5
Apprch %	0	0	0		0	100	0		0	0	0		50	50	0		
Total %	0	0	0		0	60	0	60	0	0	0		20	20	0	40	

Start Time	Murrieta Road Southbound				San Jacinto Avenue Westbound				Inland Auto Boat & RV Sales DW Northbound				San Jacinto Avenue Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	2
% App. Total	0	0	0		0	100	0		0	0	0		100	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250	.000	.000	.250	.500

City of Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue
 Weather: Clear

File Name : 04_PER_Mur_San J PM
 Site Code : 05122096
 Start Date : 2/3/2022
 Page No : 2



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

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

Location: Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue



Date: 2/3/2022
 Day: Thursday

PEDESTRIANS

	North Leg Murrieta Road	East Leg San Jacinto Avenue	South Leg Inland RV DW	West Leg San Jacinto 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 Murrieta Road	East Leg San Jacinto Avenue	South Leg Inland RV DW	West Leg San Jacinto 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

Location: Perris
 N/S: Murrieta Road
 E/W: San Jacinto Avenue



Date: 2/3/2022
 Day: Thursday

BICYCLES

	Southbound Murrieta Road			Westbound San Jacinto Avenue			Northbound Inland RV DW			Eastbound San Jacinto 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 Murrieta Road			Westbound San Jacinto Avenue			Northbound Inland RV DW			Eastbound San Jacinto Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.

County of Riverside
 Wilson Avenue
 N/ Dale Street
 24 Hour Directional Classification Count

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

CRV001
 Site Code: 051-22121

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/10/22	0	12	1	0	0	0	0	0	0	0	0	0	0	13
01:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
02:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
03:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
04:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
05:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
06:00	0	26	4	0	0	0	0	0	0	0	0	0	0	30
07:00	0	98	9	0	0	0	0	0	0	0	0	0	0	107
08:00	0	52	5	0	0	0	0	0	0	0	0	0	0	57
09:00	0	26	7	0	0	0	0	0	0	0	0	0	0	33
10:00	0	21	4	0	1	0	0	0	0	0	0	0	0	26
11:00	0	37	11	0	1	2	0	0	0	0	0	0	0	51
12 PM	0	39	15	0	0	0	0	0	0	0	0	0	0	54
13:00	0	67	15	1	0	0	0	0	0	0	0	0	0	83
14:00	0	94	17	0	1	0	0	0	0	0	0	0	0	112
15:00	0	85	14	0	0	0	0	0	0	0	0	0	0	99
16:00	0	85	16	0	0	0	0	0	0	0	0	0	0	101
17:00	1	90	22	0	0	0	0	0	0	0	0	0	0	113
18:00	1	63	6	0	2	0	0	0	0	0	0	0	0	72
19:00	0	75	9	0	0	0	0	0	0	0	0	0	0	84
20:00	0	43	3	0	1	0	0	0	0	0	0	0	0	47
21:00	0	37	8	0	0	0	0	0	0	0	0	0	0	45
22:00	0	27	0	0	0	0	0	0	0	0	0	0	0	27
23:00	0	21	0	0	0	0	0	0	0	0	0	0	0	21
Total	2	1042	166	1	6	2	0	0	0	0	0	0	0	1219
Percent	0.2%	85.5%	13.6%	0.1%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak		07:00	11:00		10:00	11:00								07:00
Vol.		98	11		1	2								107
PM Peak	17:00	14:00	17:00	13:00	18:00									17:00
Vol.	1	94	22	1	2									113
Grand Total	2	1042	166	1	6	2	0	0	0	0	0	0	0	1219
Percent	0.2%	85.5%	13.6%	0.1%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

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CRV001
 Site Code: 051-22121

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/10/22	0	13	0	0	0	0	0	0	0	0	0	0	0	13
01:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
02:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	9	3	0	2	0	0	0	0	0	0	0	0	14
04:00	0	34	7	0	0	0	0	0	0	0	0	0	0	41
05:00	1	30	8	0	1	0	0	0	0	0	0	0	0	40
06:00	0	42	13	2	0	0	0	0	1	0	0	0	0	58
07:00	1	130	8	3	1	0	0	0	0	0	0	0	0	143
08:00	0	68	7	1	0	1	0	0	0	0	0	0	0	77
09:00	0	34	5	0	2	0	0	0	0	0	0	0	0	41
10:00	0	38	4	0	1	0	0	0	0	0	0	0	0	43
11:00	0	41	14	0	0	0	0	0	0	0	0	0	0	55
12 PM	0	47	11	0	0	0	0	0	0	0	0	0	0	58
13:00	0	56	12	0	1	0	1	0	0	0	0	0	0	70
14:00	0	80	15	4	0	0	0	0	0	0	0	0	0	99
15:00	0	71	13	0	1	0	0	0	0	0	0	0	0	85
16:00	0	63	15	1	1	0	0	0	0	0	0	0	0	80
17:00	1	62	8	0	0	0	0	0	0	0	0	0	0	71
18:00	0	57	9	0	0	0	0	0	0	0	0	0	0	66
19:00	0	49	11	0	0	0	0	0	0	0	0	0	0	60
20:00	0	44	7	0	1	0	0	0	0	0	0	0	0	52
21:00	0	13	2	0	0	0	0	0	0	0	0	0	0	15
22:00	0	15	0	0	0	0	0	0	0	0	0	0	0	15
23:00	0	18	0	0	0	0	0	0	0	0	0	0	0	18
Total	3	1024	172	11	11	1	1	0	1	0	0	0	0	1224
Percent	0.2%	83.7%	14.1%	0.9%	0.9%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	07:00	11:00	07:00	03:00	08:00			06:00					07:00
Vol.	1	130	14	3	2	1			1					143
PM Peak	17:00	14:00	14:00	14:00	13:00		13:00							14:00
Vol.	1	80	15	4	1		1							99
Grand Total	3	1024	172	11	11	1	1	0	1	0	0	0	0	1224
Percent	0.2%	83.7%	14.1%	0.9%	0.9%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	

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CRV001
 Site Code: 051-22121

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/10/22	0	25	1	0	0	0	0	0	0	0	0	0	0	26
01:00	0	18	0	0	0	0	0	0	0	0	0	0	0	18
02:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
03:00	0	14	3	0	2	0	0	0	0	0	0	0	0	19
04:00	0	41	7	0	0	0	0	0	0	0	0	0	0	48
05:00	1	42	8	0	1	0	0	0	0	0	0	0	0	52
06:00	0	68	17	2	0	0	0	0	1	0	0	0	0	88
07:00	1	228	17	3	1	0	0	0	0	0	0	0	0	250
08:00	0	120	12	1	0	1	0	0	0	0	0	0	0	134
09:00	0	60	12	0	2	0	0	0	0	0	0	0	0	74
10:00	0	59	8	0	2	0	0	0	0	0	0	0	0	69
11:00	0	78	25	0	1	2	0	0	0	0	0	0	0	106
12 PM	0	86	26	0	0	0	0	0	0	0	0	0	0	112
13:00	0	123	27	1	1	0	1	0	0	0	0	0	0	153
14:00	0	174	32	4	1	0	0	0	0	0	0	0	0	211
15:00	0	156	27	0	1	0	0	0	0	0	0	0	0	184
16:00	0	148	31	1	1	0	0	0	0	0	0	0	0	181
17:00	2	152	30	0	0	0	0	0	0	0	0	0	0	184
18:00	1	120	15	0	2	0	0	0	0	0	0	0	0	138
19:00	0	124	20	0	0	0	0	0	0	0	0	0	0	144
20:00	0	87	10	0	2	0	0	0	0	0	0	0	0	99
21:00	0	50	10	0	0	0	0	0	0	0	0	0	0	60
22:00	0	42	0	0	0	0	0	0	0	0	0	0	0	42
23:00	0	39	0	0	0	0	0	0	0	0	0	0	0	39
Total	5	2066	338	12	17	3	1	0	1	0	0	0	0	2443
Percent	0.2%	84.6%	13.8%	0.5%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	07:00	11:00	07:00	03:00	11:00			06:00					07:00
Vol.	1	228	25	3	2	2			1					250
PM Peak	17:00	14:00	14:00	14:00	18:00		13:00							14:00
Vol.	2	174	32	4	2		1							211
Grand Total	5	2066	338	12	17	3	1	0	1	0	0	0	0	2443
Percent	0.2%	84.6%	13.8%	0.5%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

County of Riverside
 Murrieta Road
 N/ Dale Street
 24 Hour Directional Classification Count

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 email: counts@countsunlimited.com

CRV002
 Site Code: 051-22121

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/10/22	0	24	3	0	0	0	0	0	0	0	0	0	0	27
01:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
02:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
03:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
05:00	0	11	1	0	1	0	0	0	0	0	0	0	0	13
06:00	0	50	11	0	1	0	0	0	0	0	0	0	0	62
07:00	0	194	22	0	0	0	0	1	0	0	0	0	0	217
08:00	0	93	25	1	0	0	0	1	0	0	0	0	0	120
09:00	0	64	12	0	1	0	0	0	0	0	0	0	0	77
10:00	0	47	12	1	1	0	0	0	0	0	0	0	0	61
11:00	0	54	17	0	1	0	0	0	1	0	0	0	0	73
12 PM	0	67	16	1	0	0	0	1	0	0	0	0	0	85
13:00	2	99	27	1	2	2	0	0	0	0	0	0	0	133
14:00	1	158	15	0	2	2	0	0	0	0	0	0	0	178
15:00	0	134	46	0	4	1	0	0	1	0	0	0	0	186
16:00	0	163	41	1	0	0	0	0	0	0	0	0	0	205
17:00	2	191	33	0	0	0	0	0	0	0	0	0	0	226
18:00	0	142	20	1	0	0	0	0	0	0	0	0	0	163
19:00	0	128	27	0	1	0	0	0	1	0	0	0	0	157
20:00	1	94	8	0	0	0	0	0	0	0	0	0	0	103
21:00	0	59	6	0	0	0	0	0	0	0	0	0	0	65
22:00	0	40	0	0	0	0	0	0	0	0	0	0	0	40
23:00	0	26	3	0	1	0	0	0	0	0	0	0	0	30
Total	6	1864	346	6	15	5	0	3	3	0	0	0	0	2248
Percent	0.3%	82.9%	15.4%	0.3%	0.7%	0.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak		07:00	08:00	08:00	05:00			07:00	11:00					07:00
Vol.		194	25	1	1			1	1					217
PM Peak	13:00	17:00	15:00	12:00	15:00	13:00		12:00	15:00					17:00
Vol.	2	191	46	1	4	2		1	1					226
Grand Total	6	1864	346	6	15	5	0	3	3	0	0	0	0	2248
Percent	0.3%	82.9%	15.4%	0.3%	0.7%	0.2%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	

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 email: counts@countsunlimited.com

CRV002
 Site Code: 051-22121

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/10/22	0	9	2	0	0	0	0	0	0	0	0	0	0	11
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	16	3	0	0	0	0	0	0	0	0	0	0	19
04:00	0	35	10	0	0	0	0	0	0	0	0	0	0	45
05:00	1	59	17	0	3	0	0	0	0	0	0	0	0	80
06:00	0	101	33	0	2	0	0	0	0	0	0	0	0	136
07:00	0	205	34	1	1	0	0	0	0	0	0	0	0	241
08:00	0	143	16	1	1	0	0	0	0	0	0	0	0	161
09:00	0	74	16	0	1	0	0	1	0	0	0	0	0	92
10:00	0	66	15	0	0	0	0	0	0	0	0	0	0	81
11:00	0	43	12	0	1	1	0	0	0	0	0	0	0	57
12 PM	0	58	11	0	1	1	0	0	0	0	0	0	0	71
13:00	3	84	17	0	3	1	0	0	0	0	0	0	0	108
14:00	1	159	28	0	1	1	0	0	1	0	0	0	0	191
15:00	1	134	22	1	2	0	0	1	0	0	0	0	0	161
16:00	0	140	25	0	4	2	0	0	0	0	0	0	0	171
17:00	0	94	24	0	0	1	0	0	0	0	0	0	0	119
18:00	1	97	18	0	0	0	0	0	0	0	0	0	0	116
19:00	0	54	18	0	0	0	0	0	0	0	0	0	0	72
20:00	0	53	21	0	0	0	0	0	0	0	0	0	0	74
21:00	0	35	11	0	0	0	0	0	0	0	0	0	0	46
22:00	0	20	6	0	0	0	0	0	0	0	0	0	0	26
23:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
Total	7	1693	361	3	20	7	0	2	1	0	0	0	0	2094
Percent	0.3%	80.9%	17.2%	0.1%	1.0%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	07:00	07:00	07:00	05:00	11:00		09:00						07:00
Vol.	1	205	34	1	3	1		1						241
PM Peak	13:00	14:00	14:00	15:00	16:00	16:00		15:00	14:00					14:00
Vol.	3	159	28	1	4	2		1	1					191
Grand Total	7	1693	361	3	20	7	0	2	1	0	0	0	0	2094
Percent	0.3%	80.9%	17.2%	0.1%	1.0%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

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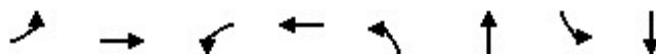
Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/10/22	0	33	5	0	0	0	0	0	0	0	0	0	0	38
01:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
02:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
03:00	0	20	3	0	0	0	0	0	0	0	0	0	0	23
04:00	0	43	10	0	0	0	0	0	0	0	0	0	0	53
05:00	1	70	18	0	4	0	0	0	0	0	0	0	0	93
06:00	0	151	44	0	3	0	0	0	0	0	0	0	0	198
07:00	0	399	56	1	1	0	0	1	0	0	0	0	0	458
08:00	0	236	41	2	1	0	0	1	0	0	0	0	0	281
09:00	0	138	28	0	2	0	0	1	0	0	0	0	0	169
10:00	0	113	27	1	1	0	0	0	0	0	0	0	0	142
11:00	0	97	29	0	2	1	0	0	1	0	0	0	0	130
12 PM	0	125	27	1	1	1	0	1	0	0	0	0	0	156
13:00	5	183	44	1	5	3	0	0	0	0	0	0	0	241
14:00	2	317	43	0	3	3	0	0	1	0	0	0	0	369
15:00	1	268	68	1	6	1	0	1	1	0	0	0	0	347
16:00	0	303	66	1	4	2	0	0	0	0	0	0	0	376
17:00	2	285	57	0	0	1	0	0	0	0	0	0	0	345
18:00	1	239	38	1	0	0	0	0	0	0	0	0	0	279
19:00	0	182	45	0	1	0	0	0	1	0	0	0	0	229
20:00	1	147	29	0	0	0	0	0	0	0	0	0	0	177
21:00	0	94	17	0	0	0	0	0	0	0	0	0	0	111
22:00	0	60	6	0	0	0	0	0	0	0	0	0	0	66
23:00	0	35	5	0	1	0	0	0	0	0	0	0	0	41
Total	13	3557	707	9	35	12	0	5	4	0	0	0	0	4342
Percent	0.3%	81.9%	16.3%	0.2%	0.8%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	05:00	07:00	07:00	08:00	05:00	11:00		07:00	11:00					07:00
Vol.	1	399	56	2	4	1		1	1					458
PM Peak	13:00	14:00	15:00	12:00	15:00	13:00		12:00	14:00					16:00
Vol.	5	317	68	1	6	3		1	1					376
Grand Total	13	3557	707	9	35	12	0	5	4	0	0	0	0	4342
Percent	0.3%	81.9%	16.3%	0.2%	0.8%	0.3%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	

APPENDIX 3.2: EXISTING (2022) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Timings
1: Redlands Av & Dale St

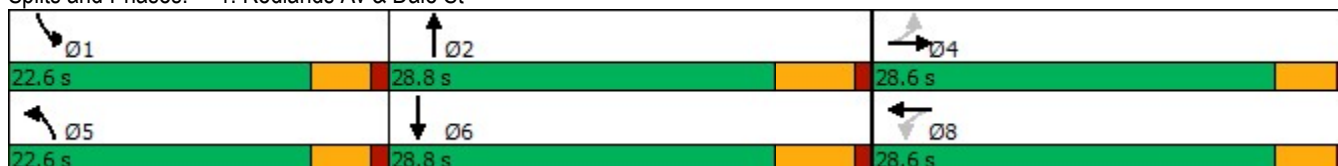


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↗	↕	↗	↕
Traffic Volume (vph)	40	6	46	23	78	319	29	449
Future Volume (vph)	40	6	46	23	78	319	29	449
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	28.6	28.6	28.6	28.6	22.6	28.6	22.6	24.8
Total Split (s)	28.6	28.6	28.6	28.6	22.6	28.8	22.6	28.8
Total Split (%)	35.8%	35.8%	35.8%	35.8%	28.3%	36.0%	28.3%	36.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		10.7		10.7	7.8	28.8	6.2	22.8
Actuated g/C Ratio		0.22		0.22	0.16	0.59	0.13	0.46
v/c Ratio		0.34		0.41	0.35	0.21	0.16	0.46
Control Delay		12.6		16.9	26.2	9.9	26.8	14.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		12.6		16.9	26.2	9.9	26.8	14.8
LOS		B		B	C	A	C	B
Approach Delay		12.6		16.9		13.0		15.4
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 49.2
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.46
 Intersection Signal Delay: 14.5
 Intersection Capacity Utilization 42.5%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 1: Redlands Av & Dale St



HCM 6th Signalized Intersection Summary
 1: Redlands Av & Dale St

Prairie View Apartments (JN 13747)
 05/27/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↔		↔	↔	
Traffic Volume (veh/h)	40	6	53	46	23	51	78	319	18	29	449	142
Future Volume (veh/h)	40	6	53	46	23	51	78	319	18	29	449	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	50	8	66	58	29	64	98	399	22	36	561	178
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	36	130	218	63	103	156	1316	72	75	900	285
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.09	0.38	0.38	0.04	0.34	0.34
Sat Flow, veh/h	528	241	875	518	425	694	1781	3425	188	1781	2656	840
Grp Volume(v), veh/h	124	0	0	151	0	0	98	206	215	36	375	364
Grp Sat Flow(s),veh/h/ln	1644	0	0	1637	0	0	1781	1777	1836	1781	1777	1719
Q Serve(g_s), s	0.0	0.0	0.0	0.6	0.0	0.0	1.9	2.9	2.9	0.7	6.2	6.3
Cycle Q Clear(g_c), s	2.3	0.0	0.0	2.9	0.0	0.0	1.9	2.9	2.9	0.7	6.2	6.3
Prop In Lane	0.40		0.53	0.38		0.42	1.00		0.10	1.00		0.49
Lane Grp Cap(c), veh/h	387	0	0	384	0	0	156	683	706	75	602	583
V/C Ratio(X)	0.32	0.00	0.00	0.39	0.00	0.00	0.63	0.30	0.30	0.48	0.62	0.63
Avail Cap(c_a), veh/h	1169	0	0	1190	0	0	908	1158	1197	908	1158	1120
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	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	0.0	0.0	14.0	0.0	0.0	15.6	7.6	7.6	16.5	9.8	9.8
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.7	0.0	0.0	1.6	0.2	0.2	1.8	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	1.0	0.0	0.0	0.6	0.6	0.6	0.3	1.6	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.2	0.0	0.0	14.6	0.0	0.0	17.1	7.8	7.8	18.3	10.8	10.9
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	B	B
Approach Vol, veh/h		124			151			519			775	
Approach Delay, s/veh		14.2			14.6			9.6			11.2	
Approach LOS		B			B			A			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	19.4		9.8	7.7	17.8		9.8				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	18.0	23.0		24.0	18.0	23.0		24.0				
Max Q Clear Time (g_c+I1), s	2.7	4.9		4.3	3.9	8.3		4.9				
Green Ext Time (p_c), s	0.0	2.0		0.6	0.1	3.7		0.8				
Intersection Summary												
HCM 6th Ctrl Delay				11.2								
HCM 6th LOS				B								

Timings
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

05/27/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↖↗
Traffic Volume (vph)	77	18	108	616	61	41	91	363	481	52	456
Future Volume (vph)	77	18	108	616	61	41	91	363	481	52	456
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	36.8	36.8	9.6	30.8	30.8	9.6	32.1	32.1	9.6	32.1
Total Split (s)	11.3	36.8	36.8	28.0	53.5	53.5	12.0	34.3	34.3	10.9	33.2
Total Split (%)	10.3%	33.5%	33.5%	25.5%	48.6%	48.6%	10.9%	31.2%	31.2%	9.9%	30.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.1	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.1	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	6.7	13.4	13.4	22.6	31.8	31.8	7.6	23.1	23.1	6.3	19.3
Actuated g/C Ratio	0.08	0.16	0.16	0.27	0.38	0.38	0.09	0.28	0.28	0.08	0.23
v/c Ratio	0.32	0.07	0.32	0.76	0.10	0.07	0.64	0.42	0.66	0.44	0.72
Control Delay	43.6	30.8	4.6	35.9	19.1	0.2	60.1	28.2	7.0	52.5	35.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.6	30.8	4.6	35.9	19.1	0.2	60.1	28.2	7.0	52.5	35.2
LOS	D	C	A	D	B	A	E	C	A	D	D
Approach Delay		21.8			32.5			20.4			36.8
Approach LOS		C			C			C			D

Intersection Summary

Cycle Length: 110

Actuated Cycle Length: 83.5

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 27.9

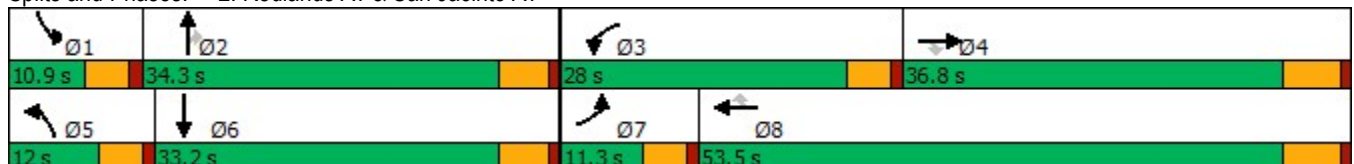
Intersection LOS: C

Intersection Capacity Utilization 57.0%

ICU Level of Service B

Analysis Period (min) 15





























Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

05/27/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 				 			 	
Traffic Volume (veh/h)	77	18	108	616	61	41	91	363	481	52	456	59
Future Volume (veh/h)	77	18	108	616	61	41	91	363	481	52	456	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	88	20	22	700	69	20	103	412	369	59	518	59
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	262	222	841	610	517	132	1025	457	86	844	96
Arrive On Green	0.06	0.14	0.14	0.24	0.33	0.33	0.07	0.29	0.29	0.05	0.26	0.26
Sat Flow, veh/h	3456	1870	1585	3456	1870	1584	1781	3554	1585	1781	3216	365
Grp Volume(v), veh/h	88	20	22	700	69	20	103	412	369	59	285	292
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1584	1781	1777	1585	1781	1777	1804
Q Serve(g_s), s	1.8	0.7	0.9	13.8	1.9	0.6	4.1	6.7	15.5	2.3	10.1	10.2
Cycle Q Clear(g_c), s	1.8	0.7	0.9	13.8	1.9	0.6	4.1	6.7	15.5	2.3	10.1	10.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	199	262	222	841	610	517	132	1025	457	86	466	473
V/C Ratio(X)	0.44	0.08	0.10	0.83	0.11	0.04	0.78	0.40	0.81	0.69	0.61	0.62
Avail Cap(c_a), veh/h	322	807	684	1125	1241	1051	183	1443	644	156	695	705
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	26.9	26.9	25.8	16.9	16.5	32.7	20.6	23.7	33.7	23.3	23.3
Incr Delay (d2), s/veh	1.5	0.1	0.2	4.1	0.1	0.0	13.3	0.3	5.1	9.4	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.3	0.3	5.5	0.7	0.2	2.2	2.6	5.8	1.2	4.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.3	27.0	27.1	29.9	17.0	16.6	46.0	20.8	28.9	43.1	24.6	24.6
LnGrp LOS	C	C	C	C	B	B	D	C	C	D	C	C
Approach Vol, veh/h		130			789			884			636	
Approach Delay, s/veh		32.0			28.4			27.1			26.3	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	25.8	22.1	15.9	9.9	24.0	8.7	29.3				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	6.3	29.2	23.4	31.0	7.4	28.1	6.7	47.7				
Max Q Clear Time (g_c+I1), s	4.3	17.5	15.8	2.9	6.1	12.2	3.8	3.9				
Green Ext Time (p_c), s	0.0	3.1	1.7	0.1	0.0	2.8	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay				27.6								
HCM 6th LOS				C								

Timings
3: Redlands Av & I-215 NB Ramps

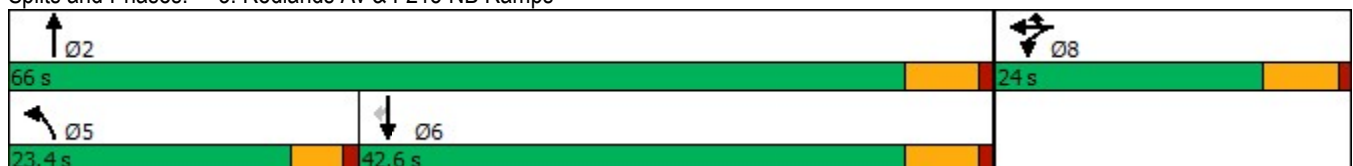


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	299	2	267	142	668	975	205
Future Volume (vph)	299	2	267	142	668	975	205
Turn Type	Split	NA	Prot	Prot	NA	NA	Perm
Protected Phases	8	8	8	5	2	6	
Permitted Phases							6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	9.5	11.0	31.0	31.0
Total Split (s)	24.0	24.0	24.0	23.4	66.0	42.6	42.6
Total Split (%)	26.7%	26.7%	26.7%	26.0%	73.3%	47.3%	47.3%
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.5	6.0	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min
Act Effect Green (s)	13.7	13.7	13.7	8.6	35.2	21.9	21.9
Actuated g/C Ratio	0.22	0.22	0.22	0.14	0.57	0.36	0.36
v/c Ratio	0.59	0.57	0.41	0.33	0.37	0.48	0.32
Control Delay	30.2	24.9	6.9	28.7	7.8	16.2	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.2	24.9	6.9	28.7	7.9	16.2	3.7
LOS	C	C	A	C	A	B	A
Approach Delay		21.1			11.5	14.0	
Approach LOS		C			B	B	

Intersection Summary

Cycle Length: 90	
Actuated Cycle Length: 61.4	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 14.8	Intersection LOS: B
Intersection Capacity Utilization 43.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Redlands Av & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 3: Redlands Av & I-215 NB Ramps

Prairie View Apartments (JN 13747)
 05/27/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↔	↗	↙↗	↕			↑↑↑	↗
Traffic Volume (veh/h)	0	0	0	299	2	267	142	668	0	0	975	205
Future Volume (veh/h)	0	0	0	299	2	267	142	668	0	0	975	205
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				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				379	0	91	160	751	0	0	1096	139
Peak Hour Factor				0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				604	0	269	327	2023	0	0	2424	597
Arrive On Green				0.17	0.00	0.17	0.09	0.57	0.00	0.00	0.38	0.38
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	6696	1585
Grp Volume(v), veh/h				379	0	91	160	751	0	0	1096	139
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1609	1585
Q Serve(g_s), s				4.5	0.0	2.3	2.0	5.3	0.0	0.0	5.9	2.8
Cycle Q Clear(g_c), s				4.5	0.0	2.3	2.0	5.3	0.0	0.0	5.9	2.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				604	0	269	327	2023	0	0	2424	597
V/C Ratio(X)				0.63	0.00	0.34	0.49	0.37	0.00	0.00	0.45	0.23
Avail Cap(c_a), veh/h				1395	0	621	1421	4639	0	0	5123	1262
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.7	0.0	16.8	19.8	5.4	0.0	0.0	10.8	9.8
Incr Delay (d2), s/veh				1.1	0.0	0.7	1.1	0.1	0.0	0.0	0.1	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.6	0.0	0.7	0.8	1.2	0.0	0.0	1.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				18.8	0.0	17.6	20.9	5.5	0.0	0.0	10.9	10.0
LnGrp LOS				B	A	B	C	A	A	A	B	A
Approach Vol, veh/h					470			911			1235	
Approach Delay, s/veh					18.6			8.2			10.8	
Approach LOS					B			A			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		32.2			8.9	23.3		13.8				
Change Period (Y+Rc), s		6.0			4.5	6.0		6.0				
Max Green Setting (Gmax), s		60.0			18.9	36.6		18.0				
Max Q Clear Time (g_c+I1), s		7.3			4.0	7.9		6.5				
Green Ext Time (p_c), s		6.0			0.4	9.4		1.3				

Intersection Summary

HCM 6th Ctrl Delay	11.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Timings
4: Redlands Av & I-215 SB Ramps



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	120	0	134	690	249	431	843
Future Volume (vph)	120	0	134	690	249	431	843
Turn Type	Split	NA	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	4	2		1	6
Permitted Phases					2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.3	23.3	23.3	23.7	23.7	9.6	32.0
Total Split (s)	35.2	35.2	35.2	33.2	33.2	21.6	54.8
Total Split (%)	39.1%	39.1%	39.1%	36.9%	36.9%	24.0%	60.9%
Yellow Time (s)	4.5	4.5	4.5	5.0	5.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	6.0	6.0	4.5	5.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	Min
Act Effct Green (s)	9.1	9.1	9.1	15.7	15.7	13.2	36.7
Actuated g/C Ratio	0.18	0.18	0.18	0.31	0.31	0.26	0.71
v/c Ratio	0.33	0.27	0.26	0.39	0.26	0.54	0.37
Control Delay	25.2	8.8	8.2	15.8	3.3	21.0	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.2	8.8	8.2	15.8	3.3	21.0	5.0
LOS	C	A	A	B	A	C	A
Approach Delay		14.4		12.5			10.4
Approach LOS		B		B			B

Intersection Summary





















Cycle Length: 90
 Actuated Cycle Length: 51.4
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.54
 Intersection Signal Delay: 11.6
 Intersection Capacity Utilization 43.1%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 4: Redlands Av & I-215 SB Ramps



HCM 6th Signalized Intersection Summary
 4: Redlands Av & I-215 SB Ramps

Prairie View Apartments (JN 13747)
 05/27/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	0	134	0	0	0	0	690	249	431	843	0
Future Volume (veh/h)	120	0	134	0	0	0	0	690	249	431	843	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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	150	0	39				0	758	225	474	926	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	385	0	171				0	1894	821	710	2168	0
Arrive On Green	0.11	0.00	0.11				0.00	0.29	0.29	0.21	0.61	0.00
Sat Flow, veh/h	3563	0	1585				0	6696	2790	3456	3647	0
Grp Volume(v), veh/h	150	0	39				0	758	225	474	926	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1609	1395	1728	1777	0
Q Serve(g_s), s	1.6	0.0	0.9				0.0	3.8	2.5	5.2	5.6	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.9				0.0	3.8	2.5	5.2	5.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	385	0	171				0	1894	821	710	2168	0
V/C Ratio(X)	0.39	0.00	0.23				0.00	0.40	0.27	0.67	0.43	0.00
Avail Cap(c_a), veh/h	2592	0	1153				0	4287	1859	1448	4335	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	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.0	0.0	16.6				0.0	11.5	11.1	14.9	4.2	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.7				0.0	0.1	0.2	1.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.3				0.0	1.1	0.6	1.7	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	0.0	17.3				0.0	11.7	11.2	16.0	4.3	0.0
LnGrp LOS	B	A	B				A	B	B	B	A	A
Approach Vol, veh/h		189						983			1400	
Approach Delay, s/veh		17.5						11.6			8.3	
Approach LOS		B						B			A	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	12.9	18.0		9.9				30.9				
Change Period (Y+Rc), s	4.5	6.0		5.5				* 6				
Max Green Setting (Gmax), s	17.1	27.2		29.7				* 50				
Max Q Clear Time (g_c+I1), s	7.2	5.8		3.6				7.6				
Green Ext Time (p_c), s	1.3	6.2		0.6				7.8				

Intersection Summary

HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	2.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	24	25	91	60	11
Future Vol, veh/h	21	24	25	91	60	11
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	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	27	28	103	68	13

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	234	75	81	0	0
Stage 1	75	-	-	-	-
Stage 2	159	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	754	986	1517	-	-
Stage 1	948	-	-	-	-
Stage 2	870	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	740	986	1517	-	-
Mov Cap-2 Maneuver	746	-	-	-	-
Stage 1	931	-	-	-	-
Stage 2	870	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	1.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1517	-	857	-	-
HCM Lane V/C Ratio	0.019	-	0.06	-	-
HCM Control Delay (s)	7.4	-	9.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	85	521	639	9	10	132
Future Vol, veh/h	85	521	639	9	10	132
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	210	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	102	628	770	11	12	159

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	781	0	-	0	1602 770
Stage 1	-	-	-	-	770 -
Stage 2	-	-	-	-	832 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	837	-	-	-	116 401
Stage 1	-	-	-	-	457 -
Stage 2	-	-	-	-	427 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	837	-	-	-	94 401
Mov Cap-2 Maneuver	-	-	-	-	224 -
Stage 1	-	-	-	-	372 -
Stage 2	-	-	-	-	427 -

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	22
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	837	-	-	-	380
HCM Lane V/C Ratio	0.122	-	-	-	0.45
HCM Control Delay (s)	9.9	0	-	-	22
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	2.3

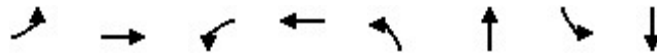
Intersection												
Int Delay, s/veh	5.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗		↕			↕			↕	
Traffic Vol, veh/h	180	276	0	0	396	30	0	0	0	20	0	222
Future Vol, veh/h	180	276	0	0	396	30	0	0	0	20	0	222
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	212	325	0	0	466	35	0	0	0	24	0	261

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	501	0	0	325	0	0	1363	1250	325	1233	1233	484
Stage 1	-	-	-	-	-	-	749	749	-	484	484	-
Stage 2	-	-	-	-	-	-	614	501	-	749	749	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1063	-	-	1235	-	-	125	173	716	154	177	583
Stage 1	-	-	-	-	-	-	404	419	-	564	552	-
Stage 2	-	-	-	-	-	-	479	543	-	404	419	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1063	-	-	1235	-	-	58	139	716	130	142	583
Mov Cap-2 Maneuver	-	-	-	-	-	-	58	139	-	229	250	-
Stage 1	-	-	-	-	-	-	324	336	-	452	552	-
Stage 2	-	-	-	-	-	-	264	543	-	323	336	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.6	0	0	20.2
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1063	-	-	1235	-	-	517
HCM Lane V/C Ratio	-	0.199	-	-	-	-	-	0.551
HCM Control Delay (s)	0	9.2	-	-	0	-	-	20.2
HCM Lane LOS	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	-	0.7	-	-	0	-	-	3.3

Timings
1: Redlands Av & Dale St

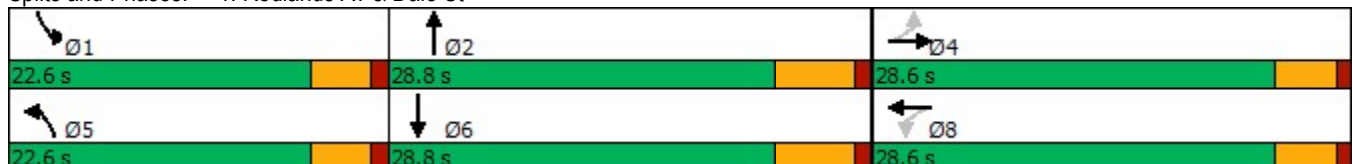


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↗	↕	↗	↕
Traffic Volume (vph)	6	3	15	4	22	441	47	392
Future Volume (vph)	6	3	15	4	22	441	47	392
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	28.6	28.6	28.6	28.6	22.6	28.6	22.6	24.8
Total Split (s)	28.6	28.6	28.6	28.6	22.6	28.8	22.6	28.8
Total Split (%)	35.8%	35.8%	35.8%	35.8%	28.3%	36.0%	28.3%	36.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		8.7		8.7	5.9	24.4	6.4	26.7
Actuated g/C Ratio		0.22		0.22	0.15	0.62	0.16	0.68
v/c Ratio		0.09		0.15	0.09	0.23	0.18	0.20
Control Delay		9.3		9.2	21.8	10.2	20.8	7.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		9.3		9.2	21.8	10.2	20.8	7.8
LOS		A		A	C	B	C	A
Approach Delay		9.3		9.2		10.8		9.1
Approach LOS		A		A		B		A

Intersection Summary

Cycle Length: 80	
Actuated Cycle Length: 39.2	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.23	
Intersection Signal Delay: 9.9	Intersection LOS: A
Intersection Capacity Utilization 34.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Redlands Av & Dale St



HCM 6th Signalized Intersection Summary
 1: Redlands Av & Dale St

Prairie View Apartments (JN 13747)
 05/27/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Volume (veh/h)	6	3	19	15	4	31	22	441	28	47	392	39
Future Volume (veh/h)	6	3	19	15	4	31	22	441	28	47	392	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	3	21	16	4	34	24	479	30	51	426	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	15	98	217	10	88	54	977	61	105	1033	101
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.03	0.29	0.29	0.06	0.32	0.32
Sat Flow, veh/h	367	166	1119	472	118	1002	1781	3397	212	1781	3269	321
Grp Volume(v), veh/h	31	0	0	54	0	0	24	250	259	51	231	237
Grp Sat Flow(s),veh/h/ln	1651	0	0	1592	0	0	1781	1777	1832	1781	1777	1813
Q Serve(g_s), s	0.0	0.0	0.0	0.4	0.0	0.0	0.4	3.1	3.1	0.7	2.7	2.7
Cycle Q Clear(g_c), s	0.4	0.0	0.0	0.8	0.0	0.0	0.4	3.1	3.1	0.7	2.7	2.7
Prop In Lane	0.23		0.68	0.30		0.63	1.00		0.12	1.00		0.18
Lane Grp Cap(c), veh/h	311	0	0	316	0	0	54	511	527	105	562	573
V/C Ratio(X)	0.10	0.00	0.00	0.17	0.00	0.00	0.44	0.49	0.49	0.48	0.41	0.41
Avail Cap(c_a), veh/h	1581	0	0	1572	0	0	1209	1541	1589	1209	1541	1572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.2	0.0	0.0	11.4	0.0	0.0	12.6	7.8	7.8	12.1	7.1	7.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.3	0.0	0.0	2.1	0.7	0.7	1.3	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.6	0.6	0.2	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.4	0.0	0.0	11.6	0.0	0.0	14.7	8.6	8.6	13.4	7.6	7.6
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		31			54			533			519	
Approach Delay, s/veh		11.4			11.6			8.8			8.2	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	13.4		6.9	5.4	14.2		6.9				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	18.0	23.0		24.0	18.0	23.0		24.0				
Max Q Clear Time (g_c+I1), s	2.7	5.1		2.4	2.4	4.7		2.8				
Green Ext Time (p_c), s	0.0	2.5		0.1	0.0	2.3		0.2				
Intersection Summary												
HCM 6th Ctrl Delay				8.7								
HCM 6th LOS				A								

Timings
2: Redlands Av & San Jacinto Av

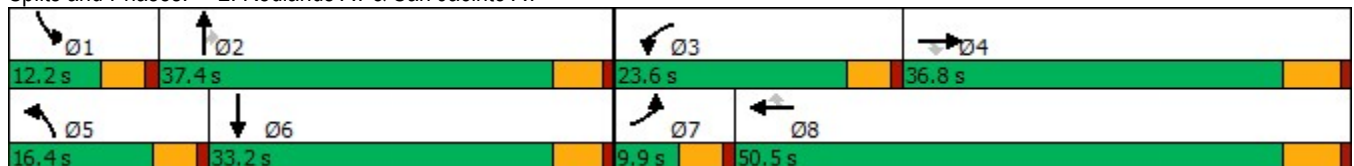


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↖↗
Traffic Volume (vph)	58	51	106	467	59	26	130	443	703	77	432
Future Volume (vph)	58	51	106	467	59	26	130	443	703	77	432
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	36.8	36.8	9.6	30.8	30.8	9.6	32.1	32.1	9.6	32.1
Total Split (s)	9.9	36.8	36.8	23.6	50.5	50.5	16.4	37.4	37.4	12.2	33.2
Total Split (%)	9.0%	33.5%	33.5%	21.5%	45.9%	45.9%	14.9%	34.0%	34.0%	11.1%	30.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.1	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.1	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	5.7	13.7	13.7	16.7	22.7	22.7	11.1	24.5	24.5	7.8	17.6
Actuated g/C Ratio	0.08	0.18	0.18	0.22	0.30	0.30	0.15	0.32	0.32	0.10	0.23
v/c Ratio	0.23	0.16	0.26	0.64	0.11	0.05	0.52	0.40	0.73	0.44	0.61
Control Delay	42.7	30.8	3.2	34.8	20.6	0.2	44.3	25.1	7.2	47.5	31.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.7	30.8	3.2	34.8	20.6	0.2	44.3	25.1	7.2	47.5	31.1
LOS	D	C	A	C	C	A	D	C	A	D	C
Approach Delay		20.4			31.7			17.2			33.4
Approach LOS		C			C			B			C

Intersection Summary




























Cycle Length: 110
 Actuated Cycle Length: 75.6
 Natural Cycle: 100
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 24.0
 Intersection LOS: C
 Intersection Capacity Utilization 69.0%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)
05/27/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 				 			 	
Traffic Volume (veh/h)	58	51	106	467	59	26	130	443	703	77	432	48
Future Volume (veh/h)	58	51	106	467	59	26	130	443	703	77	432	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	53	17	486	61	2	135	461	568	80	450	43
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	238	202	598	475	402	170	1378	615	103	1148	109
Arrive On Green	0.05	0.13	0.13	0.17	0.25	0.25	0.10	0.39	0.39	0.06	0.35	0.35
Sat Flow, veh/h	3456	1870	1585	3456	1870	1583	1781	3554	1585	1781	3278	312
Grp Volume(v), veh/h	60	53	17	486	61	2	135	461	568	80	243	250
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1583	1781	1777	1585	1781	1777	1814
Q Serve(g_s), s	1.3	2.0	0.7	10.7	2.0	0.1	5.9	7.2	27.1	3.5	8.2	8.2
Cycle Q Clear(g_c), s	1.3	2.0	0.7	10.7	2.0	0.1	5.9	7.2	27.1	3.5	8.2	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	160	238	202	598	475	402	170	1378	615	103	622	635
V/C Ratio(X)	0.38	0.22	0.08	0.81	0.13	0.00	0.79	0.33	0.92	0.78	0.39	0.39
Avail Cap(c_a), veh/h	231	732	621	829	1056	894	265	1450	647	171	631	644
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	31.0	30.5	31.5	22.8	22.1	35.0	17.0	23.1	36.8	19.4	19.4
Incr Delay (d2), s/veh	1.5	0.5	0.2	4.4	0.1	0.0	8.5	0.1	18.6	11.7	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.9	0.3	4.5	0.8	0.0	2.9	2.8	11.9	1.8	3.1	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.1	31.5	30.6	35.9	22.9	22.1	43.5	17.2	41.7	48.5	19.8	19.8
LnGrp LOS	D	C	C	D	C	C	D	B	D	D	B	B
Approach Vol, veh/h		130			549			1164				573
Approach Delay, s/veh		34.4			34.4			32.2				23.8
Approach LOS		C			C			C				C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	35.8	18.3	15.9	12.2	32.8	8.3	25.9				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	7.6	32.3	19.0	31.0	11.8	28.1	5.3	44.7				
Max Q Clear Time (g_c+I1), s	5.5	29.1	12.7	4.0	7.9	10.2	3.3	4.0				
Green Ext Time (p_c), s	0.0	1.6	1.0	0.2	0.1	2.4	0.0	0.3				
Intersection Summary												
HCM 6th Ctrl Delay				30.8								
HCM 6th LOS				C								

Timings
3: Redlands Av & I-215 NB Ramps

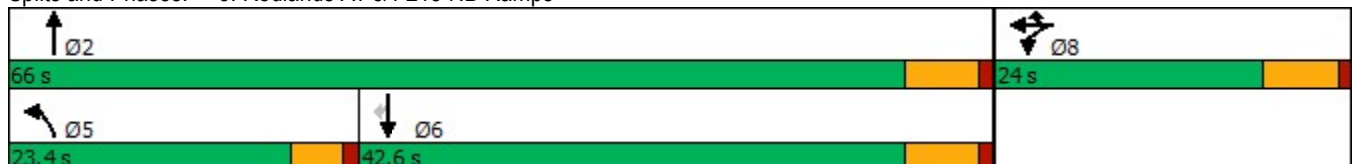


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	330	4	493	123	783	877	128
Future Volume (vph)	330	4	493	123	783	877	128
Turn Type	Split	NA	Prot	Prot	NA	NA	Perm
Protected Phases	8	8	8	5	2	6	
Permitted Phases							6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	9.5	11.0	31.0	31.0
Total Split (s)	24.0	24.0	24.0	23.4	66.0	42.6	42.6
Total Split (%)	26.7%	26.7%	26.7%	26.0%	73.3%	47.3%	47.3%
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.5	6.0	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min
Act Effct Green (s)	16.6	16.6	16.6	7.8	26.9	17.6	17.6
Actuated g/C Ratio	0.30	0.30	0.30	0.14	0.48	0.31	0.31
v/c Ratio	0.60	0.48	0.46	0.27	0.48	0.45	0.22
Control Delay	25.4	8.5	8.0	26.2	10.4	16.9	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.4	8.5	8.0	26.2	10.4	16.9	4.6
LOS	C	A	A	C	B	B	A
Approach Delay		14.2			12.6	15.3	
Approach LOS		B			B	B	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 56.1
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.60
 Intersection Signal Delay: 14.1
 Intersection LOS: B
 Intersection Capacity Utilization 52.0%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 3: Redlands Av & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 3: Redlands Av & I-215 NB Ramps

Prairie View Apartments (JN 13747)
 05/27/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↶	↷	↶	↶↷	↶↷			↶↷↷	↶↷
Traffic Volume (veh/h)	0	0	0	330	4	493	123	783	0	0	877	128
Future Volume (veh/h)	0	0	0	330	4	493	123	783	0	0	877	128
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				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				455	0	236	127	807	0	0	904	48
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				792	0	352	307	1806	0	0	2046	504
Arrive On Green				0.22	0.00	0.22	0.09	0.51	0.00	0.00	0.32	0.32
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	6696	1585
Grp Volume(v), veh/h				455	0	236	127	807	0	0	904	48
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1609	1585
Q Serve(g_s), s				5.1	0.0	6.1	1.5	6.4	0.0	0.0	5.0	0.9
Cycle Q Clear(g_c), s				5.1	0.0	6.1	1.5	6.4	0.0	0.0	5.0	0.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				792	0	352	307	1806	0	0	2046	504
V/C Ratio(X)				0.57	0.00	0.67	0.41	0.45	0.00	0.00	0.44	0.10
Avail Cap(c_a), veh/h				1441	0	641	1468	4791	0	0	5291	1304
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.4	0.0	15.8	19.2	7.0	0.0	0.0	12.0	10.7
Incr Delay (d2), s/veh				0.7	0.0	2.2	0.9	0.2	0.0	0.0	0.2	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.7	0.0	1.9	0.6	1.6	0.0	0.0	1.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				16.1	0.0	18.0	20.1	7.1	0.0	0.0	12.2	10.8
LnGrp LOS				B	A	B	C	A	A	A	B	B
Approach Vol, veh/h					691			934			952	
Approach Delay, s/veh					16.7			8.9			12.1	
Approach LOS					B			A			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		28.6			8.5	20.2		15.9				
Change Period (Y+Rc), s		6.0			4.5	6.0		6.0				
Max Green Setting (Gmax), s		60.0			18.9	36.6		18.0				
Max Q Clear Time (g_c+I1), s		8.4			3.5	7.0		8.1				
Green Ext Time (p_c), s		6.6			0.3	7.2		1.8				

Intersection Summary

HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Timings
4: Redlands Av & I-215 SB Ramps

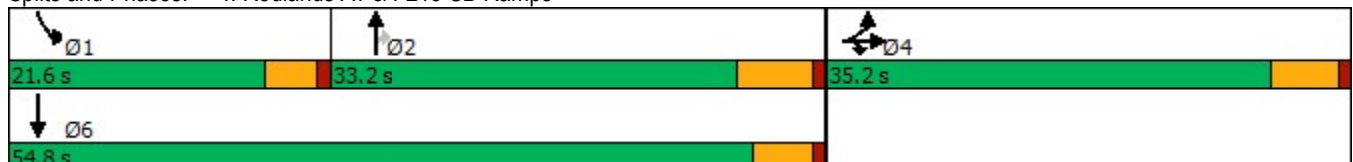


Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	173	2	179	733	419	389	818
Future Volume (vph)	173	2	179	733	419	389	818
Turn Type	Split	NA	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	4	2		1	6
Permitted Phases					2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.3	23.3	23.3	23.7	23.7	9.6	32.0
Total Split (s)	35.2	35.2	35.2	33.2	33.2	21.6	54.8
Total Split (%)	39.1%	39.1%	39.1%	36.9%	36.9%	24.0%	60.9%
Yellow Time (s)	4.5	4.5	4.5	5.0	5.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	6.0	6.0	4.5	5.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	Min
Act Effct Green (s)	10.0	10.0	10.0	16.9	16.9	12.0	34.6
Actuated g/C Ratio	0.18	0.18	0.18	0.30	0.30	0.22	0.62
v/c Ratio	0.41	0.37	0.31	0.38	0.37	0.53	0.37
Control Delay	26.7	15.4	8.2	16.2	3.1	23.5	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.7	15.4	8.2	16.2	3.1	23.5	5.8
LOS	C	B	A	B	A	C	A
Approach Delay		17.0		11.4			11.5
Approach LOS		B		B			B

Intersection Summary





















Cycle Length: 90
 Actuated Cycle Length: 55.6
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.53
 Intersection Signal Delay: 12.2
 Intersection LOS: B
 Intersection Capacity Utilization 52.0%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 4: Redlands Av & I-215 SB Ramps



HCM 6th Signalized Intersection Summary
 4: Redlands Av & I-215 SB Ramps

Prairie View Apartments (JN 13747)
 05/27/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	173	2	179	0	0	0	0	733	419	389	818	0
Future Volume (veh/h)	173	2	179	0	0	0	0	733	419	389	818	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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	207	0	67				0	740	378	393	826	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	422	0	188				0	2042	885	613	2145	0
Arrive On Green	0.12	0.00	0.12				0.00	0.32	0.32	0.18	0.60	0.00
Sat Flow, veh/h	3563	0	1585				0	6696	2790	3456	3647	0
Grp Volume(v), veh/h	207	0	67				0	740	378	393	826	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1609	1395	1728	1777	0
Q Serve(g_s), s	2.2	0.0	1.6				0.0	3.7	4.4	4.4	5.0	0.0
Cycle Q Clear(g_c), s	2.2	0.0	1.6				0.0	3.7	4.4	4.4	5.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	422	0	188				0	2042	885	613	2145	0
V/C Ratio(X)	0.49	0.00	0.36				0.00	0.36	0.43	0.64	0.39	0.00
Avail Cap(c_a), veh/h	2558	0	1138				0	4231	1834	1429	4278	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	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.1	0.0	16.8				0.0	10.9	11.1	15.8	4.2	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.1				0.0	0.1	0.3	1.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.5				0.0	1.0	1.1	1.5	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.0	0.0	17.9				0.0	11.0	11.5	16.9	4.3	0.0
LnGrp LOS	B	A	B				A	B	B	B	A	A
Approach Vol, veh/h		274						1118			1219	
Approach Delay, s/veh		17.9						11.2			8.4	
Approach LOS		B						B			A	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	11.8	19.1		10.4				31.0				
Change Period (Y+Rc), s	4.5	6.0		5.5				* 6				
Max Green Setting (Gmax), s	17.1	27.2		29.7				* 50				
Max Q Clear Time (g_c+I1), s	6.4	6.4		4.2				7.0				
Green Ext Time (p_c), s	1.1	6.7		0.9				6.7				

Intersection Summary												
HCM 6th Ctrl Delay			10.6									
HCM 6th LOS			B									

Notes
 User approved volume balancing among the lanes for turning movement.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	24	25	91	60	11
Future Vol, veh/h	21	24	25	91	60	11
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	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	38	38	38	38
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	55	63	66	239	158	29

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	544	173	187	0	-	0
Stage 1	173	-	-	-	-	-
Stage 2	371	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	500	871	1387	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	698	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	476	871	1387	-	-	-
Mov Cap-2 Maneuver	557	-	-	-	-	-
Stage 1	816	-	-	-	-	-
Stage 2	698	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.3	1.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1387	-	690	-	-
HCM Lane V/C Ratio	0.047	-	0.172	-	-
HCM Control Delay (s)	7.7	-	11.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	120	685	473	5	13	90
Future Vol, veh/h	120	685	473	5	13	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	210	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	132	753	520	5	14	99

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	525	0	-	0	1537 520
Stage 1	-	-	-	-	520 -
Stage 2	-	-	-	-	1017 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1042	-	-	-	128 556
Stage 1	-	-	-	-	597 -
Stage 2	-	-	-	-	349 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1042	-	-	-	100 556
Mov Cap-2 Maneuver	-	-	-	-	227 -
Stage 1	-	-	-	-	467 -
Stage 2	-	-	-	-	349 -

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1042	-	-	-	470
HCM Lane V/C Ratio	0.127	-	-	-	0.241
HCM Control Delay (s)	9	0	-	-	15.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	0.9

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↕			↕			↕	
Traffic Vol, veh/h	197	511	0	0	281	18	0	0	0	15	0	153
Future Vol, veh/h	197	511	0	0	281	18	0	0	0	15	0	153
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	-	0	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	219	568	0	0	312	20	0	0	0	17	0	170

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	332	0	0	568	0	0	1413	1338	568	1328	1328	322
Stage 1	-	-	-	-	-	-	1006	1006	-	322	322	-
Stage 2	-	-	-	-	-	-	407	332	-	1006	1006	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1227	-	-	1004	-	-	115	153	522	132	155	719
Stage 1	-	-	-	-	-	-	291	319	-	690	651	-
Stage 2	-	-	-	-	-	-	621	644	-	291	319	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1227	-	-	1004	-	-	76	126	522	114	127	719
Mov Cap-2 Maneuver	-	-	-	-	-	-	76	126	-	193	214	-
Stage 1	-	-	-	-	-	-	239	262	-	567	651	-
Stage 2	-	-	-	-	-	-	474	644	-	239	262	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0	0	14.2
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1227	-	-	1004	-	-	578
HCM Lane V/C Ratio	-	0.178	-	-	-	-	-	0.323
HCM Control Delay (s)	0	8.6	-	-	0	-	-	14.2
HCM Lane LOS	A	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	-	0.6	-	-	0	-	-	1.4

**APPENDIX 3.3: EXISTING (2022) CONDITIONS TRAFFIC SIGNAL
WARRANT ANALYSIS WORKSHEETS**

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2022) Conditions - Weekday AM Peak Hour**

Major Street Name = **Wilson Avenue**

Total of Both Approaches (VPH) = **187**

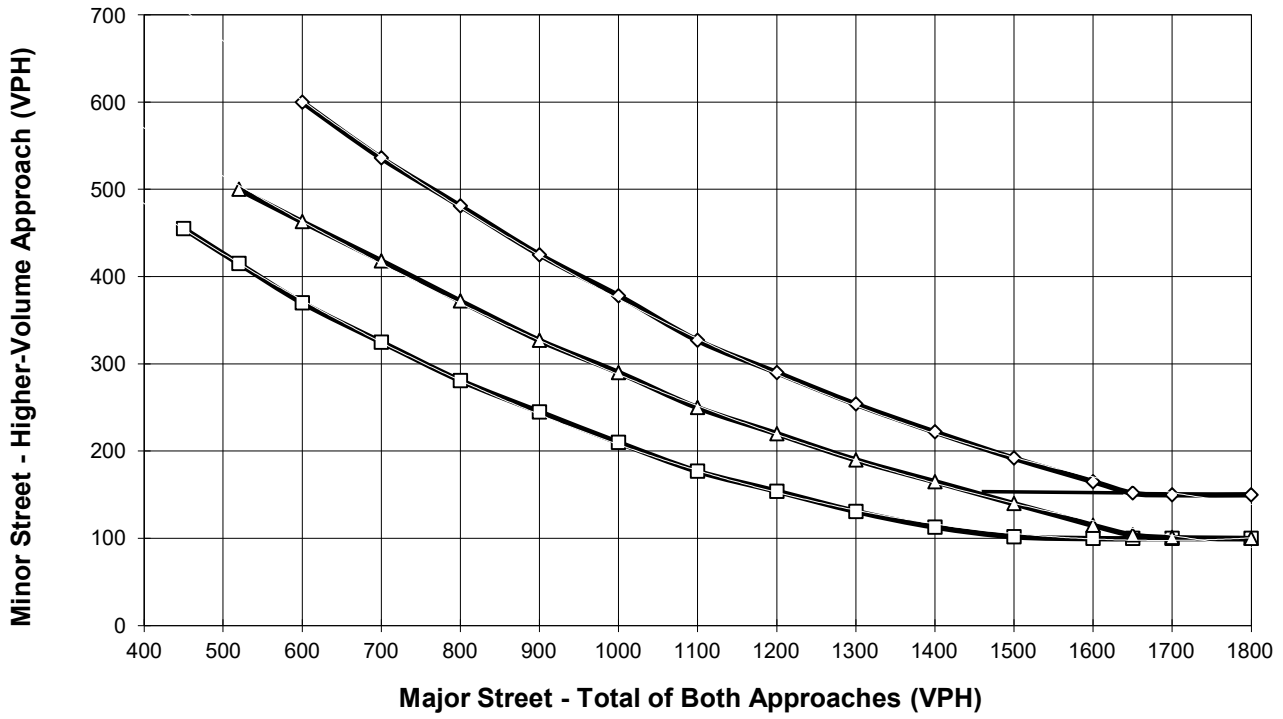
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Dale Street**

High Volume Approach (VPH) = **45**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



- 1 Lane (Major) & 1 Lane (Minor)
- △— 2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)
- ◇— 2+ Lanes (Major) & 2+ Lanes (Minor)
- x— Major Street Approaches
- x— Minor Street Approaches

*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane



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

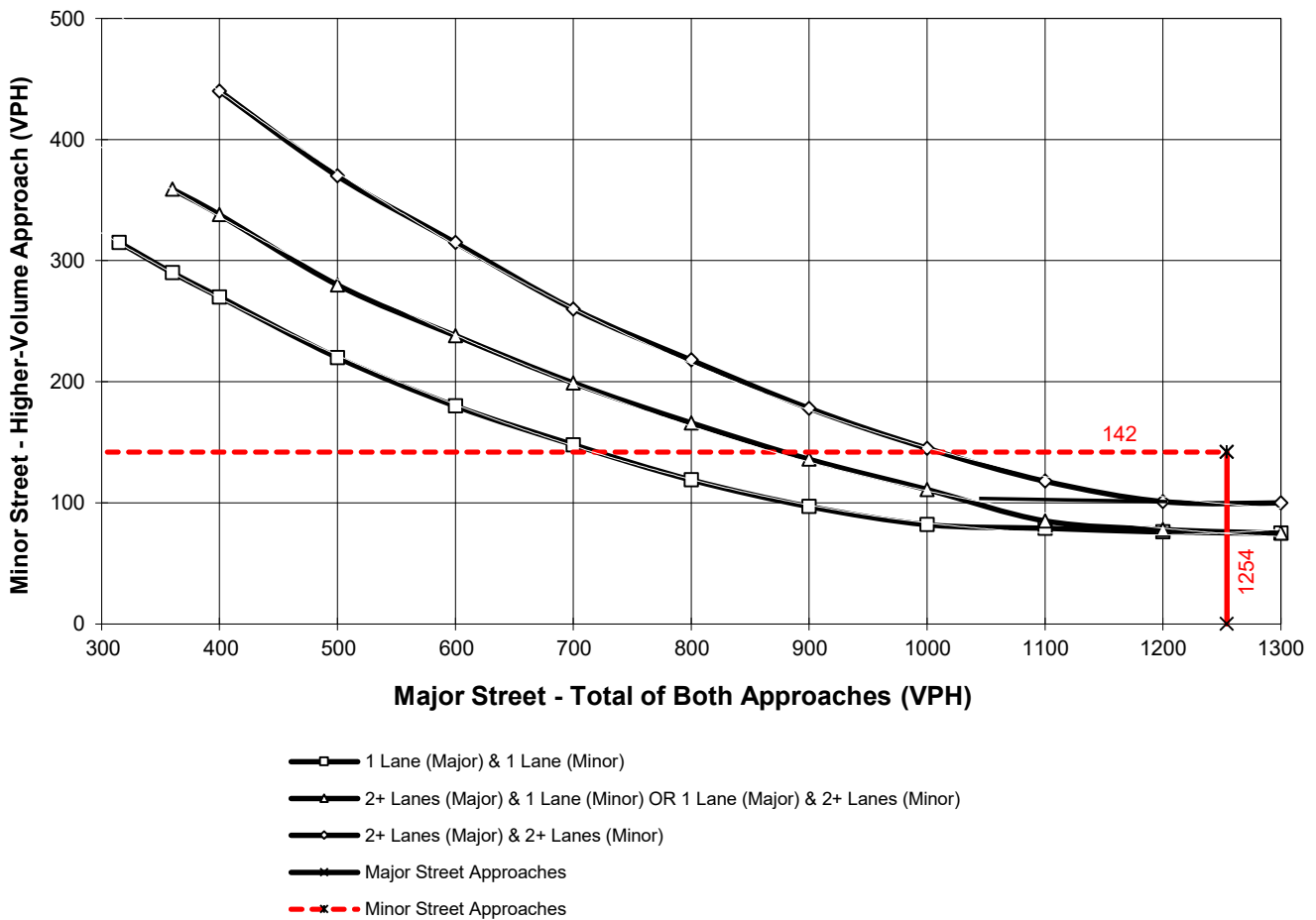
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2022) Conditions - Weekday AM Peak Hour**

Major Street Name = **San Jancinto Avenue** Total of Both Approaches (VPH) = **1254**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Wilson Avenue** High Volume Approach (VPH) = **142**
 Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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

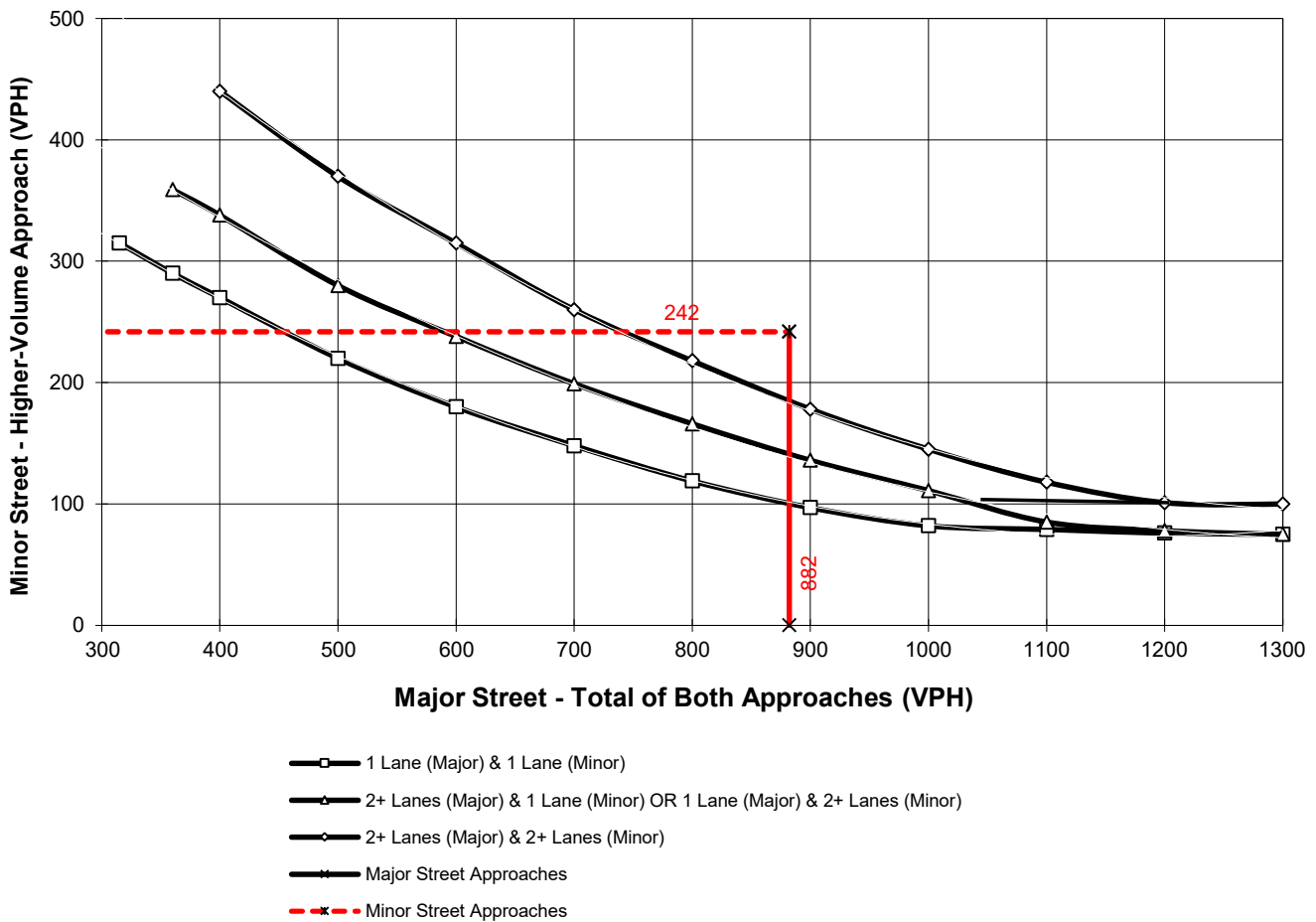
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2022) Conditions - Weekday AM Peak Hour**

Major Street Name = **San Jancinto Avenue** Total of Both Approaches (VPH) = **882**
 Number of Approach Lanes Major Street = **2**

Minor Street Name = **Murrieta Road** High Volume Approach (VPH) = **242**
 Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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APPENDIX 3.4: EXISTING (2022) CONDITIONS QUEUING ANALYSIS WORKSHEETS

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Queues

3: Redlands Av & I-215 NB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	222	215	201	160	751	1096	230
v/c Ratio	0.59	0.57	0.41	0.33	0.37	0.48	0.32
Control Delay	30.2	24.9	6.9	28.7	7.8	16.2	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.2	24.9	6.9	28.7	7.9	16.2	3.7
Queue Length 50th (ft)	76	60	0	28	71	89	0
Queue Length 95th (ft)	172	153	51	63	112	131	38
Internal Link Dist (ft)		1157			322	711	
Turn Bay Length (ft)	800		400				
Base Capacity (vph)	512	498	598	1099	3261	3973	1068
Starvation Cap Reductn	0	0	0	0	576	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.43	0.34	0.15	0.28	0.28	0.22

Intersection Summary

Queues

4: Redlands Av & I-215 SB Ramps



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	98	93	88	758	274	474	926
v/c Ratio	0.33	0.27	0.26	0.39	0.26	0.54	0.37
Control Delay	25.2	8.8	8.2	15.8	3.3	21.0	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.2	8.8	8.2	15.8	3.3	21.0	5.0
Queue Length 50th (ft)	29	1	0	54	0	67	61
Queue Length 95th (ft)	78	38	33	92	25	131	108
Internal Link Dist (ft)		878		463			322
Turn Bay Length (ft)	740		140		200		
Base Capacity (vph)	1050	975	974	3682	1718	1240	3200
Starvation Cap Reductn	0	0	0	0	0	0	541
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.10	0.09	0.21	0.16	0.38	0.35

Intersection Summary



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	296	282	274	127	807	904	132
v/c Ratio	0.60	0.48	0.46	0.27	0.48	0.45	0.22
Control Delay	25.4	8.5	8.0	26.2	10.4	16.9	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.4	8.5	8.0	26.2	10.4	16.9	4.6
Queue Length 50th (ft)	91	16	13	21	92	76	0
Queue Length 95th (ft)	#211	87	77	48	127	106	31
Internal Link Dist (ft)		1157			322	711	
Turn Bay Length (ft)	800		400				
Base Capacity (vph)	567	645	655	1216	3424	4379	1123
Starvation Cap Reductn	0	0	0	0	318	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.44	0.42	0.10	0.26	0.21	0.12

Intersection Summary

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

Queues

4: Redlands Av & I-215 SB Ramps



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	124	120	114	740	423	393	826
v/c Ratio	0.41	0.37	0.31	0.38	0.37	0.53	0.37
Control Delay	26.7	15.4	8.2	16.2	3.1	23.5	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.7	15.4	8.2	16.2	3.1	23.5	5.8
Queue Length 50th (ft)	36	15	0	52	0	56	55
Queue Length 95th (ft)	101	69	40	95	30	122	108
Internal Link Dist (ft)		878		463			322
Turn Bay Length (ft)	740		140		200		
Base Capacity (vph)	935	875	887	3265	1627	1100	3130
Starvation Cap Reductn	0	0	0	0	0	0	566
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.14	0.13	0.23	0.26	0.36	0.32

Intersection Summary

APPENDIX 4.1: POST PROCESSING WORKSHEETS

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Project: Prairie View Apartments
 Scenario: Horizon Year (2040) Without Project

Job #: 13747
 Analyst: JB
 Date: 5/26/22

LOCATION: Redlands Av. & San Jacinto Av.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	78	87	9	12%	22	45	23	105%
	Through	319	470	151	47%	441	657	216	49%
	Right	18	15	-3	-17%	28	29	1	4%
	NB Total	415	572	157	38%	491	731	240	49%
SOUTH BOUND	Left	29	29	0	0%	47	49	2	4%
	Through	449	605	156	35%	392	549	157	40%
	Right	142	195	53	37%	39	80	41	105%
	SB Total	620	829	209	34%	478	678	200	42%
EAST BOUND	Left	40	106	66	165%	6	7	1	17%
	Through	6	9	3	50%	3	2	-1	-33%
	Right	53	105	52	98%	19	21	2	11%
	EB Total	99	220	121	122%	28	30	2	7%
WEST BOUND	Left	46	40	-6	-13%	15	14	-1	-7%
	Through	23	20	-3	-13%	4	5	1	25%
	Right	51	60	9	18%	31	31	0	0%
	WB Total	120	120	0	0%	50	50	0	0%
TOTAL ENTERING VOLUME		1,254	1,741	487	39%	1,047	1,489	442	42%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	829	678			
North Leg	Outbound	636	695			
North Leg	TOTAL	1,465	1,373	7%	7%	20,009
South Leg	Inbound	572	731			
South Leg	Outbound	750	584			
South Leg	TOTAL	1,322	1,315	7%	7%	19,105
East Leg	Inbound	120	50			
East Leg	Outbound	53	80			
East Leg	TOTAL	173	130	#DIV/0!	#DIV/0!	#DIV/0!
West Leg	Inbound	220	30			
West Leg	Outbound	302	130			
West Leg	TOTAL	522	160	23%	7%	2,289
OVERALL TOTAL		3,482	2,978	#DIV/0!	#DIV/0!	#DIV/0!

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Project: Prairie View Apartments
 Scenario: Horizon Year (2040) Without Project

Job #: 13747
 Analyst: JB
 Date: 5/26/22

LOCATION: Redlands Av. & San Jancinto Av.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	91	210	119	131%	130	284	154	118%
	Through	363	309	-54	-15%	443	591	148	33%
	Right	481	751	270	56%	703	1,109	406	58%
	NB Total	935	1,270	335	36%	1,276	1,984	708	55%
SOUTH BOUND	Left	52	120	68	131%	77	139	62	81%
	Through	456	433	-23	-5%	432	501	69	16%
	Right	59	200	141	239%	48	120	72	150%
	SB Total	567	753	186	33%	557	760	203	36%
EAST BOUND	Left	77	254	177	230%	58	175	117	202%
	Through	18	109	91	506%	51	182	131	257%
	Right	108	270	162	150%	106	243	137	129%
	EB Total	203	633	430	212%	215	600	385	179%
WEST BOUND	Left	616	987	371	60%	467	727	260	56%
	Through	61	350	289	474%	59	197	138	234%
	Right	41	87	46	112%	26	53	27	104%
	WB Total	718	1,424	706	98%	552	977	425	77%
TOTAL ENTERING VOLUME		2,423	4,080	1657	68%	2,600	4,321	1721	66%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	753	760			
North Leg	Outbound	650	819			
North Leg	TOTAL	1,403	1,579	6%	7%	22,584
South Leg	Inbound	1,270	1,984			
South Leg	Outbound	1,690	1,471			
South Leg	TOTAL	2,960	3,455	5%	6%	54,507
East Leg	Inbound	1,424	977			
East Leg	Outbound	980	1,430			
East Leg	TOTAL	2,404	2,407	5%	5%	51,252
West Leg	Inbound	633	600			
West Leg	Outbound	760	601			
West Leg	TOTAL	1,393	1,201	16%	14%	8,696
OVERALL TOTAL		8,160	8,642	6%	6%	137,039

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Project: Prairie View Apartments
 Scenario: Horizon Year (2040) Without Project

Job #: 13747
 Analyst: JB
 Date: 5/26/22

LOCATION: Redlands Av. & I-215 NB Ramps
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	142	595	453	319%	123	268	145	118%
	Through	668	1,135	467	70%	783	1,298	515	66%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	810	1,730	920	114%	906	1,566	660	73%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	975	1,352	377	39%	877	1,175	298	34%
	Right	205	347	142	69%	128	275	147	115%
	SB Total	1,180	1,699	519	44%	1,005	1,450	445	44%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	299	394	95	32%	330	375	45	14%
	Through	2	3	1	50%	4	7	3	75%
	Right	267	174	-93	-35%	493	682	189	38%
	WB Total	568	571	3	1%	827	1,064	237	29%
TOTAL ENTERING VOLUME		2,558	4,000	1442	56%	2,738	4,080	1342	49%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,699	1,450			
North Leg	Outbound	1,309	1,980			
North Leg	TOTAL	3,008	3,430	6%	6%	54,507
South Leg	Inbound	1,730	1,566			
South Leg	Outbound	1,746	1,550			
South Leg	TOTAL	3,476	3,116	7%	6%	52,027
East Leg	Inbound	571	1,064			
East Leg	Outbound	0	0			
East Leg	TOTAL	571	1,064	4%	7%	15,613
West Leg	Inbound	0	0			
West Leg	Outbound	945	550			
West Leg	TOTAL	945	550	7%	4%	13,776
OVERALL TOTAL		8,000	8,160	6%	6%	135,924

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Project: Prairie View Apartments
 Scenario: Horizon Year (2040) Without Project

Job #: 13747
 Analyst: JB
 Date: 5/26/22

LOCATION: Redlands Av. & I-215 SB Ramps
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	690	1,515	825	120%	733	1,204	471	64%
	Right	249	324	75	30%	419	490	71	17%
	NB Total	939	1,839	900	96%	1,152	1,694	542	47%
SOUTH BOUND	Left	431	506	75	17%	389	327	-62	-16%
	Through	843	1,165	322	38%	818	1,261	443	54%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	1,274	1,671	397	31%	1,207	1,588	381	32%
EAST BOUND	Left	120	225	105	88%	173	326	153	88%
	Through	0	0	0	#DIV/0!	2	3	1	50%
	Right	134	175	41	31%	179	439	260	145%
	EB Total	254	400	146	57%	354	768	414	117%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		2,467	3,910	1443	58%	2,713	4,050	1337	49%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	1,671	1,588			
North Leg	Outbound	1,740	1,530			
North Leg	TOTAL	3,411	3,118	7%	6%	52,027
South Leg	Inbound	1,839	1,694			
South Leg	Outbound	1,340	1,700			
South Leg	TOTAL	3,179	3,394	6%	6%	56,888
East Leg	Inbound	0	0			
East Leg	Outbound	830	820			
East Leg	TOTAL	830	820	6%	6%	13,759
West Leg	Inbound	400	768			
West Leg	Outbound	0	0			
West Leg	TOTAL	400	768	3%	5%	15,608
OVERALL TOTAL		7,820	8,100	6%	6%	138,283

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Project: Prairie View Apartments
 Scenario: Horizon Year (2040) Without Project

Job #: 13747
 Analyst: JB
 Date: 5/26/22

LOCATION: Murrieta Rd. & San Jancinto Av.
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
SOUTH BOUND	Left	20	84	64	320%	15	23	8	53%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	222	339	117	53%	153	154	1	1%
	SB Total	242	423	181	75%	168	177	9	5%
EAST BOUND	Left	180	147	-33	-18%	197	323	126	64%
	Through	276	736	460	167%	511	956	445	87%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	456	883	427	94%	708	1,279	571	81%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	396	981	585	148%	281	694	413	147%
	Right	30	63	33	110%	18	60	42	233%
	WB Total	426	1,044	618	145%	299	754	455	152%
TOTAL ENTERING VOLUME		1,124	2,350	1226	109%	1,175	2,210	1035	88%

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	423	177			
North Leg	Outbound	210	383			
North Leg	TOTAL	633	560	7%	6%	8,753
South Leg	Inbound	0	0			
South Leg	Outbound	0	0			
South Leg	TOTAL	0	0	#DIV/0!	#DIV/0!	#DIV/0!
East Leg	Inbound	1,044	754			
East Leg	Outbound	820	979			
East Leg	TOTAL	1,864	1,733	4%	3%	50,100
West Leg	Inbound	883	1,279			
West Leg	Outbound	1,320	848			
West Leg	TOTAL	2,203	2,127	5%	5%	42,319
OVERALL TOTAL		4,700	4,420	#DIV/0!	#DIV/0!	#DIV/0!

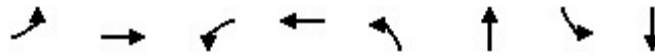
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APPENDIX 5.1: E+P CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Timings
1: Redlands Av & Dale St

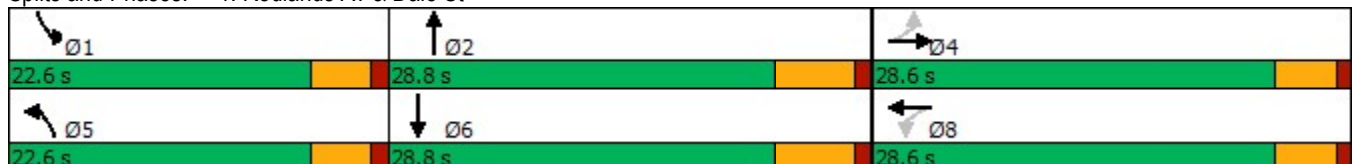


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↙	↕	↙	↕
Traffic Volume (vph)	40	6	68	23	78	319	29	449
Future Volume (vph)	40	6	68	23	78	319	29	449
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	28.6	28.6	28.6	28.6	22.6	28.6	22.6	24.8
Total Split (s)	28.6	28.6	28.6	28.6	22.6	28.8	22.6	28.8
Total Split (%)	35.8%	35.8%	35.8%	35.8%	28.3%	36.0%	28.3%	36.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		12.0		12.0	7.8	25.2	6.1	19.1
Actuated g/C Ratio		0.23		0.23	0.15	0.48	0.12	0.37
v/c Ratio		0.32		0.52	0.37	0.25	0.17	0.58
Control Delay		12.2		19.8	27.6	10.8	27.9	16.7
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		12.2		19.8	27.6	10.8	27.9	16.7
LOS		B		B	C	B	C	B
Approach Delay		12.2		19.8		14.0		17.3
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 80	
Actuated Cycle Length: 52.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 16.1	Intersection LOS: B
Intersection Capacity Utilization 45.6%	ICU Level of Service A
Analysis Period (min) 15	

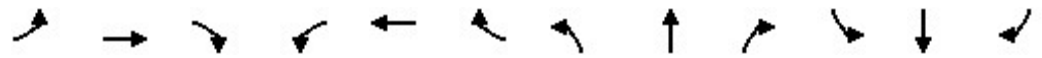
Splits and Phases: 1: Redlands Av & Dale St



HCM 6th Signalized Intersection Summary
1: Redlands Av & Dale St

Prairie View Apartments (JN 13747)

08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↕	↕	↔	↕	↕
Traffic Volume (veh/h)	40	6	53	68	23	64	78	319	18	29	449	142
Future Volume (veh/h)	40	6	53	68	23	64	78	319	18	29	449	142
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	50	8	66	85	29	80	98	399	22	36	561	178
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	53	159	244	65	120	152	1283	71	74	879	278
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.09	0.37	0.37	0.04	0.33	0.33
Sat Flow, veh/h	478	293	877	579	358	658	1781	3425	188	1781	2656	840
Grp Volume(v), veh/h	124	0	0	194	0	0	98	206	215	36	375	364
Grp Sat Flow(s),veh/h/ln	1648	0	0	1595	0	0	1781	1777	1836	1781	1777	1719
Q Serve(g_s), s	0.0	0.0	0.0	1.7	0.0	0.0	2.0	3.1	3.1	0.7	6.7	6.7
Cycle Q Clear(g_c), s	2.4	0.0	0.0	4.0	0.0	0.0	2.0	3.1	3.1	0.7	6.7	6.7
Prop In Lane	0.40		0.53	0.44		0.41	1.00		0.10	1.00		0.49
Lane Grp Cap(c), veh/h	435	0	0	429	0	0	152	666	688	74	588	569
V/C Ratio(X)	0.29	0.00	0.00	0.45	0.00	0.00	0.64	0.31	0.31	0.48	0.64	0.64
Avail Cap(c_a), veh/h	1109	0	0	1116	0	0	859	1095	1131	859	1095	1059
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.5	0.0	0.0	14.1	0.0	0.0	16.5	8.3	8.3	17.5	10.6	10.6
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.7	0.0	0.0	1.7	0.3	0.3	1.8	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	1.3	0.0	0.0	0.7	0.7	0.8	0.3	1.8	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.8	0.0	0.0	14.8	0.0	0.0	18.2	8.5	8.5	19.3	11.7	11.8
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	B	B
Approach Vol, veh/h		124			194			519			775	
Approach Delay, s/veh		13.8			14.8			10.4			12.1	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	19.8		11.4	7.8	18.2		11.4				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	18.0	23.0		24.0	18.0	23.0		24.0				
Max Q Clear Time (g_c+I1), s	2.7	5.1		4.4	4.0	8.7		6.0				
Green Ext Time (p_c), s	0.0	2.0		0.6	0.1	3.6		1.0				
Intersection Summary												
HCM 6th Ctrl Delay				12.0								
HCM 6th LOS				B								

Timings
2: Redlands Av & San Jacinto Av

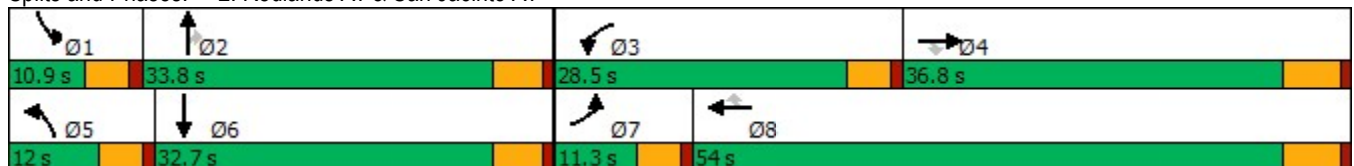


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↖↗
Traffic Volume (vph)	77	18	108	642	61	41	91	363	496	52	478
Future Volume (vph)	77	18	108	642	61	41	91	363	496	52	478
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	36.8	36.8	9.6	30.8	30.8	9.6	32.1	32.1	9.6	32.1
Total Split (s)	11.3	36.8	36.8	28.5	54.0	54.0	12.0	33.8	33.8	10.9	32.7
Total Split (%)	10.3%	33.5%	33.5%	25.9%	49.1%	49.1%	10.9%	30.7%	30.7%	9.9%	29.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.1	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.1	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	6.6	13.4	13.4	23.7	33.0	33.0	7.5	23.5	23.5	6.3	19.9
Actuated g/C Ratio	0.08	0.16	0.16	0.28	0.39	0.39	0.09	0.28	0.28	0.07	0.23
v/c Ratio	0.33	0.07	0.32	0.76	0.10	0.07	0.66	0.42	0.67	0.45	0.74
Control Delay	44.3	31.2	4.6	36.2	19.1	0.2	61.8	28.5	7.1	53.5	36.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.3	31.2	4.6	36.2	19.1	0.2	61.8	28.5	7.1	53.5	36.5
LOS	D	C	A	D	B	A	E	C	A	D	D
Approach Delay		22.0			32.8			20.5			38.0
Approach LOS		C			C			C			D

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 85.1
 Natural Cycle: 100
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 28.5
 Intersection LOS: C
 Intersection Capacity Utilization 58.3%
 ICU Level of Service B
 Analysis Period (min) 15

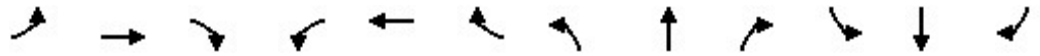
Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
 2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↑↗	
Traffic Volume (veh/h)	77	18	108	642	61	41	91	363	496	52	478	59
Future Volume (veh/h)	77	18	108	642	61	41	91	363	496	52	478	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	88	20	22	730	69	20	103	412	386	59	543	59
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	255	216	866	618	523	132	1046	467	85	866	94
Arrive On Green	0.06	0.14	0.14	0.25	0.33	0.33	0.07	0.29	0.29	0.05	0.27	0.27
Sat Flow, veh/h	3456	1870	1585	3456	1870	1584	1781	3554	1585	1781	3233	350
Grp Volume(v), veh/h	88	20	22	730	69	20	103	412	386	59	298	304
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1584	1781	1777	1585	1781	1777	1807
Q Serve(g_s), s	1.8	0.7	0.9	14.9	1.9	0.6	4.2	6.9	16.8	2.4	10.9	11.0
Cycle Q Clear(g_c), s	1.8	0.7	0.9	14.9	1.9	0.6	4.2	6.9	16.8	2.4	10.9	11.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	195	255	216	866	618	523	132	1046	467	85	476	484
V/C Ratio(X)	0.45	0.08	0.10	0.84	0.11	0.04	0.78	0.39	0.83	0.70	0.63	0.63
Avail Cap(c_a), veh/h	312	782	663	1114	1216	1030	178	1376	614	151	662	673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	27.9	28.0	26.4	17.2	16.8	33.7	20.9	24.4	34.8	23.9	23.9
Incr Delay (d2), s/veh	1.6	0.1	0.2	4.8	0.1	0.0	14.4	0.2	7.1	9.9	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.3	0.3	6.1	0.7	0.2	2.3	2.7	6.5	1.2	4.3	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	28.1	28.2	31.2	17.3	16.9	48.2	21.1	31.5	44.7	25.2	25.2
LnGrp LOS	D	C	C	C	B	B	D	C	C	D	C	C
Approach Vol, veh/h		130			819			901			661	
Approach Delay, s/veh		33.1			29.7			28.6			27.0	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	26.9	23.2	15.9	10.1	25.0	8.8	30.3				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	6.3	28.7	23.9	31.0	7.4	27.6	6.7	48.2				
Max Q Clear Time (g_c+I1), s	4.4	18.8	16.9	2.9	6.2	13.0	3.8	3.9				
Green Ext Time (p_c), s	0.0	2.9	1.7	0.1	0.0	2.8	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay			28.8									
HCM 6th LOS			C									

Timings
3: Redlands Av & I-215 NB Ramps

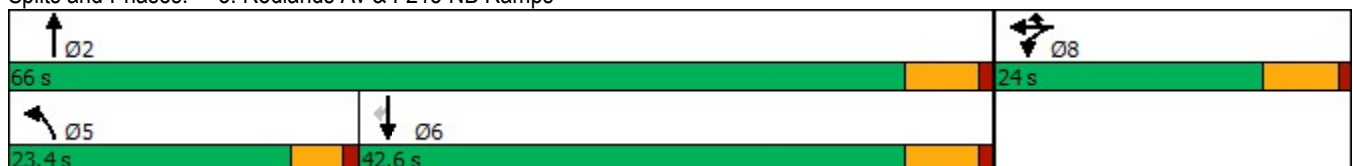


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	299	2	274	142	676	1010	218
Future Volume (vph)	299	2	274	142	676	1010	218
Turn Type	Split	NA	Prot	Prot	NA	NA	Perm
Protected Phases	8	8	8	5	2	6	
Permitted Phases							6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	9.5	11.0	31.0	31.0
Total Split (s)	24.0	24.0	24.0	23.4	66.0	42.6	42.6
Total Split (%)	26.7%	26.7%	26.7%	26.0%	73.3%	47.3%	47.3%
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.5	6.0	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min
Act Effct Green (s)	13.9	13.9	13.9	8.6	36.6	23.3	23.3
Actuated g/C Ratio	0.22	0.22	0.22	0.14	0.58	0.37	0.37
v/c Ratio	0.61	0.58	0.41	0.34	0.37	0.48	0.33
Control Delay	31.5	25.7	7.0	29.5	7.7	16.0	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.5	25.7	7.0	29.5	7.8	16.0	3.6
LOS	C	C	A	C	A	B	A
Approach Delay		21.9			11.5	13.8	
Approach LOS		C			B	B	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 63
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.61
 Intersection Signal Delay: 14.9
 Intersection LOS: B
 Intersection Capacity Utilization 43.7%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 3: Redlands Av & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 3: Redlands Av & I-215 NB Ramps

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↔	↗	↙↗	↕			↕↕↕	↗
Traffic Volume (veh/h)	0	0	0	299	2	274	142	676	0	0	1010	218
Future Volume (veh/h)	0	0	0	299	2	274	142	676	0	0	1010	218
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				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				381	0	96	160	760	0	0	1135	154
Peak Hour Factor				0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				603	0	268	323	2042	0	0	2478	611
Arrive On Green				0.17	0.00	0.17	0.09	0.57	0.00	0.00	0.39	0.39
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	6696	1585
Grp Volume(v), veh/h				381	0	96	160	760	0	0	1135	154
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1609	1585
Q Serve(g_s), s				4.7	0.0	2.5	2.1	5.4	0.0	0.0	6.2	3.1
Cycle Q Clear(g_c), s				4.7	0.0	2.5	2.1	5.4	0.0	0.0	6.2	3.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				603	0	268	323	2042	0	0	2478	611
V/C Ratio(X)				0.63	0.00	0.36	0.50	0.37	0.00	0.00	0.46	0.25
Avail Cap(c_a), veh/h				1368	0	609	1394	4550	0	0	5025	1238
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				18.1	0.0	17.2	20.2	5.4	0.0	0.0	10.8	9.8
Incr Delay (d2), s/veh				1.1	0.0	0.8	1.2	0.1	0.0	0.0	0.1	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.6	0.0	0.8	0.8	1.2	0.0	0.0	1.7	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				19.2	0.0	18.0	21.4	5.5	0.0	0.0	10.9	10.0
LnGrp LOS				B	A	B	C	A	A	A	B	B
Approach Vol, veh/h					477			920			1289	
Approach Delay, s/veh					19.0			8.3			10.8	
Approach LOS					B			A			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		32.9			8.9	24.1		13.9				
Change Period (Y+Rc), s		6.0			4.5	6.0		6.0				
Max Green Setting (Gmax), s		60.0			18.9	36.6		18.0				
Max Q Clear Time (g_c+I1), s		7.4			4.1	8.2		6.7				
Green Ext Time (p_c), s		6.1			0.4	9.9		1.3				

Intersection Summary

HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Timings
4: Redlands Av & I-215 SB Ramps

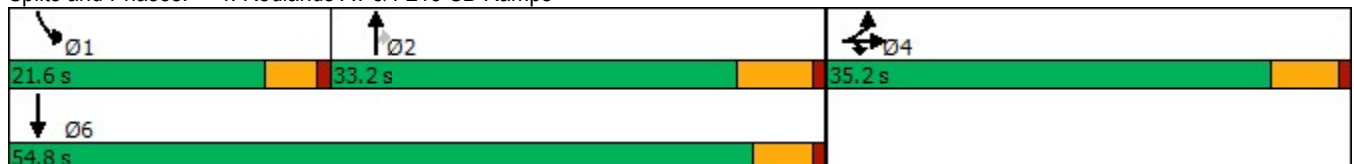


Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	124	0	134	694	249	453	856
Future Volume (vph)	124	0	134	694	249	453	856
Turn Type	Split	NA	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	4	2		1	6
Permitted Phases					2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.3	23.3	23.3	23.7	23.7	9.6	32.0
Total Split (s)	35.2	35.2	35.2	33.2	33.2	21.6	54.8
Total Split (%)	39.1%	39.1%	39.1%	36.9%	36.9%	24.0%	60.9%
Yellow Time (s)	4.5	4.5	4.5	5.0	5.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	6.0	6.0	4.5	5.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	Min
Act Effct Green (s)	9.1	9.1	9.1	15.8	15.8	13.7	37.3
Actuated g/C Ratio	0.18	0.18	0.18	0.30	0.30	0.26	0.72
v/c Ratio	0.33	0.28	0.27	0.39	0.26	0.55	0.37
Control Delay	25.6	8.9	8.5	16.0	3.3	21.1	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.6	8.9	8.5	16.0	3.3	21.1	5.0
LOS	C	A	A	B	A	C	A
Approach Delay		14.6		12.7			10.6
Approach LOS		B		B			B

Intersection Summary

Cycle Length: 90	
Actuated Cycle Length: 52	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.55	
Intersection Signal Delay: 11.8	Intersection LOS: B
Intersection Capacity Utilization 43.7%	ICU Level of Service A
Analysis Period (min) 15	





















Splits and Phases: 4: Redlands Av & I-215 SB Ramps



HCM 6th Signalized Intersection Summary
 4: Redlands Av & I-215 SB Ramps

Prairie View Apartments (JN 13747)

08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	0	134	0	0	0	0	694	249	453	856	0
Future Volume (veh/h)	124	0	134	0	0	0	0	694	249	453	856	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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	154	0	39				0	763	225	498	941	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	384	0	171				0	1887	818	734	2183	0
Arrive On Green	0.11	0.00	0.11				0.00	0.29	0.29	0.21	0.61	0.00
Sat Flow, veh/h	3563	0	1585				0	6696	2790	3456	3647	0
Grp Volume(v), veh/h	154	0	39				0	763	225	498	941	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1609	1395	1728	1777	0
Q Serve(g_s), s	1.7	0.0	0.9				0.0	3.9	2.6	5.5	5.7	0.0
Cycle Q Clear(g_c), s	1.7	0.0	0.9				0.0	3.9	2.6	5.5	5.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	384	0	171				0	1887	818	734	2183	0
V/C Ratio(X)	0.40	0.00	0.23				0.00	0.40	0.27	0.68	0.43	0.00
Avail Cap(c_a), veh/h	2557	0	1138				0	4229	1834	1428	4277	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	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.2	0.0	16.9				0.0	11.7	11.2	15.0	4.2	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.7				0.0	0.1	0.2	1.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.3				0.0	1.1	0.6	1.8	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.9	0.0	17.6				0.0	11.9	11.4	16.1	4.3	0.0
LnGrp LOS	B	A	B				A	B	B	B	A	A
Approach Vol, veh/h		193						988			1439	
Approach Delay, s/veh		17.8						11.8			8.4	
Approach LOS		B						B			A	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	13.3	18.1		10.0				31.4				
Change Period (Y+Rc), s	4.5	6.0		5.5				* 6				
Max Green Setting (Gmax), s	17.1	27.2		29.7				* 50				
Max Q Clear Time (g_c+I1), s	7.5	5.9		3.7				7.7				
Green Ext Time (p_c), s	1.3	6.2		0.6				8.0				

Intersection Summary

HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↑			↑
Traffic Vol, veh/h	44	4	112	0	0	71
Future Vol, veh/h	44	4	112	0	0	71
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, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	4	122	0	0	77

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	199	122	0	-	-	-
Stage 1	122	-	-	-	-	-
Stage 2	77	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	790	929	-	0	0	-
Stage 1	903	-	-	0	0	-
Stage 2	946	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	790	929	-	-	-	-
Mov Cap-2 Maneuver	832	-	-	-	-	-
Stage 1	903	-	-	-	-	-
Stage 2	946	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 839	-
HCM Lane V/C Ratio	- 0.062	-
HCM Control Delay (s)	- 9.6	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.2	-

Intersection						
Int Delay, s/veh	2.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	24	25	91	69	46
Future Vol, veh/h	21	24	25	91	69	46
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	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	27	28	103	78	52

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	263	104	130	0	-	0
Stage 1	104	-	-	-	-	-
Stage 2	159	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	726	951	1455	-	-	-
Stage 1	920	-	-	-	-	-
Stage 2	870	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	712	951	1455	-	-	-
Mov Cap-2 Maneuver	729	-	-	-	-	-
Stage 1	903	-	-	-	-	-
Stage 2	870	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.6	1.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1455	-	833	-	-
HCM Lane V/C Ratio	0.02	-	0.061	-	-
HCM Control Delay (s)	7.5	-	9.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	85	536	656	9	10	141
Future Vol, veh/h	85	536	656	9	10	141
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	210	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	102	646	790	11	12	170

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	801	0	-	0	1640 790
Stage 1	-	-	-	-	790 -
Stage 2	-	-	-	-	850 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	822	-	-	-	110 390
Stage 1	-	-	-	-	447 -
Stage 2	-	-	-	-	419 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	822	-	-	-	89 390
Mov Cap-2 Maneuver	-	-	-	-	217 -
Stage 1	-	-	-	-	360 -
Stage 2	-	-	-	-	419 -

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	23.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	822	-	-	-	370
HCM Lane V/C Ratio	0.125	-	-	-	0.492
HCM Control Delay (s)	10	0	-	-	23.8
HCM Lane LOS	B	A	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	2.6

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	9	30	20	210	242	8
Future Vol, veh/h	9	30	20	210	242	8
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, %	2	2	2	2	2	2
Mvmt Flow	10	33	22	228	263	9

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	540	268	272	0	0
Stage 1	268	-	-	-	-
Stage 2	272	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	503	771	1291	-	-
Stage 1	777	-	-	-	-
Stage 2	774	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	493	771	1291	-	-
Mov Cap-2 Maneuver	493	-	-	-	-
Stage 1	761	-	-	-	-
Stage 2	774	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1291	-	682	-	-
HCM Lane V/C Ratio	0.017	-	0.062	-	-
HCM Control Delay (s)	7.8	0	10.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

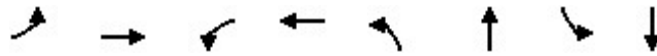
Intersection												
Int Delay, s/veh	7.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗		↕			↕			↕	
Traffic Vol, veh/h	195	276	0	0	396	34	0	0	0	33	0	239
Future Vol, veh/h	195	276	0	0	396	34	0	0	0	33	0	239
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	229	325	0	0	466	40	0	0	0	39	0	281

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	506	0	0	325	0	0	1410	1289	325	1269	1269	486
Stage 1	-	-	-	-	-	-	783	783	-	486	486	-
Stage 2	-	-	-	-	-	-	627	506	-	783	783	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1059	-	-	1235	-	-	116	164	716	145	168	581
Stage 1	-	-	-	-	-	-	387	404	-	563	551	-
Stage 2	-	-	-	-	-	-	471	540	-	387	404	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1059	-	-	1235	-	-	50	129	716	121	132	581
Mov Cap-2 Maneuver	-	-	-	-	-	-	50	129	-	216	238	-
Stage 1	-	-	-	-	-	-	303	317	-	441	551	-
Stage 2	-	-	-	-	-	-	243	540	-	303	317	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.9	0	0	26
HCM LOS			A	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1059	-	-	1235	-	-	482
HCM Lane V/C Ratio	-	0.217	-	-	-	-	-	0.664
HCM Control Delay (s)	0	9.3	-	-	0	-	-	26
HCM Lane LOS	A	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	-	0.8	-	-	0	-	-	4.8

Timings
1: Redlands Av & Dale St

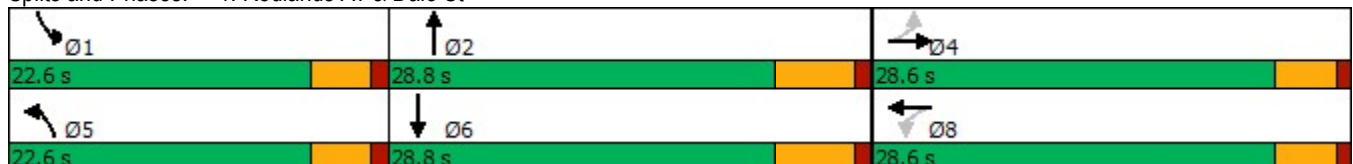


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↙	↕	↙	↕
Traffic Volume (vph)	6	3	29	4	22	441	47	392
Future Volume (vph)	6	3	29	4	22	441	47	392
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	28.6	28.6	28.6	28.6	22.6	28.6	22.6	24.8
Total Split (s)	28.6	28.6	28.6	28.6	22.6	28.8	22.6	28.8
Total Split (%)	35.8%	35.8%	35.8%	35.8%	28.3%	36.0%	28.3%	36.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		8.9		8.9	5.9	24.0	6.4	26.3
Actuated g/C Ratio		0.23		0.23	0.15	0.61	0.16	0.67
v/c Ratio		0.09		0.21	0.09	0.24	0.18	0.20
Control Delay		9.1		9.8	21.8	10.4	20.8	8.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		9.1		9.8	21.8	10.4	20.8	8.0
LOS		A		A	C	B	C	A
Approach Delay		9.1		9.8		10.9		9.2
Approach LOS		A		A		B		A

Intersection Summary

Cycle Length: 80	
Actuated Cycle Length: 39.2	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.24	
Intersection Signal Delay: 10.1	Intersection LOS: B
Intersection Capacity Utilization 37.3%	ICU Level of Service A
Analysis Period (min) 15	

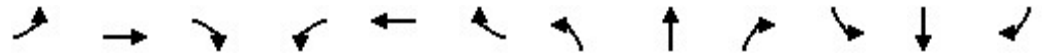
Splits and Phases: 1: Redlands Av & Dale St



HCM 6th Signalized Intersection Summary
 1: Redlands Av & Dale St

Prairie View Apartments (JN 13747)

08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Volume (veh/h)	6	3	19	29	4	39	22	441	28	47	392	39
Future Volume (veh/h)	6	3	19	29	4	39	22	441	28	47	392	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	3	21	32	4	42	24	479	30	51	426	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	23	116	254	8	87	54	966	60	105	1022	100
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.03	0.28	0.28	0.06	0.31	0.31
Sat Flow, veh/h	313	220	1119	641	80	841	1781	3397	212	1781	3269	321
Grp Volume(v), veh/h	31	0	0	78	0	0	24	250	259	51	231	237
Grp Sat Flow(s),veh/h/ln	1652	0	0	1562	0	0	1781	1777	1832	1781	1777	1813
Q Serve(g_s), s	0.0	0.0	0.0	0.8	0.0	0.0	0.4	3.2	3.2	0.8	2.8	2.8
Cycle Q Clear(g_c), s	0.5	0.0	0.0	1.2	0.0	0.0	0.4	3.2	3.2	0.8	2.8	2.8
Prop In Lane	0.23		0.68	0.41		0.54	1.00		0.12	1.00		0.18
Lane Grp Cap(c), veh/h	333	0	0	349	0	0	54	505	521	105	555	567
V/C Ratio(X)	0.09	0.00	0.00	0.22	0.00	0.00	0.44	0.49	0.50	0.49	0.42	0.42
Avail Cap(c_a), veh/h	1546	0	0	1529	0	0	1183	1508	1555	1183	1508	1539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.1	0.0	0.0	11.4	0.0	0.0	12.9	8.1	8.1	12.4	7.4	7.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.3	0.0	0.0	2.1	0.8	0.7	1.3	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.3	0.0	0.0	0.1	0.6	0.7	0.2	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.2	0.0	0.0	11.7	0.0	0.0	15.0	8.8	8.8	13.7	7.9	7.9
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		31			78			533			519	
Approach Delay, s/veh		11.2			11.7			9.1			8.4	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	13.5		7.4	5.4	14.3		7.4				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	18.0	23.0		24.0	18.0	23.0		24.0				
Max Q Clear Time (g_c+I1), s	2.8	5.2		2.5	2.4	4.8		3.2				
Green Ext Time (p_c), s	0.0	2.5		0.1	0.0	2.3		0.3				

Intersection Summary

HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Timings
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

08/17/2022

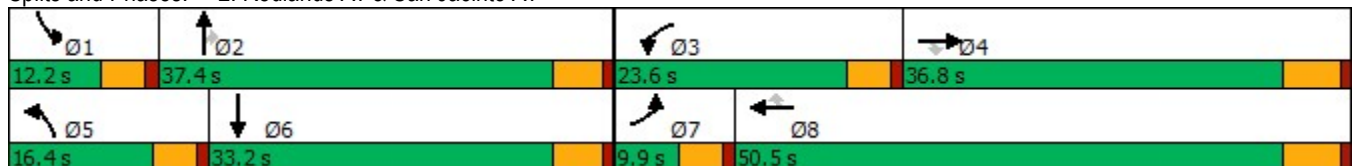


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↖↗
Traffic Volume (vph)	58	51	106	483	59	26	130	443	754	77	446
Future Volume (vph)	58	51	106	483	59	26	130	443	754	77	446
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	36.8	36.8	9.6	30.8	30.8	9.6	32.1	32.1	9.6	32.1
Total Split (s)	9.9	36.8	36.8	23.6	50.5	50.5	16.4	37.4	37.4	12.2	33.2
Total Split (%)	9.0%	33.5%	33.5%	21.5%	45.9%	45.9%	14.9%	34.0%	34.0%	11.1%	30.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.1	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.1	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	5.7	13.7	13.7	17.1	23.2	23.2	11.1	25.1	25.1	7.8	18.2
Actuated g/C Ratio	0.07	0.18	0.18	0.22	0.30	0.30	0.14	0.33	0.33	0.10	0.24
v/c Ratio	0.23	0.16	0.27	0.66	0.11	0.05	0.53	0.40	0.75	0.44	0.62
Control Delay	43.1	31.2	3.2	35.3	20.7	0.2	44.9	25.1	7.5	48.1	31.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.1	31.2	3.2	35.3	20.7	0.2	44.9	25.1	7.5	48.1	31.3
LOS	D	C	A	D	C	A	D	C	A	D	C
Approach Delay		20.6			32.2			17.1			33.5
Approach LOS		C			C			B			C

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 76.6
 Natural Cycle: 100
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 24.1
 Intersection LOS: C
 Intersection Capacity Utilization 72.2%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)
08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↑↗	
Traffic Volume (veh/h)	58	51	106	483	59	26	130	443	754	77	446	48
Future Volume (veh/h)	58	51	106	483	59	26	130	443	754	77	446	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	60	53	17	503	61	2	135	461	621	80	465	43
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	232	196	609	476	403	170	1406	627	103	1178	109
Arrive On Green	0.05	0.12	0.12	0.18	0.25	0.25	0.10	0.40	0.40	0.06	0.36	0.36
Sat Flow, veh/h	3456	1870	1585	3456	1870	1583	1781	3554	1585	1781	3289	303
Grp Volume(v), veh/h	60	53	17	503	61	2	135	461	621	80	250	258
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1583	1781	1777	1585	1781	1777	1815
Q Serve(g_s), s	1.4	2.1	0.8	11.5	2.1	0.1	6.1	7.4	31.8	3.6	8.6	8.7
Cycle Q Clear(g_c), s	1.4	2.1	0.8	11.5	2.1	0.1	6.1	7.4	31.8	3.6	8.6	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	157	232	196	609	476	403	170	1406	627	103	637	650
V/C Ratio(X)	0.38	0.23	0.09	0.83	0.13	0.00	0.80	0.33	0.99	0.78	0.39	0.40
Avail Cap(c_a), veh/h	224	710	602	804	1024	867	257	1406	627	166	637	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.8	32.2	31.7	32.4	23.4	22.7	36.1	17.1	24.5	37.9	19.6	19.6
Incr Delay (d2), s/veh	1.5	0.5	0.2	5.4	0.1	0.0	9.5	0.1	33.3	11.7	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.9	0.3	4.9	0.9	0.0	3.0	2.8	16.2	1.8	3.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.4	32.7	31.9	37.8	23.6	22.7	45.7	17.3	57.8	49.7	20.0	20.0
LnGrp LOS	D	C	C	D	C	C	D	B	E	D	B	B
Approach Vol, veh/h		130			566			1217			588	
Approach Delay, s/veh		35.7			36.2			41.1			24.0	
Approach LOS		D			D			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	37.4	19.0	15.9	12.4	34.3	8.3	26.6				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	7.6	32.3	19.0	31.0	11.8	28.1	5.3	44.7				
Max Q Clear Time (g_c+I1), s	5.6	33.8	13.5	4.1	8.1	10.7	3.4	4.1				
Green Ext Time (p_c), s	0.0	0.0	0.9	0.2	0.1	2.5	0.0	0.3				

Intersection Summary												
HCM 6th Ctrl Delay											35.7	
HCM 6th LOS											D	

Timings
3: Redlands Av & I-215 NB Ramps

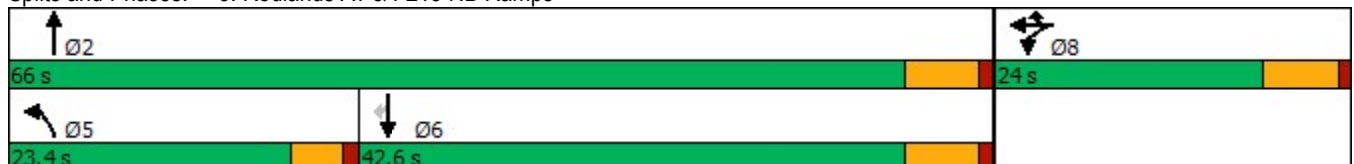


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	330	4	516	123	811	899	136
Future Volume (vph)	330	4	516	123	811	899	136
Turn Type	Split	NA	Prot	Prot	NA	NA	Perm
Protected Phases	8	8	8	5	2	6	
Permitted Phases							6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	9.5	11.0	31.0	31.0
Total Split (s)	24.0	24.0	24.0	23.4	66.0	42.6	42.6
Total Split (%)	26.7%	26.7%	26.7%	26.0%	73.3%	47.3%	47.3%
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.5	6.0	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min
Act Effct Green (s)	17.2	17.2	17.2	7.8	27.4	18.0	18.0
Actuated g/C Ratio	0.30	0.30	0.30	0.14	0.48	0.32	0.32
v/c Ratio	0.61	0.49	0.47	0.27	0.49	0.46	0.23
Control Delay	26.0	9.5	9.0	26.6	10.7	17.1	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.0	9.5	9.0	26.6	10.7	17.1	4.5
LOS	C	A	A	C	B	B	A
Approach Delay		15.1			12.8	15.4	
Approach LOS		B			B	B	

Intersection Summary

Cycle Length: 90	
Actuated Cycle Length: 57.1	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 14.5	Intersection LOS: B
Intersection Capacity Utilization 53.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 3: Redlands Av & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 3: Redlands Av & I-215 NB Ramps

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↔	↗	↙↗	↕			↑↑↑	↗
Traffic Volume (veh/h)	0	0	0	330	4	516	123	811	0	0	899	136
Future Volume (veh/h)	0	0	0	330	4	516	123	811	0	0	899	136
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				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				466	0	248	127	836	0	0	927	56
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				813	0	362	303	1806	0	0	2068	510
Arrive On Green				0.23	0.00	0.23	0.09	0.51	0.00	0.00	0.32	0.32
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	6696	1585
Grp Volume(v), veh/h				466	0	248	127	836	0	0	927	56
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1609	1585
Q Serve(g_s), s				5.3	0.0	6.5	1.6	6.9	0.0	0.0	5.2	1.1
Cycle Q Clear(g_c), s				5.3	0.0	6.5	1.6	6.9	0.0	0.0	5.2	1.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				813	0	362	303	1806	0	0	2068	510
V/C Ratio(X)				0.57	0.00	0.69	0.42	0.46	0.00	0.00	0.45	0.11
Avail Cap(c_a), veh/h				1409	0	627	1435	4686	0	0	5175	1275
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.6	0.0	16.1	19.7	7.2	0.0	0.0	12.2	10.9
Incr Delay (d2), s/veh				0.6	0.0	2.3	0.9	0.2	0.0	0.0	0.2	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.7	0.0	2.1	0.6	1.7	0.0	0.0	1.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				16.2	0.0	18.4	20.6	7.4	0.0	0.0	12.4	11.0
LnGrp LOS				B	A	B	C	A	A	A	B	B
Approach Vol, veh/h					714			963			983	
Approach Delay, s/veh					17.0			9.1			12.3	
Approach LOS					B			A			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		29.1			8.5	20.6		16.4				
Change Period (Y+Rc), s		6.0			4.5	6.0		6.0				
Max Green Setting (Gmax), s		60.0			18.9	36.6		18.0				
Max Q Clear Time (g_c+I1), s		8.9			3.6	7.2		8.5				
Green Ext Time (p_c), s		6.9			0.3	7.4		1.9				

Intersection Summary

HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Timings
4: Redlands Av & I-215 SB Ramps

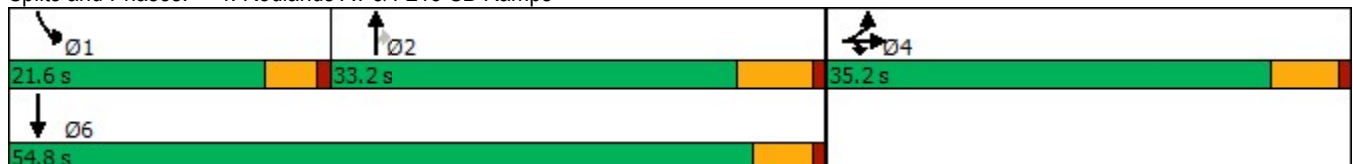


Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	187	2	179	747	419	403	826
Future Volume (vph)	187	2	179	747	419	403	826
Turn Type	Split	NA	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	4	2		1	6
Permitted Phases					2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.3	23.3	23.3	23.7	23.7	9.6	32.0
Total Split (s)	35.2	35.2	35.2	33.2	33.2	21.6	54.8
Total Split (%)	39.1%	39.1%	39.1%	36.9%	36.9%	24.0%	60.9%
Yellow Time (s)	4.5	4.5	4.5	5.0	5.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	6.0	6.0	4.5	5.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	Min
Act Effct Green (s)	10.2	10.2	10.2	17.1	17.1	12.3	35.0
Actuated g/C Ratio	0.18	0.18	0.18	0.30	0.30	0.22	0.62
v/c Ratio	0.42	0.38	0.32	0.39	0.37	0.54	0.38
Control Delay	27.1	16.9	8.2	16.4	3.1	23.9	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.1	16.9	8.2	16.4	3.1	23.9	5.9
LOS	C	B	A	B	A	C	A
Approach Delay		17.6		11.6			11.8
Approach LOS		B		B			B

Intersection Summary





















Cycle Length: 90	
Actuated Cycle Length: 56.2	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 12.5	Intersection LOS: B
Intersection Capacity Utilization 53.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Redlands Av & I-215 SB Ramps



HCM 6th Signalized Intersection Summary
4: Redlands Av & I-215 SB Ramps

Prairie View Apartments (JN 13747)
08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	2	179	0	0	0	0	747	419	403	826	0
Future Volume (veh/h)	187	2	179	0	0	0	0	747	419	403	826	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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	221	0	67				0	755	378	407	834	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	438	0	195				0	2035	882	626	2147	0
Arrive On Green	0.12	0.00	0.12				0.00	0.32	0.32	0.18	0.60	0.00
Sat Flow, veh/h	3563	0	1585				0	6696	2790	3456	3647	0
Grp Volume(v), veh/h	221	0	67				0	755	378	407	834	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1609	1395	1728	1777	0
Q Serve(g_s), s	2.4	0.0	1.6				0.0	3.8	4.5	4.6	5.1	0.0
Cycle Q Clear(g_c), s	2.4	0.0	1.6				0.0	3.8	4.5	4.6	5.1	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	438	0	195				0	2035	882	626	2147	0
V/C Ratio(X)	0.50	0.00	0.34				0.00	0.37	0.43	0.65	0.39	0.00
Avail Cap(c_a), veh/h	2512	0	1118				0	4154	1801	1403	4201	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.3	0.0	16.9				0.0	11.2	11.4	16.0	4.3	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.0				0.0	0.1	0.3	1.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.5				0.0	1.1	1.1	1.6	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	0.0	18.0				0.0	11.3	11.7	17.2	4.4	0.0
LnGrp LOS	B	A	B				A	B	B	B	A	A
Approach Vol, veh/h		288						1133			1241	
Approach Delay, s/veh		18.1						11.4			8.6	
Approach LOS		B						B			A	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	12.1	19.3		10.7				31.5				
Change Period (Y+Rc), s	4.5	6.0		5.5				* 6				
Max Green Setting (Gmax), s	17.1	27.2		29.7				* 50				
Max Q Clear Time (g_c+I1), s	6.6	6.5		4.4				7.1				
Green Ext Time (p_c), s	1.1	6.8		0.9				6.8				

Intersection Summary

HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑			↑
Traffic Vol, veh/h	27	3	112	0	0	71
Future Vol, veh/h	27	3	112	0	0	71
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, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	3	122	0	0	77

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	199	122	0	-	-	-
Stage 1	122	-	-	-	-	-
Stage 2	77	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	790	929	-	0	0	-
Stage 1	903	-	-	0	0	-
Stage 2	946	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	790	929	-	-	-	-
Mov Cap-2 Maneuver	832	-	-	-	-	-
Stage 1	903	-	-	-	-	-
Stage 2	946	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 841	-
HCM Lane V/C Ratio	- 0.039	-
HCM Control Delay (s)	- 9.5	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.1	-

Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	24	25	91	65	33
Future Vol, veh/h	21	24	25	91	65	33
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	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	38	38	38	38
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	55	63	66	239	171	87

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	586	215	258	0	0
Stage 1	215	-	-	-	-
Stage 2	371	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	473	825	1307	-	-
Stage 1	821	-	-	-	-
Stage 2	698	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	449	825	1307	-	-
Mov Cap-2 Maneuver	540	-	-	-	-
Stage 1	780	-	-	-	-
Stage 2	698	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	1.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1307	-	662	-	-
HCM Lane V/C Ratio	0.05	-	0.179	-	-
HCM Control Delay (s)	7.9	-	11.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	120	736	484	5	13	95
Future Vol, veh/h	120	736	484	5	13	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	210	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	132	809	532	5	14	104

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	537	0	-	0	1605 532
Stage 1	-	-	-	-	532 -
Stage 2	-	-	-	-	1073 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1031	-	-	-	116 547
Stage 1	-	-	-	-	589 -
Stage 2	-	-	-	-	328 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1031	-	-	-	89 547
Mov Cap-2 Maneuver	-	-	-	-	213 -
Stage 1	-	-	-	-	452 -
Stage 2	-	-	-	-	328 -

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	15.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1031	-	-	-	460
HCM Lane V/C Ratio	0.128	-	-	-	0.258
HCM Control Delay (s)	9	0	-	-	15.5
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	1

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	5	19	64	215	168	28
Future Vol, veh/h	5	19	64	215	168	28
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, %	2	2	2	2	2	2
Mvmt Flow	5	21	70	234	183	30

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	572	198	213	0	0
Stage 1	198	-	-	-	-
Stage 2	374	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	482	843	1357	-	-
Stage 1	835	-	-	-	-
Stage 2	696	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	454	843	1357	-	-
Mov Cap-2 Maneuver	454	-	-	-	-
Stage 1	786	-	-	-	-
Stage 2	696	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	1.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1357	-	715	-	-
HCM Lane V/C Ratio	0.051	-	0.036	-	-
HCM Control Delay (s)	7.8	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	-	-

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗		↕			↕			↕	
Traffic Vol, veh/h	248	511	0	0	281	32	0	0	0	23	0	164
Future Vol, veh/h	248	511	0	0	281	32	0	0	0	23	0	164
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	-	0	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	276	568	0	0	312	36	0	0	0	26	0	182

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	348	0	0	568	0	0	1541	1468	568	1450	1450	330
Stage 1	-	-	-	-	-	-	1120	1120	-	330	330	-
Stage 2	-	-	-	-	-	-	421	348	-	1120	1120	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1211	-	-	1004	-	-	94	128	522	109	131	712
Stage 1	-	-	-	-	-	-	251	282	-	683	646	-
Stage 2	-	-	-	-	-	-	610	634	-	251	282	-
Platoon blocked, %		-	-	-	-	-						
Mov Cap-1 Maneuver	1211	-	-	1004	-	-	58	99	522	90	101	712
Mov Cap-2 Maneuver	-	-	-	-	-	-	58	99	-	159	180	-
Stage 1	-	-	-	-	-	-	194	218	-	527	646	-
Stage 2	-	-	-	-	-	-	454	634	-	194	218	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.9	0	0	17.3
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	1211	-	-	1004	-	-	499
HCM Lane V/C Ratio	-	0.228	-	-	-	-	-	0.416
HCM Control Delay (s)		0	8.8	-	-	0	-	17.3
HCM Lane LOS		A	A	-	-	A	-	C
HCM 95th %tile Q(veh)	-	0.9	-	-	0	-	-	2

**APPENDIX 5.2: E+P CONDITIONS TRAFFIC SIGNAL WARRANT
ANALYSIS WORKSHEETS**

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

<u>DIST</u>	<u>CO</u>	<u>RTE</u>	<u>PM</u>	<u>CALC</u>	<u>TRAFFIC CONDITIONS</u>	<u>E+P</u>
Jurisdiction: <u>County of Riverside</u>				<u>JB</u>		<u>DATE</u> <u>03/22/22</u>
Major Street: <u>Wilson Avenue</u>				<u>JB</u>		<u>DATE</u> <u>03/22/22</u>
Minor Street: <u>Driveway 1</u>					Critical Approach Speed (Major) <u>30</u> mph	
					Critical Approach Speed (Minor) <u>25</u> mph	
Major Street Approach Lanes = <u>1</u>	lane	Minor Street Approach Lanes = <u>1</u>	lane			
Major Street Future ADT = <u>2,709</u>	vpd	Minor Street Future ADT = <u>266</u>	vpd			
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);	<input type="checkbox"/>	or	<input type="checkbox"/>			URBAN (U)
In built up area of isolated community of < 10,000 population	<input type="checkbox"/>					

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>	<u>RURAL</u>	Minimum Requirements			
XX		EADT			
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>	<u>Not Satisfied</u>	(Total of Both Approaches)		(One Direction Only)	
	XX	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
<u>1 2,709</u>	<u>1 266</u>	8,000	5,600	2,400	1,680
<u>2 +</u>	<u>1</u>	9,600	6,720	2,400	1,680
<u>2 +</u>	<u>2 +</u>	9,600	6,720	3,200	2,240
<u>1</u>	<u>2 +</u>	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>	<u>Not Satisfied</u>	(Total of Both Approaches)		(One Direction Only)	
	XX	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
<u>1 2,709</u>	<u>1 266</u>	12,000	8,400	1,200	850
<u>2 +</u>	<u>1</u>	14,400	10,080	1,200	850
<u>2 +</u>	<u>2 +</u>	14,400	10,080	1,600	1,120
<u>1</u>	<u>2 +</u>	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B		2 CONDITIONS		2 CONDITIONS	
<u>Satisfied</u>	<u>Not Satisfied</u>	80%		80%	
No one condition satisfied, but following conditions fulfilled 80% of more	XX				
	<u>A</u>				
	11%				
	<u>B</u>				
	22%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.



Figure 4C-3. Warrant 3, Peak Hour

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

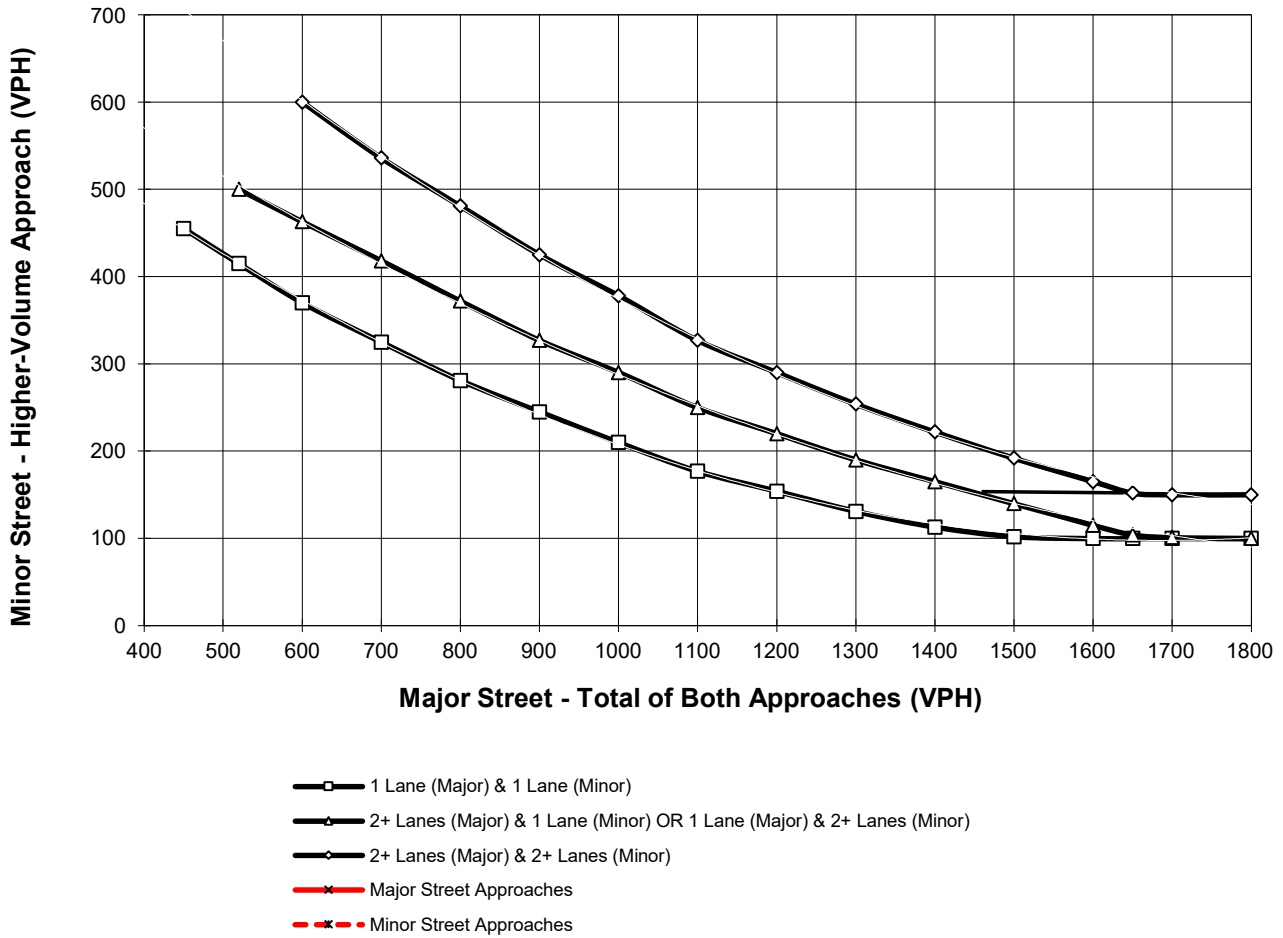
Major Street Name = **Wilson Avenue**

Total of Both Approaches (VPH) = **214**
 Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Dale Street**

High Volume Approach (VPH) = **45**
 Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane



Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

<u>DIST</u>	<u>CO</u>	<u>RTE</u>	<u>PM</u>	CALC <u>MT</u>	TRAFFIC CONDITIONS	<u>E+P</u>
Jurisdiction: <u>County of Riverside</u>				CHK <u>MT</u>		DATE <u>03/22/22</u>
Major Street: <u>Murrieta Road</u>					Critical Approach Speed (Major)	<u>35</u> mph
Minor Street: <u>Driveway 2</u>					Critical Approach Speed (Minor)	<u>30</u> mph
Major Street Approach Lanes =		<u>1</u>	lane	Minor Street Approach Lanes =		<u>1</u> lane
Major Street Future ADT =		<u>5,428</u>	vpd	Minor Street Future ADT =		<u>701</u> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);						<input type="checkbox"/>
						or
In built up area of isolated community of < 10,000 population						<input type="checkbox"/>

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>	<u>RURAL</u>	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume					
<u>Satisfied</u>	<u>Not Satisfied</u>				
	XX				
Number of lanes for moving traffic on each approach		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Major Street</u>	<u>Minor Street</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1 5,428	1 701	8,000	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic					
<u>Satisfied</u>	<u>Not Satisfied</u>				
	XX				
Number of lanes for moving traffic on each approach		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Major Street</u>	<u>Minor Street</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
1 5,428	1 701	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
<u>Satisfied</u>	<u>Not Satisfied</u>				
	XX				
No one condition satisfied, but following conditions fulfilled 80% of more		2 CONDITIONS 80%		2 CONDITIONS 80%	
	<u>A</u>				
	29%				
	<u>B</u>				
	45%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.



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APPENDIX 5.3: E+P QUEUING ANALYSIS WORKSHEETS

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Queues

3: Redlands Av & I-215 NB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	225	218	203	160	760	1135	245
v/c Ratio	0.61	0.58	0.41	0.34	0.37	0.48	0.33
Control Delay	31.5	25.7	7.0	29.5	7.7	16.0	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.5	25.7	7.0	29.5	7.8	16.0	3.6
Queue Length 50th (ft)	80	62	0	29	74	94	0
Queue Length 95th (ft)	180	158	51	64	113	136	38
Internal Link Dist (ft)		1157			322	711	
Turn Bay Length (ft)	800		400				
Base Capacity (vph)	498	486	588	1068	3215	3859	1050
Starvation Cap Reductn	0	0	0	0	622	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.45	0.35	0.15	0.29	0.29	0.23

Intersection Summary

Queues

4: Redlands Av & I-215 SB Ramps



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	98	94	91	763	274	498	941
v/c Ratio	0.33	0.28	0.27	0.39	0.26	0.55	0.37
Control Delay	25.6	8.9	8.5	16.0	3.3	21.1	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.6	8.9	8.5	16.0	3.3	21.1	5.0
Queue Length 50th (ft)	29	1	0	56	0	71	62
Queue Length 95th (ft)	78	39	35	93	25	139	111
Internal Link Dist (ft)		878		463			322
Turn Bay Length (ft)	740		140		200		
Base Capacity (vph)	1040	971	965	3632	1698	1223	3181
Starvation Cap Reductn	0	0	0	0	0	0	557
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.10	0.09	0.21	0.16	0.41	0.36

Intersection Summary

Queues

3: Redlands Av & I-215 NB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	306	288	282	127	836	927	140
v/c Ratio	0.61	0.49	0.47	0.27	0.49	0.46	0.23
Control Delay	26.0	9.5	9.0	26.6	10.7	17.1	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.0	9.5	9.0	26.6	10.7	17.1	4.5
Queue Length 50th (ft)	96	21	18	21	96	79	0
Queue Length 95th (ft)	#232	98	89	48	133	109	32
Internal Link Dist (ft)		1157			322	711	
Turn Bay Length (ft)	800		400				
Base Capacity (vph)	553	625	637	1186	3409	4290	1106
Starvation Cap Reductn	0	0	0	0	319	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.46	0.44	0.11	0.27	0.22	0.13

Intersection Summary

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

Queues

4: Redlands Av & I-215 SB Ramps



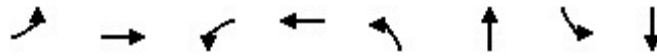
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	129	125	118	755	423	407	834
v/c Ratio	0.42	0.38	0.32	0.39	0.37	0.54	0.38
Control Delay	27.1	16.9	8.2	16.4	3.1	23.9	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.1	16.9	8.2	16.4	3.1	23.9	5.9
Queue Length 50th (ft)	38	19	0	55	0	59	57
Queue Length 95th (ft)	104	75	41	98	30	127	111
Internal Link Dist (ft)		878		463			322
Turn Bay Length (ft)	740		140		200		
Base Capacity (vph)	924	868	880	3226	1613	1086	3108
Starvation Cap Reductn	0	0	0	0	0	0	576
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.14	0.13	0.23	0.26	0.37	0.33

Intersection Summary

**APPENDIX 6.1: OPENING YEAR CUMULATIVE (2024) WITHOUT
PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS
WORKSHEETS**

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Timings
1: Redlands Av & Dale St

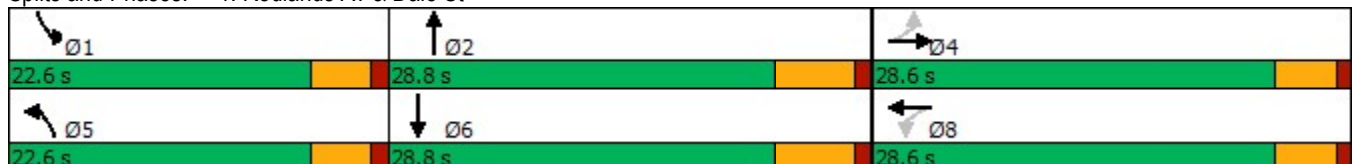


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↙	↕	↙	↕
Traffic Volume (vph)	42	6	54	24	83	453	33	587
Future Volume (vph)	42	6	54	24	83	453	33	587
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	28.6	28.6	28.6	28.6	22.6	28.6	22.6	24.8
Total Split (s)	28.6	28.6	28.6	28.6	22.6	28.8	22.6	28.8
Total Split (%)	35.8%	35.8%	35.8%	35.8%	28.3%	36.0%	28.3%	36.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		11.3		11.3	7.9	29.7	6.2	23.6
Actuated g/C Ratio		0.20		0.20	0.14	0.53	0.11	0.42
v/c Ratio		0.38		0.50	0.41	0.32	0.21	0.63
Control Delay		14.0		20.7	29.7	10.7	29.2	17.8
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		14.0		20.7	29.7	10.7	29.2	17.8
LOS		B		C	C	B	C	B
Approach Delay		14.0		20.7		13.5		18.3
Approach LOS		B		C		B		B

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 55.9
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.63
 Intersection Signal Delay: 16.5
 Intersection LOS: B
 Intersection Capacity Utilization 48.0%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 1: Redlands Av & Dale St



HCM 6th Signalized Intersection Summary
 1: Redlands Av & Dale St

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕		↗	↕	
Traffic Volume (veh/h)	42	6	56	54	24	55	83	453	25	33	587	151
Future Volume (veh/h)	42	6	56	54	24	55	83	453	25	33	587	151
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	8	70	68	30	69	104	566	31	41	734	189
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	40	139	213	64	105	153	1440	79	82	1063	274
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.09	0.42	0.42	0.05	0.38	0.38
Sat Flow, veh/h	508	254	889	546	410	673	1781	3426	187	1781	2797	720
Grp Volume(v), veh/h	130	0	0	167	0	0	104	293	304	41	466	457
Grp Sat Flow(s),veh/h/ln	1651	0	0	1630	0	0	1781	1777	1837	1781	1777	1741
Q Serve(g_s), s	0.0	0.0	0.0	0.9	0.0	0.0	2.3	4.6	4.6	0.9	8.8	8.8
Cycle Q Clear(g_c), s	2.7	0.0	0.0	3.6	0.0	0.0	2.3	4.6	4.6	0.9	8.8	8.8
Prop In Lane	0.40		0.54	0.41		0.41	1.00		0.10	1.00		0.41
Lane Grp Cap(c), veh/h	385	0	0	382	0	0	153	747	772	82	675	662
V/C Ratio(X)	0.34	0.00	0.00	0.44	0.00	0.00	0.68	0.39	0.39	0.50	0.69	0.69
Avail Cap(c_a), veh/h	1042	0	0	1056	0	0	807	1029	1063	807	1029	1008
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	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.3	0.0	0.0	15.6	0.0	0.0	17.6	8.0	8.0	18.5	10.3	10.3
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.8	0.0	0.0	2.0	0.3	0.3	1.8	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	1.3	0.0	0.0	0.8	1.1	1.1	0.3	2.3	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	0.0	0.0	16.4	0.0	0.0	19.6	8.3	8.3	20.3	11.6	11.6
LnGrp LOS	B	A	A	B	A	A	B	A	A	C	B	B
Approach Vol, veh/h		130			167			701				964
Approach Delay, s/veh		15.8			16.4			10.0				12.0
Approach LOS		B			B			B				B
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	22.5		10.8	8.0	20.9		10.8				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	18.0	23.0		24.0	18.0	23.0		24.0				
Max Q Clear Time (g_c+I1), s	2.9	6.6		4.7	4.3	10.8		5.6				
Green Ext Time (p_c), s	0.0	2.9		0.7	0.1	4.3		0.9				

Intersection Summary

HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Timings
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

08/17/2022

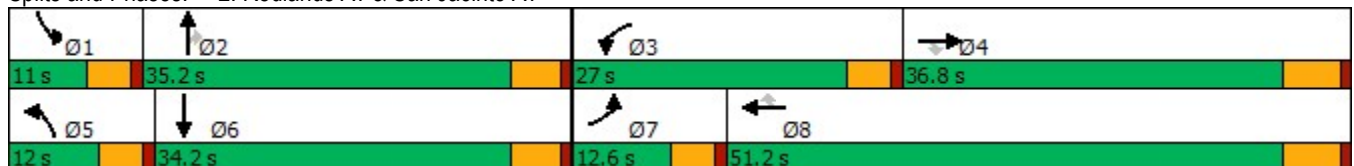


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↖↗
Traffic Volume (vph)	103	36	161	1019	85	108	153	420	917	127	503
Future Volume (vph)	103	36	161	1019	85	108	153	420	917	127	503
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	36.8	36.8	9.6	30.8	30.8	9.6	32.1	32.1	9.6	32.1
Total Split (s)	12.6	36.8	36.8	27.0	51.2	51.2	12.0	35.2	35.2	11.0	34.2
Total Split (%)	11.5%	33.5%	33.5%	24.5%	46.5%	46.5%	10.9%	32.0%	32.0%	10.0%	31.1%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.1	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.1	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	7.6	13.6	13.6	22.6	28.6	28.6	7.5	30.3	30.3	6.4	29.3
Actuated g/C Ratio	0.08	0.15	0.15	0.24	0.31	0.31	0.08	0.33	0.33	0.07	0.31
v/c Ratio	0.42	0.15	0.49	1.39	0.17	0.22	1.23	0.41	0.95	1.18	0.61
Control Delay	46.8	34.6	12.0	214.6	23.9	5.0	189.2	27.0	24.3	178.6	30.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.8	34.6	12.0	214.6	23.9	5.0	189.2	27.0	24.3	178.6	30.3
LOS	D	C	B	F	C	A	F	C	C	F	C
Approach Delay		26.7			182.5			42.0			56.4
Approach LOS		C			F			D			E

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 93.2
 Natural Cycle: 120
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.39
 Intersection Signal Delay: 89.3
 Intersection LOS: F
 Intersection Capacity Utilization 85.1%
 ICU Level of Service E
 Analysis Period (min) 15

































Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
 2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 		 	 		 	 	 	 	 	 	
Traffic Volume (veh/h)	103	36	161	1019	85	108	153	420	917	127	503	88
Future Volume (veh/h)	103	36	161	1019	85	108	153	420	917	127	503	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	41	82	1158	97	96	174	477	864	144	572	92
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	215	182	867	585	495	148	1198	534	128	1000	160
Arrive On Green	0.05	0.11	0.11	0.25	0.31	0.31	0.08	0.34	0.34	0.07	0.33	0.33
Sat Flow, veh/h	3456	1870	1585	3456	1870	1584	1781	3554	1585	1781	3066	492
Grp Volume(v), veh/h	117	41	82	1158	97	96	174	477	864	144	331	333
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1584	1781	1777	1585	1781	1777	1781
Q Serve(g_s), s	3.0	1.8	4.3	22.4	3.4	4.0	7.4	9.2	30.1	6.4	13.8	13.8
Cycle Q Clear(g_c), s	3.0	1.8	4.3	22.4	3.4	4.0	7.4	9.2	30.1	6.4	13.8	13.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	184	215	182	867	585	495	148	1198	534	128	579	581
V/C Ratio(X)	0.63	0.19	0.45	1.34	0.17	0.19	1.18	0.40	1.62	1.13	0.57	0.57
Avail Cap(c_a), veh/h	310	650	550	867	951	805	148	1198	534	128	579	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	35.7	36.9	33.4	22.2	22.5	40.9	22.6	29.6	41.4	24.9	24.9
Incr Delay (d2), s/veh	3.6	0.4	1.7	158.8	0.1	0.2	130.0	0.2	286.0	118.0	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.8	1.7	27.8	1.4	1.4	8.5	3.7	52.8	6.9	5.6	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.0	36.2	38.6	192.2	22.4	22.6	170.9	22.9	315.6	159.4	26.3	26.3
LnGrp LOS	D	D	D	F	C	C	F	C	F	F	C	C
Approach Vol, veh/h		240			1351			1515			808	
Approach Delay, s/veh		41.3			168.0			206.8			50.0	
Approach LOS		D			F			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	35.2	27.0	16.1	12.0	34.2	9.4	33.7				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	6.4	30.1	22.4	31.0	7.4	29.1	8.0	45.4				
Max Q Clear Time (g_c+I1), s	8.4	32.1	24.4	6.3	9.4	15.8	5.0	6.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	3.1	0.1	0.8				
Intersection Summary												
HCM 6th Ctrl Delay				150.9								
HCM 6th LOS				F								

Timings
3: Redlands Av & I-215 NB Ramps

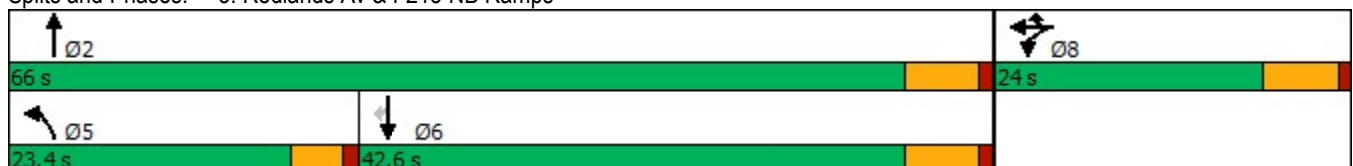


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	331	2	483	192	1006	1316	366
Future Volume (vph)	331	2	483	192	1006	1316	366
Turn Type	Split	NA	Prot	Prot	NA	NA	Perm
Protected Phases	8	8	8	5	2	6	
Permitted Phases							6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	9.5	11.0	31.0	31.0
Total Split (s)	24.0	24.0	24.0	23.4	66.0	42.6	42.6
Total Split (%)	26.7%	26.7%	26.7%	26.0%	73.3%	47.3%	47.3%
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.5	6.0	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min
Act Effct Green (s)	17.7	17.7	17.7	10.2	47.4	32.6	32.6
Actuated g/C Ratio	0.23	0.23	0.23	0.13	0.61	0.42	0.42
v/c Ratio	0.82	0.71	0.69	0.47	0.52	0.55	0.45
Control Delay	49.7	28.6	27.5	35.6	9.3	17.6	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay	49.7	28.6	27.5	35.6	9.5	17.6	3.4
LOS	D	C	C	D	A	B	A
Approach Delay		35.5			13.7	14.5	
Approach LOS		D			B	B	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 77.2
 Natural Cycle: 60
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 18.9
 Intersection Capacity Utilization 57.7%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 3: Redlands Av & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 3: Redlands Av & I-215 NB Ramps

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↔	↗	↙↗	↕			↕↕↕	↗
Traffic Volume (veh/h)	0	0	0	331	2	483	192	1006	0	0	1316	366
Future Volume (veh/h)	0	0	0	331	2	483	192	1006	0	0	1316	366
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				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				491	0	252	216	1130	0	0	1479	320
Peak Hour Factor				0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				744	0	331	343	2114	0	0	2715	669
Arrive On Green				0.21	0.00	0.21	0.10	0.59	0.00	0.00	0.42	0.42
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	6696	1585
Grp Volume(v), veh/h				491	0	252	216	1130	0	0	1479	320
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1609	1585
Q Serve(g_s), s				7.7	0.0	9.1	3.7	11.6	0.0	0.0	10.6	8.9
Cycle Q Clear(g_c), s				7.7	0.0	9.1	3.7	11.6	0.0	0.0	10.6	8.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				744	0	331	343	2114	0	0	2715	669
V/C Ratio(X)				0.66	0.00	0.76	0.63	0.53	0.00	0.00	0.54	0.48
Avail Cap(c_a), veh/h				1048	0	466	1068	3486	0	0	3850	949
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				22.2	0.0	22.8	26.5	7.4	0.0	0.0	13.3	12.8
Incr Delay (d2), s/veh				1.0	0.0	4.6	1.9	0.2	0.0	0.0	0.2	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.9	0.0	3.4	1.5	3.2	0.0	0.0	3.3	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				23.2	0.0	27.4	28.4	7.6	0.0	0.0	13.4	13.3
LnGrp LOS				C	A	C	C	A	A	A	B	B
Approach Vol, veh/h					743			1346			1799	
Approach Delay, s/veh					24.6			10.9			13.4	
Approach LOS					C			B			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		42.4			10.6	31.8		18.8				
Change Period (Y+Rc), s		6.0			4.5	6.0		6.0				
Max Green Setting (Gmax), s		60.0			18.9	36.6		18.0				
Max Q Clear Time (g_c+I1), s		13.6			5.7	12.6		11.1				
Green Ext Time (p_c), s		10.6			0.6	13.3		1.6				

Intersection Summary

HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Timings
4: Redlands Av & I-215 SB Ramps

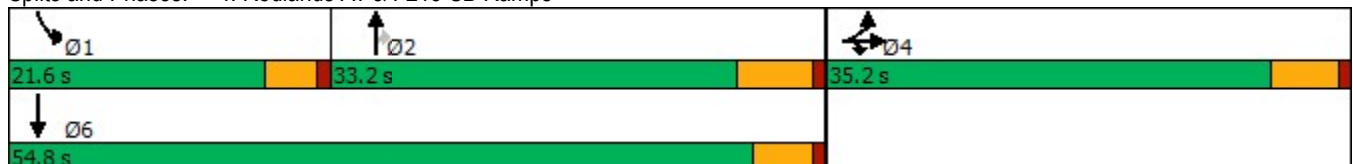


Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	288	0	190	909	276	626	1021
Future Volume (vph)	288	0	190	909	276	626	1021
Turn Type	Split	NA	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	4	2		1	6
Permitted Phases					2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.3	23.3	23.3	23.7	23.7	9.6	32.0
Total Split (s)	35.2	35.2	35.2	33.2	33.2	21.6	54.8
Total Split (%)	39.1%	39.1%	39.1%	36.9%	36.9%	24.0%	60.9%
Yellow Time (s)	4.5	4.5	4.5	5.0	5.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	6.0	6.0	4.5	5.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	Min
Act Effct Green (s)	13.2	13.2	13.2	20.9	20.9	17.4	43.9
Actuated g/C Ratio	0.19	0.19	0.19	0.31	0.31	0.26	0.65
v/c Ratio	0.55	0.48	0.45	0.51	0.28	0.78	0.49
Control Delay	32.2	17.6	16.5	20.3	3.3	33.5	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	32.2	17.6	16.5	20.3	3.3	33.5	7.7
LOS	C	B	B	C	A	C	A
Approach Delay		22.3		16.3			17.5
Approach LOS		C		B			B

Intersection Summary





















Cycle Length: 90
 Actuated Cycle Length: 67.8
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 17.8
 Intersection LOS: B
 Intersection Capacity Utilization 57.7%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 4: Redlands Av & I-215 SB Ramps



HCM 6th Signalized Intersection Summary
4: Redlands Av & I-215 SB Ramps

Prairie View Apartments (JN 13747)
08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	0	190	0	0	0	0	909	276	626	1021	0
Future Volume (veh/h)	288	0	190	0	0	0	0	909	276	626	1021	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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	353	0	80				0	999	254	688	1122	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	553	0	246				0	1961	850	854	2254	0
Arrive On Green	0.16	0.00	0.16				0.00	0.30	0.30	0.25	0.63	0.00
Sat Flow, veh/h	3563	0	1585				0	6696	2790	3456	3647	0
Grp Volume(v), veh/h	353	0	80				0	999	254	688	1122	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1609	1395	1728	1777	0
Q Serve(g_s), s	5.1	0.0	2.5				0.0	7.0	3.8	10.2	9.2	0.0
Cycle Q Clear(g_c), s	5.1	0.0	2.5				0.0	7.0	3.8	10.2	9.2	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	553	0	246				0	1961	850	854	2254	0
V/C Ratio(X)	0.64	0.00	0.33				0.00	0.51	0.30	0.81	0.50	0.00
Avail Cap(c_a), veh/h	1937	0	862				0	3204	1389	1082	3240	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	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.6	0.0	20.5				0.0	15.6	14.5	19.3	5.3	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.8				0.0	0.2	0.2	3.6	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	1.9	0.0	0.8				0.0	2.2	1.1	4.0	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.9	0.0	21.3				0.0	15.8	14.7	22.9	5.5	0.0
LnGrp LOS	C	A	C				A	B	B	C	A	A
Approach Vol, veh/h		433						1253			1810	
Approach Delay, s/veh		22.6						15.6			12.1	
Approach LOS		C						B			B	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	18.0	22.6		14.0				40.6				
Change Period (Y+Rc), s	4.5	6.0		5.5				* 6				
Max Green Setting (Gmax), s	17.1	27.2		29.7				* 50				
Max Q Clear Time (g_c+I1), s	12.2	9.0		7.1				11.2				
Green Ext Time (p_c), s	1.3	7.7		1.4				10.1				
Intersection Summary												
HCM 6th Ctrl Delay			14.7									
HCM 6th LOS			B									
Notes												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	25	27	99	65	18
Future Vol, veh/h	29	25	27	99	65	18
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	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	28	31	113	74	20

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	259	84	94	0	0
Stage 1	84	-	-	-	-
Stage 2	175	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	730	975	1500	-	-
Stage 1	939	-	-	-	-
Stage 2	855	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	715	975	1500	-	-
Mov Cap-2 Maneuver	728	-	-	-	-
Stage 1	919	-	-	-	-
Stage 2	855	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	1.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1500	-	825	-	-
HCM Lane V/C Ratio	0.02	-	0.074	-	-
HCM Control Delay (s)	7.5	-	9.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection						
Int Delay, s/veh	11.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	90	830	1128	12	12	140
Future Vol, veh/h	90	830	1128	12	12	140
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	210	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	108	1000	1359	14	14	169

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1373	0	-	0	2575 1359
Stage 1	-	-	-	-	1359 -
Stage 2	-	-	-	-	1216 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	500	-	-	-	28 182
Stage 1	-	-	-	-	239 -
Stage 2	-	-	-	-	280 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	500	-	-	-	~ 14 182
Mov Cap-2 Maneuver	-	-	-	-	83 -
Stage 1	-	-	-	-	123 -
Stage 2	-	-	-	-	280 -

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	156.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	500	-	-	-	166
HCM Lane V/C Ratio	0.217	-	-	-	1.103
HCM Control Delay (s)	14.2	0	-	-	156.2
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.8	-	-	-	9.4

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	37											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗		↕			↕			↕	
Traffic Vol, veh/h	210	552	0	0	679	50	0	0	0	41	0	274
Future Vol, veh/h	210	552	0	0	679	50	0	0	0	41	0	274
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	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	247	649	0	0	799	59	0	0	0	48	0	322

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	858	0	0	649	0	0	2133	2001	649	1972	1972	829
Stage 1	-	-	-	-	-	-	1143	1143	-	829	829	-
Stage 2	-	-	-	-	-	-	990	858	-	1143	1143	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	783	-	-	937	-	-	36	60	470	~ 47	62	370
Stage 1	-	-	-	-	-	-	243	275	-	365	385	-
Stage 2	-	-	-	-	-	-	297	374	-	243	275	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	783	-	-	937	-	-	3	41	470	~ 36	42	370
Mov Cap-2 Maneuver	-	-	-	-	-	-	3	41	-	107	132	-
Stage 1	-	-	-	-	-	-	166	188	-	250	385	-
Stage 2	-	-	-	-	-	-	38	374	-	166	188	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.2	0	0	204.5
HCM LOS			A	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	783	-	-	937	-	-	280
HCM Lane V/C Ratio	-	0.316	-	-	-	-	-	1.324
HCM Control Delay (s)	0	11.7	-	-	0	-	-	204.5
HCM Lane LOS		A	B	-	A	-	-	F
HCM 95th %tile Q(veh)	-	1.4	-	-	0	-	-	18.7

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Timings
1: Redlands Av & Dale St

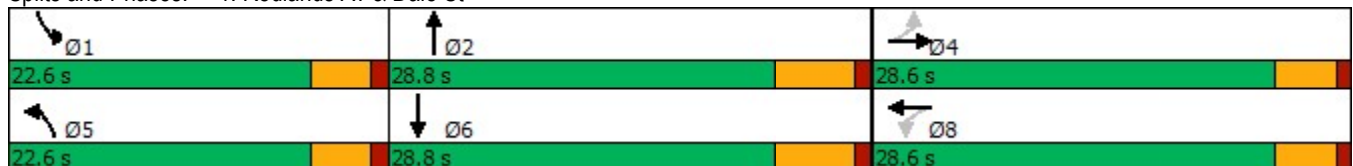


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↙	↕	↙	↕
Traffic Volume (vph)	6	3	20	4	23	621	55	583
Future Volume (vph)	6	3	20	4	23	621	55	583
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	28.6	28.6	28.6	28.6	22.6	28.6	22.6	24.8
Total Split (s)	28.6	28.6	28.6	28.6	22.6	28.8	22.6	28.8
Total Split (%)	35.8%	35.8%	35.8%	35.8%	28.3%	36.0%	28.3%	36.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		8.9		8.9	6.0	26.3	6.8	31.0
Actuated g/C Ratio		0.21		0.21	0.14	0.61	0.16	0.72
v/c Ratio		0.10		0.19	0.10	0.34	0.22	0.27
Control Delay		10.6		11.0	24.7	11.7	23.4	7.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		10.6		11.0	24.7	11.7	23.4	7.6
LOS		B		B	C	B	C	A
Approach Delay		10.6		11.0		12.1		8.9
Approach LOS		B		B		B		A

Intersection Summary

Cycle Length: 80	
Actuated Cycle Length: 43.3	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay: 10.6	Intersection LOS: B
Intersection Capacity Utilization 41.1%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Redlands Av & Dale St



HCM 6th Signalized Intersection Summary
 1: Redlands Av & Dale St

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Volume (veh/h)	6	3	20	20	4	34	23	621	49	55	583	41
Future Volume (veh/h)	6	3	20	20	4	34	23	621	49	55	583	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	3	22	22	4	37	25	675	53	60	634	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	172	19	102	209	10	84	56	1172	92	116	1296	92
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.03	0.35	0.35	0.07	0.39	0.39
Sat Flow, veh/h	308	205	1130	542	111	928	1781	3338	262	1781	3366	239
Grp Volume(v), veh/h	32	0	0	63	0	0	25	359	369	60	334	345
Grp Sat Flow(s),veh/h/ln	1644	0	0	1581	0	0	1781	1777	1823	1781	1777	1827
Q Serve(g_s), s	0.0	0.0	0.0	0.6	0.0	0.0	0.4	5.0	5.0	1.0	4.3	4.3
Cycle Q Clear(g_c), s	0.5	0.0	0.0	1.1	0.0	0.0	0.4	5.0	5.0	1.0	4.3	4.3
Prop In Lane	0.22		0.69	0.35		0.59	1.00		0.14	1.00		0.13
Lane Grp Cap(c), veh/h	293	0	0	303	0	0	56	624	640	116	684	704
V/C Ratio(X)	0.11	0.00	0.00	0.21	0.00	0.00	0.45	0.58	0.58	0.52	0.49	0.49
Avail Cap(c_a), veh/h	1377	0	0	1366	0	0	1054	1343	1378	1054	1343	1381
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.8	0.0	0.0	13.1	0.0	0.0	14.5	8.0	8.0	13.8	7.1	7.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	0.0	0.0	2.1	0.8	0.8	1.3	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.3	0.0	0.0	0.1	1.0	1.0	0.3	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.0	0.0	0.0	13.4	0.0	0.0	16.6	8.9	8.9	15.1	7.6	7.6
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		32			63			753			739	
Approach Delay, s/veh		13.0			13.4			9.1			8.2	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	16.5		7.4	5.6	17.5		7.4				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	18.0	23.0		24.0	18.0	23.0		24.0				
Max Q Clear Time (g_c+I1), s	3.0	7.0		2.5	2.4	6.3		3.1				
Green Ext Time (p_c), s	0.0	3.7		0.1	0.0	3.4		0.3				

Intersection Summary												
HCM 6th Ctrl Delay				9.0								
HCM 6th LOS				A								

Timings
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

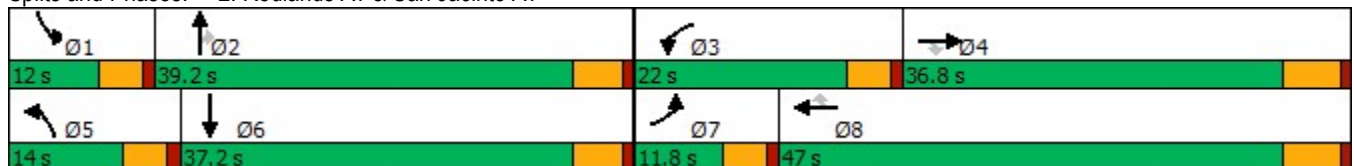
08/17/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	103	87	203	942	95	103	227	509	1192	165	495
Future Volume (vph)	103	87	203	942	95	103	227	509	1192	165	495
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	36.8	36.8	9.6	30.8	30.8	9.6	32.1	32.1	9.6	32.1
Total Split (s)	11.8	36.8	36.8	22.0	47.0	47.0	14.0	39.2	39.2	12.0	37.2
Total Split (%)	10.7%	33.5%	33.5%	20.0%	42.7%	42.7%	12.7%	35.6%	35.6%	10.9%	33.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.1	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.1	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	7.0	13.9	13.9	17.5	24.3	24.3	9.5	34.3	34.3	7.5	32.3
Actuated g/C Ratio	0.07	0.15	0.15	0.19	0.26	0.26	0.10	0.37	0.37	0.08	0.35
v/c Ratio	0.41	0.33	0.51	1.52	0.20	0.22	1.32	0.41	1.20	1.22	0.51
Control Delay	48.0	37.8	9.2	273.5	27.4	5.6	213.9	24.2	114.9	185.8	26.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.0	37.8	9.2	273.5	27.4	5.6	213.9	24.2	114.9	185.8	26.3
LOS	D	D	A	F	C	A	F	C	F	F	C
Approach Delay		25.7			228.8			102.6			61.3
Approach LOS		C			F			F			E

Intersection Summary





























Cycle Length: 110	
Actuated Cycle Length: 93.4	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.52	
Intersection Signal Delay: 122.2	Intersection LOS: F
Intersection Capacity Utilization 104.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
 2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)
 08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 				 			 	
Traffic Volume (veh/h)	103	87	203	942	95	103	227	509	1192	165	495	91
Future Volume (veh/h)	103	87	203	942	95	103	227	509	1192	165	495	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	107	91	118	981	99	82	236	530	1078	172	516	88
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	215	182	674	482	408	188	1358	606	148	1092	186
Arrive On Green	0.05	0.11	0.11	0.19	0.26	0.26	0.11	0.38	0.38	0.08	0.36	0.36
Sat Flow, veh/h	3456	1870	1585	3456	1870	1583	1781	3554	1585	1781	3038	516
Grp Volume(v), veh/h	107	91	118	981	99	82	236	530	1078	172	301	303
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1583	1781	1777	1585	1781	1777	1777
Q Serve(g_s), s	2.7	4.0	6.4	17.4	3.7	3.6	9.4	9.7	34.1	7.4	11.7	11.8
Cycle Q Clear(g_c), s	2.7	4.0	6.4	17.4	3.7	3.6	9.4	9.7	34.1	7.4	11.7	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	180	215	182	674	482	408	188	1358	606	148	639	639
V/C Ratio(X)	0.59	0.42	0.65	1.46	0.21	0.20	1.26	0.39	1.78	1.16	0.47	0.47
Avail Cap(c_a), veh/h	279	650	550	674	863	731	188	1358	606	148	639	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	36.7	37.8	35.9	26.0	25.9	39.9	20.0	27.6	40.9	22.0	22.1
Incr Delay (d2), s/veh	3.1	1.3	3.8	213.5	0.2	0.2	151.9	0.2	357.8	125.2	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.8	2.5	26.8	1.6	1.3	11.9	3.8	71.7	8.2	4.6	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.5	38.1	41.6	249.5	26.2	26.2	191.8	20.2	385.4	166.1	22.6	22.6
LnGrp LOS	D	D	D	F	C	C	F	C	F	F	C	C
Approach Vol, veh/h		316			1162			1844			776	
Approach Delay, s/veh		41.6			214.7			255.7			54.4	
Approach LOS		D			F			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	39.2	22.0	16.1	14.0	37.2	9.2	28.8				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	7.4	34.1	17.4	31.0	9.4	32.1	7.2	41.2				
Max Q Clear Time (g_c+I1), s	9.4	36.1	19.4	8.4	11.4	13.8	4.7	5.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	3.1	0.1	0.7				
Intersection Summary												
HCM 6th Ctrl Delay	189.4											
HCM 6th LOS	F											

Timings
3: Redlands Av & I-215 NB Ramps

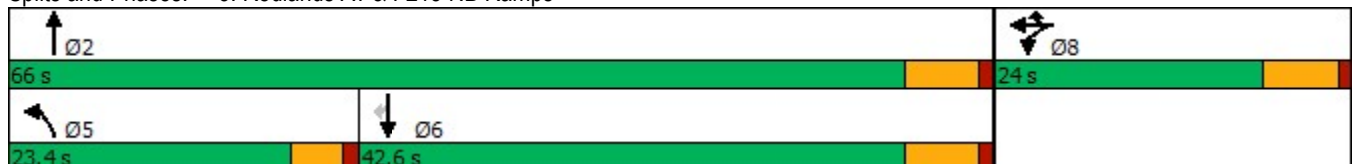


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	361	4	745	187	1184	1302	337
Future Volume (vph)	361	4	745	187	1184	1302	337
Turn Type	Split	NA	Prot	Prot	NA	NA	Perm
Protected Phases	8	8	8	5	2	6	
Permitted Phases							6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	9.5	11.0	31.0	31.0
Total Split (s)	24.0	24.0	24.0	23.4	66.0	42.6	42.6
Total Split (%)	26.7%	26.7%	26.7%	26.0%	73.3%	47.3%	47.3%
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.5	6.0	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min
Act Effct Green (s)	18.2	18.2	18.2	9.6	43.9	29.7	29.7
Actuated g/C Ratio	0.24	0.24	0.24	0.13	0.59	0.40	0.40
v/c Ratio	0.81	0.95	0.90	0.43	0.58	0.52	0.41
Control Delay	46.8	58.8	49.6	34.3	10.5	17.5	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay	46.8	58.8	49.6	34.3	10.6	17.5	3.4
LOS	D	E	D	C	B	B	A
Approach Delay		52.1			13.8	14.6	
Approach LOS		D			B	B	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 74.3
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.95
 Intersection Signal Delay: 24.5
 Intersection LOS: C
 Intersection Capacity Utilization 73.5%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 3: Redlands Av & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 3: Redlands Av & I-215 NB Ramps

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↶	↷	↶	↶↷	↶↷			↑↑↑	↶
Traffic Volume (veh/h)	0	0	0	361	4	745	187	1184	0	0	1302	337
Future Volume (veh/h)	0	0	0	361	4	745	187	1184	0	0	1302	337
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				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				249	0	751	193	1221	0	0	1342	263
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				481	0	856	311	1922	0	0	2445	602
Arrive On Green				0.27	0.00	0.27	0.09	0.54	0.00	0.00	0.38	0.38
Sat Flow, veh/h				1781	0	3170	3456	3647	0	0	6696	1585
Grp Volume(v), veh/h				249	0	751	193	1221	0	0	1342	263
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1609	1585
Q Serve(g_s), s				7.5	0.0	14.4	3.4	15.3	0.0	0.0	10.4	7.8
Cycle Q Clear(g_c), s				7.5	0.0	14.4	3.4	15.3	0.0	0.0	10.4	7.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				481	0	856	311	1922	0	0	2445	602
V/C Ratio(X)				0.52	0.00	0.88	0.62	0.64	0.00	0.00	0.55	0.44
Avail Cap(c_a), veh/h				505	0	899	1029	3360	0	0	3710	914
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				19.7	0.0	22.2	27.8	10.2	0.0	0.0	15.4	14.6
Incr Delay (d2), s/veh				0.9	0.0	9.5	2.0	0.4	0.0	0.0	0.2	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.8	0.0	5.7	1.4	4.7	0.0	0.0	3.4	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				20.5	0.0	31.7	29.9	10.5	0.0	0.0	15.6	15.1
LnGrp LOS				C	A	C	C	B	A	A	B	B
Approach Vol, veh/h					1000			1414			1605	
Approach Delay, s/veh					28.9			13.2			15.5	
Approach LOS					C			B			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		40.3			10.2	30.1		23.1				
Change Period (Y+Rc), s		6.0			4.5	6.0		6.0				
Max Green Setting (Gmax), s		60.0			18.9	36.6		18.0				
Max Q Clear Time (g_c+I1), s		17.3			5.4	12.4		16.4				
Green Ext Time (p_c), s		11.7			0.5	11.8		0.8				

Intersection Summary

HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Timings
4: Redlands Av & I-215 SB Ramps

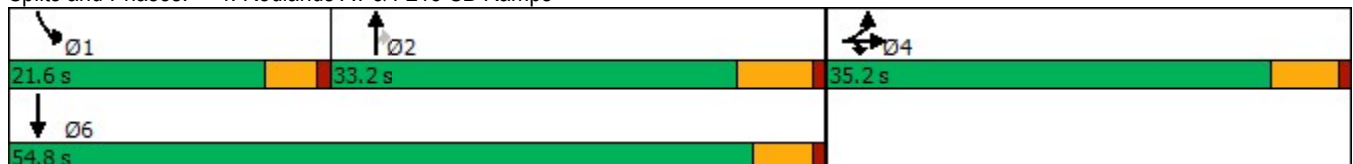


Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	383	2	230	989	461	633	1032
Future Volume (vph)	383	2	230	989	461	633	1032
Turn Type	Split	NA	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	4	2		1	6
Permitted Phases					2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.3	23.3	23.3	23.7	23.7	9.6	32.0
Total Split (s)	35.2	35.2	35.2	33.2	33.2	21.6	54.8
Total Split (%)	39.1%	39.1%	39.1%	36.9%	36.9%	24.0%	60.9%
Yellow Time (s)	4.5	4.5	4.5	5.0	5.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	6.0	6.0	4.5	5.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	Min
Act Effct Green (s)	15.5	15.5	15.5	22.6	22.6	17.4	45.5
Actuated g/C Ratio	0.22	0.22	0.22	0.32	0.32	0.24	0.63
v/c Ratio	0.59	0.61	0.49	0.50	0.39	0.77	0.46
Control Delay	32.7	31.9	18.3	21.2	3.2	35.3	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	32.7	31.9	18.3	21.2	3.2	35.3	8.6
LOS	C	C	B	C	A	D	A
Approach Delay		27.9		15.5			18.7
Approach LOS		C		B			B

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 71.7
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 19.0
 Intersection LOS: B
 Intersection Capacity Utilization 73.5%
 ICU Level of Service D
 Analysis Period (min) 15





















Splits and Phases: 4: Redlands Av & I-215 SB Ramps



HCM 6th Signalized Intersection Summary
 4: Redlands Av & I-215 SB Ramps

Prairie View Apartments (JN 13747)

08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	383	2	230	0	0	0	0	989	461	633	1032	0
Future Volume (veh/h)	383	2	230	0	0	0	0	989	461	633	1032	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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	435	0	101				0	999	421	639	1042	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	642	0	286				0	1984	860	798	2197	0
Arrive On Green	0.18	0.00	0.18				0.00	0.31	0.31	0.23	0.62	0.00
Sat Flow, veh/h	3563	0	1585				0	6696	2790	3456	3647	0
Grp Volume(v), veh/h	435	0	101				0	999	421	639	1042	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1609	1395	1728	1777	0
Q Serve(g_s), s	6.5	0.0	3.2				0.0	7.3	7.0	10.0	9.0	0.0
Cycle Q Clear(g_c), s	6.5	0.0	3.2				0.0	7.3	7.0	10.0	9.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	642	0	286				0	1984	860	798	2197	0
V/C Ratio(X)	0.68	0.00	0.35				0.00	0.50	0.49	0.80	0.47	0.00
Avail Cap(c_a), veh/h	1855	0	825				0	3068	1330	1036	3103	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.8	0.0	20.5				0.0	16.2	16.1	20.7	5.9	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.7				0.0	0.2	0.4	3.5	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	2.4	0.0	1.1				0.0	2.4	2.0	3.9	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.1	0.0	21.2				0.0	16.4	16.5	24.2	6.0	0.0
LnGrp LOS	C	A	C				A	B	B	C	A	A
Approach Vol, veh/h		536						1420			1681	
Approach Delay, s/veh		22.7						16.4			12.9	
Approach LOS		C						B			B	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	17.7	23.6		15.8				41.3				
Change Period (Y+Rc), s	4.5	6.0		5.5				* 6				
Max Green Setting (Gmax), s	17.1	27.2		29.7				* 50				
Max Q Clear Time (g_c+I1), s	12.0	9.3		8.5				11.0				
Green Ext Time (p_c), s	1.2	8.3		1.8				9.1				

Intersection Summary

HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	4.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	46	25	27	102	65	17
Future Vol, veh/h	46	25	27	102	65	17
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	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	38	38	38	38
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	121	66	71	268	171	45

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	604	194	216	0	0
Stage 1	194	-	-	-	-
Stage 2	410	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	461	847	1354	-	-
Stage 1	839	-	-	-	-
Stage 2	670	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	437	847	1354	-	-
Mov Cap-2 Maneuver	528	-	-	-	-
Stage 1	795	-	-	-	-
Stage 2	670	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.5	1.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1354	-	609	-	-
HCM Lane V/C Ratio	0.052	-	0.307	-	-
HCM Control Delay (s)	7.8	-	13.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.3	-	-

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↑	↑	↑
Traffic Vol, veh/h	127	1095	1069	10	15	95
Future Vol, veh/h	127	1095	1069	10	15	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	210	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	140	1203	1175	11	16	104

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1186	0	-	0	2658 1175
Stage 1	-	-	-	-	1175 -
Stage 2	-	-	-	-	1483 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	589	-	-	-	25 233
Stage 1	-	-	-	-	293 -
Stage 2	-	-	-	-	208 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	589	-	-	-	~ 7 233
Mov Cap-2 Maneuver	-	-	-	-	72 -
Stage 1	-	-	-	-	83 -
Stage 2	-	-	-	-	208 -

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	59.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	589	-	-	-	179
HCM Lane V/C Ratio	0.237	-	-	-	0.675
HCM Control Delay (s)	13	0	-	-	59.1
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.9	-	-	-	4

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	16											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖		↕			↕			↕	
Traffic Vol, veh/h	252	847	0	0	645	47	0	0	0	39	0	190
Future Vol, veh/h	252	847	0	0	645	47	0	0	0	39	0	190
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	-	0	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	280	941	0	0	717	52	0	0	0	43	0	211

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	769	0	0	941	0	0	2350	2270	941	2244	2244	743
Stage 1	-	-	-	-	-	-	1501	1501	-	743	743	-
Stage 2	-	-	-	-	-	-	849	769	-	1501	1501	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	845	-	-	729	-	-	25	40	319	~ 30	42	415
Stage 1	-	-	-	-	-	-	152	185	-	407	422	-
Stage 2	-	-	-	-	-	-	356	411	-	152	185	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	845	-	-	729	-	-	9	27	319	~ 22	28	415
Mov Cap-2 Maneuver	-	-	-	-	-	-	9	27	-	75	96	-
Stage 1	-	-	-	-	-	-	102	124	-	272	422	-
Stage 2	-	-	-	-	-	-	175	411	-	102	124	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.6	0	0	129
HCM LOS			A	F

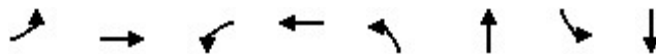
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	845	-	-	729	-	-	234
HCM Lane V/C Ratio	-	0.331	-	-	-	-	-	1.087
HCM Control Delay (s)	0	11.4	-	-	0	-	-	129
HCM Lane LOS	A	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	1.5	-	-	0	-	-	11.1

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

**APPENDIX 6.2: OPENING YEAR CUMULATIVE (2024) WITH PROJECT
CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS**

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Timings
1: Redlands Av & Dale St

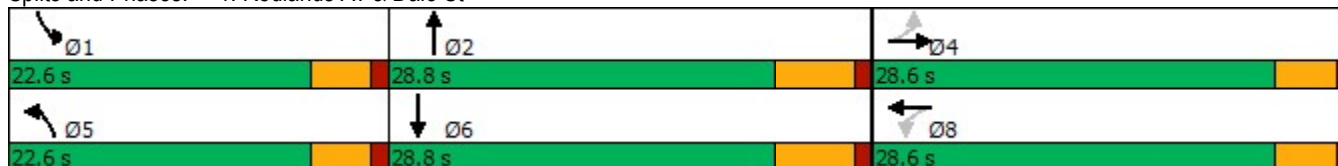


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↗	↕	↗	↕
Traffic Volume (vph)	42	6	76	24	83	453	33	587
Future Volume (vph)	42	6	76	24	83	453	33	587
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	28.6	28.6	28.6	28.6	22.6	28.6	22.6	24.8
Total Split (s)	28.6	28.6	28.6	28.6	22.6	28.8	22.6	28.8
Total Split (%)	35.8%	35.8%	35.8%	35.8%	28.3%	36.0%	28.3%	36.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		12.9		12.9	8.0	28.6	6.3	22.7
Actuated g/C Ratio		0.23		0.23	0.14	0.51	0.11	0.40
v/c Ratio		0.35		0.58	0.41	0.33	0.21	0.66
Control Delay		13.2		23.0	30.3	11.4	29.8	19.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		13.2		23.0	30.3	11.4	29.8	19.0
LOS		B		C	C	B	C	B
Approach Delay		13.2		23.0		14.2		19.5
Approach LOS		B		C		B		B

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 56.5
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.66
 Intersection Signal Delay: 17.6
 Intersection Capacity Utilization 51.1%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

Splits and Phases: 1: Redlands Av & Dale St



HCM 6th Signalized Intersection Summary
1: Redlands Av & Dale St

Prairie View Apartments (JN 13747)

08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕		↗	↕	
Traffic Volume (veh/h)	42	6	56	76	24	68	83	453	25	33	587	151
Future Volume (veh/h)	42	6	56	76	24	68	83	453	25	33	587	151
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	8	70	95	30	85	104	566	31	41	734	189
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	209	55	168	238	64	121	149	1404	77	81	1039	267
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.08	0.41	0.41	0.05	0.37	0.37
Sat Flow, veh/h	472	293	893	605	343	644	1781	3426	187	1781	2797	720
Grp Volume(v), veh/h	130	0	0	210	0	0	104	293	304	41	466	457
Grp Sat Flow(s),veh/h/ln	1658	0	0	1592	0	0	1781	1777	1837	1781	1777	1741
Q Serve(g_s), s	0.0	0.0	0.0	2.2	0.0	0.0	2.4	4.9	4.9	0.9	9.4	9.4
Cycle Q Clear(g_c), s	2.8	0.0	0.0	5.0	0.0	0.0	2.4	4.9	4.9	0.9	9.4	9.4
Prop In Lane	0.40		0.54	0.45		0.40	1.00		0.10	1.00		0.41
Lane Grp Cap(c), veh/h	432	0	0	424	0	0	149	728	753	81	660	646
V/C Ratio(X)	0.30	0.00	0.00	0.50	0.00	0.00	0.70	0.40	0.40	0.51	0.71	0.71
Avail Cap(c_a), veh/h	990	0	0	992	0	0	763	972	1005	763	972	953
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	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.0	0.0	0.0	15.8	0.0	0.0	18.7	8.8	8.8	19.6	11.3	11.3
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.9	0.0	0.0	2.2	0.4	0.3	1.8	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	1.7	0.0	0.0	0.9	1.2	1.3	0.4	2.6	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.4	0.0	0.0	16.7	0.0	0.0	20.9	9.1	9.1	21.4	12.7	12.7
LnGrp LOS	B	A	A	B	A	A	C	A	A	C	B	B
Approach Vol, veh/h		130			210			701				964
Approach Delay, s/veh		15.4			16.7			10.9				13.0
Approach LOS		B			B			B				B
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.5	23.0		12.5	8.1	21.4		12.5				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	18.0	23.0		24.0	18.0	23.0		24.0				
Max Q Clear Time (g_c+I1), s	2.9	6.9		4.8	4.4	11.4		7.0				
Green Ext Time (p_c), s	0.0	2.9		0.7	0.1	4.2		1.1				
Intersection Summary												
HCM 6th Ctrl Delay				12.8								
HCM 6th LOS				B								

Timings
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

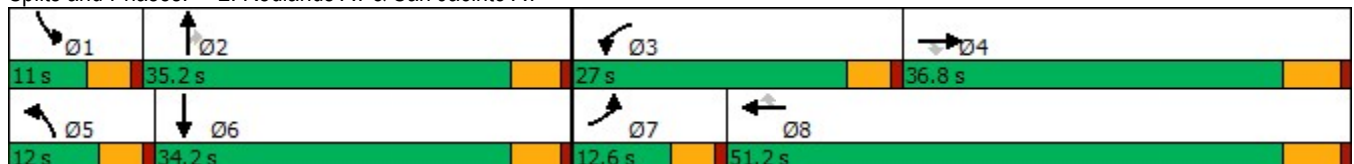
08/17/2022

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	103	36	161	1045	85	108	153	420	932	127	525
Future Volume (vph)	103	36	161	1045	85	108	153	420	932	127	525
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	36.8	36.8	9.6	30.8	30.8	9.6	32.1	32.1	9.6	32.1
Total Split (s)	12.6	36.8	36.8	27.0	51.2	51.2	12.0	35.2	35.2	11.0	34.2
Total Split (%)	11.5%	33.5%	33.5%	24.5%	46.5%	46.5%	10.9%	32.0%	32.0%	10.0%	31.1%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.1	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.1	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	7.6	13.6	13.6	22.6	28.6	28.6	7.5	30.3	30.3	6.4	29.3
Actuated g/C Ratio	0.08	0.15	0.15	0.24	0.31	0.31	0.08	0.33	0.33	0.07	0.31
v/c Ratio	0.42	0.15	0.50	1.43	0.17	0.22	1.23	0.41	0.96	1.18	0.64
Control Delay	46.8	34.6	12.6	230.0	23.9	5.0	189.2	27.0	27.3	178.6	30.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.8	34.6	12.6	230.0	23.9	5.0	189.2	27.0	27.3	178.6	30.8
LOS	D	C	B	F	C	A	F	C	C	F	C
Approach Delay		27.0			196.1			43.7			56.1
Approach LOS		C			F			D			E

Intersection Summary

Cycle Length: 110
 Actuated Cycle Length: 93.2
 Natural Cycle: 120
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.43
 Intersection Signal Delay: 94.7
 Intersection Capacity Utilization 86.0%
 Analysis Period (min) 15
 Intersection LOS: F
 ICU Level of Service E





























Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 				 			 	
Traffic Volume (veh/h)	103	36	161	1045	85	108	153	420	932	127	525	88
Future Volume (veh/h)	103	36	161	1045	85	108	153	420	932	127	525	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	41	82	1188	97	96	174	477	881	144	597	92
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	215	182	867	585	495	148	1198	534	128	1006	155
Arrive On Green	0.05	0.11	0.11	0.25	0.31	0.31	0.08	0.34	0.34	0.07	0.33	0.33
Sat Flow, veh/h	3456	1870	1585	3456	1870	1584	1781	3554	1585	1781	3086	475
Grp Volume(v), veh/h	117	41	82	1188	97	96	174	477	881	144	343	346
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1584	1781	1777	1585	1781	1777	1784
Q Serve(g_s), s	3.0	1.8	4.3	22.4	3.4	4.0	7.4	9.2	30.1	6.4	14.4	14.5
Cycle Q Clear(g_c), s	3.0	1.8	4.3	22.4	3.4	4.0	7.4	9.2	30.1	6.4	14.4	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	184	215	182	867	585	495	148	1198	534	128	579	582
V/C Ratio(X)	0.63	0.19	0.45	1.37	0.17	0.19	1.18	0.40	1.65	1.13	0.59	0.59
Avail Cap(c_a), veh/h	310	650	550	867	951	805	148	1198	534	128	579	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	35.7	36.9	33.4	22.2	22.5	40.9	22.6	29.6	41.4	25.1	25.2
Incr Delay (d2), s/veh	3.6	0.4	1.7	173.8	0.1	0.2	130.0	0.2	300.1	118.0	1.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.8	1.7	29.6	1.4	1.4	8.5	3.7	54.9	6.9	5.8	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.0	36.2	38.6	207.3	22.4	22.6	170.9	22.9	329.6	159.4	26.7	26.8
LnGrp LOS	D	D	D	F	C	C	F	C	F	F	C	C
Approach Vol, veh/h		240			1381			1532			833	
Approach Delay, s/veh		41.3			181.4			216.1			49.7	
Approach LOS		D			F			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	35.2	27.0	16.1	12.0	34.2	9.4	33.7				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	6.4	30.1	22.4	31.0	7.4	29.1	8.0	45.4				
Max Q Clear Time (g_c+I1), s	8.4	32.1	24.4	6.3	9.4	16.5	5.0	6.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	3.1	0.1	0.8				
Intersection Summary												
HCM 6th Ctrl Delay	158.8											
HCM 6th LOS	F											

Timings
3: Redlands Av & I-215 NB Ramps

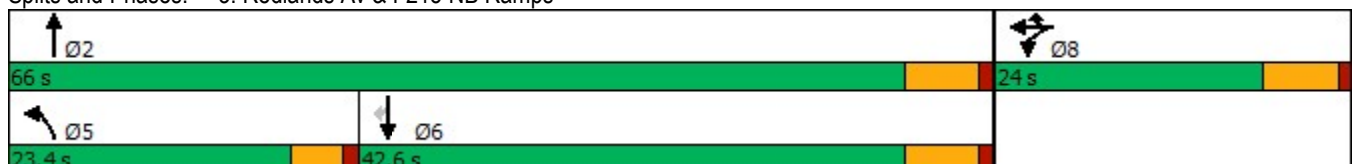


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	331	2	490	192	1014	1351	379
Future Volume (vph)	331	2	490	192	1014	1351	379
Turn Type	Split	NA	Prot	Prot	NA	NA	Perm
Protected Phases	8	8	8	5	2	6	
Permitted Phases							6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	9.5	11.0	31.0	31.0
Total Split (s)	24.0	24.0	24.0	23.4	66.0	42.6	42.6
Total Split (%)	26.7%	26.7%	26.7%	26.0%	73.3%	47.3%	47.3%
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.5	6.0	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min
Act Effct Green (s)	18.1	18.1	18.1	10.3	47.9	33.2	33.2
Actuated g/C Ratio	0.23	0.23	0.23	0.13	0.61	0.43	0.43
v/c Ratio	0.84	0.71	0.69	0.48	0.52	0.56	0.46
Control Delay	51.0	29.0	27.4	35.9	9.4	17.9	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay	51.0	29.0	27.4	35.9	9.7	17.9	3.5
LOS	D	C	C	D	A	B	A
Approach Delay		36.2			13.8	14.7	
Approach LOS		D			B	B	

Intersection Summary

Cycle Length: 90	
Actuated Cycle Length: 78.1	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 19.1	Intersection LOS: B
Intersection Capacity Utilization 58.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 3: Redlands Av & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
3: Redlands Av & I-215 NB Ramps

Prairie View Apartments (JN 13747)
08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↔	↗	↖↗	↕			↑↑↑	↗
Traffic Volume (veh/h)	0	0	0	331	2	490	192	1014	0	0	1351	379
Future Volume (veh/h)	0	0	0	331	2	490	192	1014	0	0	1351	379
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				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				495	0	256	216	1139	0	0	1518	335
Peak Hour Factor				0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				748	0	333	341	2123	0	0	2743	676
Arrive On Green				0.21	0.00	0.21	0.10	0.60	0.00	0.00	0.43	0.43
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	6696	1585
Grp Volume(v), veh/h				495	0	256	216	1139	0	0	1518	335
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1609	1585
Q Serve(g_s), s				7.9	0.0	9.5	3.7	11.8	0.0	0.0	11.0	9.6
Cycle Q Clear(g_c), s				7.9	0.0	9.5	3.7	11.8	0.0	0.0	11.0	9.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				748	0	333	341	2123	0	0	2743	676
V/C Ratio(X)				0.66	0.00	0.77	0.63	0.54	0.00	0.00	0.55	0.50
Avail Cap(c_a), veh/h				1030	0	458	1049	3423	0	0	3781	931
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				22.6	0.0	23.2	27.0	7.4	0.0	0.0	13.4	13.0
Incr Delay (d2), s/veh				1.0	0.0	5.3	1.9	0.2	0.0	0.0	0.2	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.0	0.0	3.6	1.5	3.3	0.0	0.0	3.4	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				23.6	0.0	28.5	28.9	7.6	0.0	0.0	13.6	13.6
LnGrp LOS				C	A	C	C	A	A	A	B	B
Approach Vol, veh/h					751			1355			1853	
Approach Delay, s/veh					25.2			11.0			13.6	
Approach LOS					C			B			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		43.2			10.7	32.6		19.1				
Change Period (Y+Rc), s		6.0			4.5	6.0		6.0				
Max Green Setting (Gmax), s		60.0			18.9	36.6		18.0				
Max Q Clear Time (g_c+I1), s		13.8			5.7	13.0		11.5				
Green Ext Time (p_c), s		10.7			0.6	13.5		1.6				

Intersection Summary

HCM 6th Ctrl Delay	14.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Timings
4: Redlands Av & I-215 SB Ramps

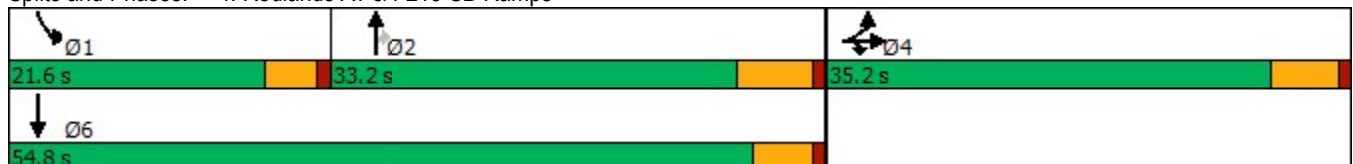


Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	292	0	190	913	276	648	1034
Future Volume (vph)	292	0	190	913	276	648	1034
Turn Type	Split	NA	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	4	2		1	6
Permitted Phases					2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.3	23.3	23.3	23.7	23.7	9.6	32.0
Total Split (s)	35.2	35.2	35.2	33.2	33.2	21.6	54.8
Total Split (%)	39.1%	39.1%	39.1%	36.9%	36.9%	24.0%	60.9%
Yellow Time (s)	4.5	4.5	4.5	5.0	5.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	6.0	6.0	4.5	5.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	Min
Act Effct Green (s)	13.3	13.3	13.3	21.0	21.0	17.4	44.0
Actuated g/C Ratio	0.20	0.20	0.20	0.31	0.31	0.26	0.65
v/c Ratio	0.56	0.48	0.45	0.51	0.28	0.81	0.50
Control Delay	32.4	17.7	16.5	20.4	3.3	35.2	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	32.4	17.7	16.5	20.4	3.3	35.2	7.9
LOS	C	B	B	C	A	D	A
Approach Delay		22.4		16.4			18.4
Approach LOS		C		B			B

Intersection Summary





















Cycle Length: 90
 Actuated Cycle Length: 68
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 18.3
 Intersection Capacity Utilization 58.3%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service B

Splits and Phases: 4: Redlands Av & I-215 SB Ramps



HCM 6th Signalized Intersection Summary
 4: Redlands Av & I-215 SB Ramps

Prairie View Apartments (JN 13747)
 08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	292	0	190	0	0	0	0	913	276	648	1034	0
Future Volume (veh/h)	292	0	190	0	0	0	0	913	276	648	1034	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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	358	0	80				0	1003	254	712	1136	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	556	0	247				0	1950	845	871	2262	0
Arrive On Green	0.16	0.00	0.16				0.00	0.30	0.30	0.25	0.64	0.00
Sat Flow, veh/h	3563	0	1585				0	6696	2790	3456	3647	0
Grp Volume(v), veh/h	358	0	80				0	1003	254	712	1136	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1609	1395	1728	1777	0
Q Serve(g_s), s	5.2	0.0	2.5				0.0	7.1	3.9	10.8	9.5	0.0
Cycle Q Clear(g_c), s	5.2	0.0	2.5				0.0	7.1	3.9	10.8	9.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	556	0	247				0	1950	845	871	2262	0
V/C Ratio(X)	0.64	0.00	0.32				0.00	0.51	0.30	0.82	0.50	0.00
Avail Cap(c_a), veh/h	1909	0	849				0	3158	1369	1066	3193	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.9	0.0	20.8				0.0	15.9	14.8	19.5	5.4	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.7				0.0	0.2	0.2	4.2	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	2.0	0.0	0.8				0.0	2.3	1.1	4.3	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.2	0.0	21.5				0.0	16.2	15.0	23.7	5.6	0.0
LnGrp LOS	C	A	C				A	B	B	C	A	A
Approach Vol, veh/h		438						1257			1848	
Approach Delay, s/veh		22.9						15.9			12.6	
Approach LOS		C						B			B	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	18.5	22.8		14.1				41.3				
Change Period (Y+Rc), s	4.5	6.0		5.5				* 6				
Max Green Setting (Gmax), s	17.1	27.2		29.7				* 50				
Max Q Clear Time (g_c+I1), s	12.8	9.1		7.2				11.5				
Green Ext Time (p_c), s	1.2	7.7		1.4				10.3				

Intersection Summary												
HCM 6th Ctrl Delay			15.0									
HCM 6th LOS			B									

Notes
 User approved volume balancing among the lanes for turning movement.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	1.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑↑		↑			↑
Traffic Vol, veh/h	44	4	128	0	0	83
Future Vol, veh/h	44	4	128	0	0	83
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, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	4	139	0	0	90

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	229	139	0	-	-	-
Stage 1	139	-	-	-	-	-
Stage 2	90	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	759	909	-	0	0	-
Stage 1	888	-	-	0	0	-
Stage 2	934	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	759	909	-	-	-	-
Mov Cap-2 Maneuver	814	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	934	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 821	-
HCM Lane V/C Ratio	- 0.064	-
HCM Control Delay (s)	- 9.7	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.2	-

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	25	27	99	74	53
Future Vol, veh/h	29	25	27	99	74	53
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	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	28	31	113	84	60

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	289	114	144	0	0
Stage 1	114	-	-	-	-
Stage 2	175	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	702	939	1438	-	-
Stage 1	911	-	-	-	-
Stage 2	855	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	687	939	1438	-	-
Mov Cap-2 Maneuver	711	-	-	-	-
Stage 1	891	-	-	-	-
Stage 2	855	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	1.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1438	-	801	-	-
HCM Lane V/C Ratio	0.021	-	0.077	-	-
HCM Control Delay (s)	7.6	-	9.9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection						
Int Delay, s/veh	14.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↑	↑	↑
Traffic Vol, veh/h	90	845	1145	12	12	149
Future Vol, veh/h	90	845	1145	12	12	149
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	210	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	108	1018	1380	14	14	180

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1394	0	-	0	2614 1380
Stage 1	-	-	-	-	1380 -
Stage 2	-	-	-	-	1234 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	491	-	-	-	27 ~ 177
Stage 1	-	-	-	-	233 -
Stage 2	-	-	-	-	275 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	491	-	-	-	~ 13 ~ 177
Mov Cap-2 Maneuver	-	-	-	-	79 -
Stage 1	-	-	-	-	115 -
Stage 2	-	-	-	-	275 -

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	189.7
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	491	-	-	-	162
HCM Lane V/C Ratio	0.221	-	-	-	1.197
HCM Control Delay (s)	14.4	0	-	-	189.7
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.8	-	-	-	10.8

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	9	30	20	260	315	8
Future Vol, veh/h	9	30	20	260	315	8
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, %	2	2	2	2	2	2
Mvmt Flow	10	33	22	283	342	9

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	674	347	351	0	-	0
Stage 1	347	-	-	-	-	-
Stage 2	327	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	420	696	1208	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	731	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	411	696	1208	-	-	-
Mov Cap-2 Maneuver	411	-	-	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	731	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1208	-	600	-	-
HCM Lane V/C Ratio	0.018	-	0.071	-	-
HCM Control Delay (s)	8	0	11.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection												
Int Delay, s/veh	58.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗		↕			↕			↕	
Traffic Vol, veh/h	225	552	0	0	679	54	0	0	0	54	0	291
Future Vol, veh/h	225	552	0	0	679	54	0	0	0	54	0	291
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	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	265	649	0	0	799	64	0	0	0	64	0	342

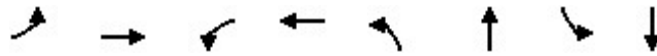
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	863	0	0	649	0	0	2181	2042	649	2010	2010	831
Stage 1	-	-	-	-	-	-	1179	1179	-	831	831	-
Stage 2	-	-	-	-	-	-	1002	863	-	1179	1179	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	779	-	-	937	-	-	33	56	470	~44	59	370
Stage 1	-	-	-	-	-	-	232	264	-	364	384	-
Stage 2	-	-	-	-	-	-	292	372	-	232	264	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	779	-	-	937	-	-	2	37	470	~32	39	370
Mov Cap-2 Maneuver	-	-	-	-	-	-	2	37	-	99	124	-
Stage 1	-	-	-	-	-	-	153	174	-	240	384	-
Stage 2	-	-	-	-	-	-	22	372	-	153	174	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.5	0	0	\$ 308
HCM LOS			A	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	779	-	-	937	-	-	259
HCM Lane V/C Ratio	-	0.34	-	-	-	-	-	1.567
HCM Control Delay (s)	0	12	-	-	0	-	-	\$ 308
HCM Lane LOS	A	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	1.5	-	-	0	-	-	24.6

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Timings
1: Redlands Av & Dale St

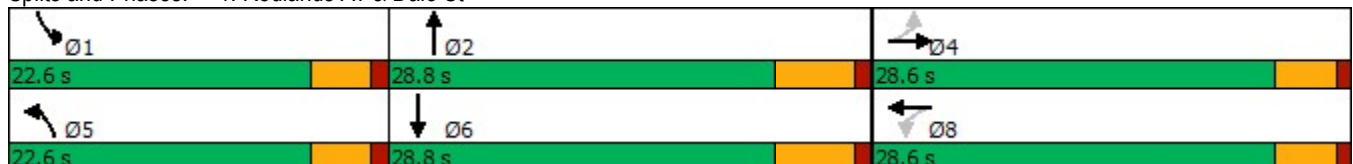


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↗	↕	↗	↕
Traffic Volume (vph)	6	3	34	4	23	621	55	583
Future Volume (vph)	6	3	34	4	23	621	55	583
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	28.6	28.6	28.6	28.6	22.6	28.6	22.6	24.8
Total Split (s)	28.6	28.6	28.6	28.6	22.6	28.8	22.6	28.8
Total Split (%)	35.8%	35.8%	35.8%	35.8%	28.3%	36.0%	28.3%	36.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		9.2		9.2	5.9	24.3	6.7	29.1
Actuated g/C Ratio		0.20		0.20	0.13	0.53	0.15	0.63
v/c Ratio		0.10		0.26	0.11	0.39	0.23	0.31
Control Delay		10.5		11.9	25.0	12.7	24.3	8.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		10.5		11.9	25.0	12.7	24.3	8.4
LOS		B		B	C	B	C	A
Approach Delay		10.5		11.9		13.1		9.7
Approach LOS		B		B		B		A

Intersection Summary

Cycle Length: 80	
Actuated Cycle Length: 46	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 11.4	Intersection LOS: B
Intersection Capacity Utilization 44.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 1: Redlands Av & Dale St



HCM 6th Signalized Intersection Summary
 1: Redlands Av & Dale St

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Volume (veh/h)	6	3	20	34	4	42	23	621	49	55	583	41
Future Volume (veh/h)	6	3	20	34	4	42	23	621	49	55	583	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	3	22	37	4	46	25	675	53	60	634	45
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	25	118	231	10	85	56	1162	91	116	1285	91
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.03	0.35	0.35	0.07	0.38	0.38
Sat Flow, veh/h	275	242	1137	637	96	822	1781	3338	262	1781	3366	239
Grp Volume(v), veh/h	32	0	0	87	0	0	25	359	369	60	334	345
Grp Sat Flow(s),veh/h/ln	1654	0	0	1555	0	0	1781	1777	1823	1781	1777	1827
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	0.4	5.1	5.1	1.0	4.4	4.5
Cycle Q Clear(g_c), s	0.5	0.0	0.0	1.6	0.0	0.0	0.4	5.1	5.1	1.0	4.4	4.5
Prop In Lane	0.22		0.69	0.43		0.53	1.00		0.14	1.00		0.13
Lane Grp Cap(c), veh/h	312	0	0	326	0	0	56	618	634	116	678	698
V/C Ratio(X)	0.10	0.00	0.00	0.27	0.00	0.00	0.45	0.58	0.58	0.52	0.49	0.49
Avail Cap(c_a), veh/h	1351	0	0	1334	0	0	1034	1317	1352	1034	1317	1355
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	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.7	0.0	0.0	13.2	0.0	0.0	14.8	8.3	8.3	14.0	7.3	7.3
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.4	0.0	0.0	2.1	0.9	0.8	1.3	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.5	0.0	0.0	0.2	1.1	1.1	0.3	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.9	0.0	0.0	13.6	0.0	0.0	16.9	9.1	9.1	15.4	7.9	7.8
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		32			87			753			739	
Approach Delay, s/veh		12.9			13.6			9.4			8.5	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	16.6		7.8	5.6	17.6		7.8				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	18.0	23.0		24.0	18.0	23.0		24.0				
Max Q Clear Time (g_c+I1), s	3.0	7.1		2.5	2.4	6.5		3.6				
Green Ext Time (p_c), s	0.0	3.7		0.1	0.0	3.4		0.4				
Intersection Summary												
HCM 6th Ctrl Delay				9.3								
HCM 6th LOS				A								

Timings
2: Redlands Av & San Jacinto Av

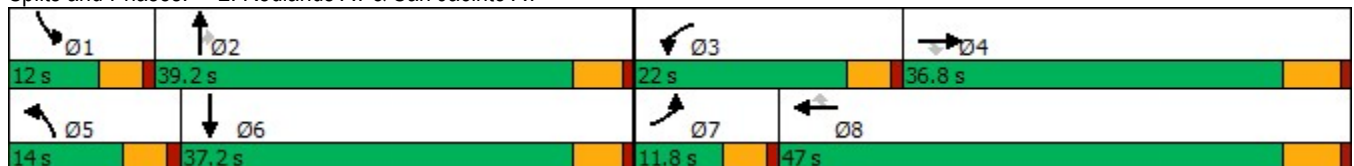


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↖↗
Traffic Volume (vph)	103	87	203	958	95	103	227	509	1243	165	509
Future Volume (vph)	103	87	203	958	95	103	227	509	1243	165	509
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	36.8	36.8	9.6	30.8	30.8	9.6	32.1	32.1	9.6	32.1
Total Split (s)	11.8	36.8	36.8	22.0	47.0	47.0	14.0	39.2	39.2	12.0	37.2
Total Split (%)	10.7%	33.5%	33.5%	20.0%	42.7%	42.7%	12.7%	35.6%	35.6%	10.9%	33.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.1	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.1	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	7.0	13.9	13.9	17.5	24.3	24.3	9.5	34.3	34.3	7.5	32.3
Actuated g/C Ratio	0.07	0.15	0.15	0.19	0.26	0.26	0.10	0.37	0.37	0.08	0.35
v/c Ratio	0.41	0.33	0.51	1.55	0.20	0.22	1.32	0.41	1.25	1.22	0.52
Control Delay	48.0	37.8	9.2	284.8	27.4	5.6	213.9	24.2	137.2	185.8	26.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.0	37.8	9.2	284.8	27.4	5.6	213.9	24.2	137.2	185.8	26.5
LOS	D	D	A	F	C	A	F	C	F	F	C
Approach Delay		25.7			238.8			117.0			60.8
Approach LOS		C			F			F			E

Intersection Summary




























Cycle Length: 110	
Actuated Cycle Length: 93.4	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.55	
Intersection Signal Delay: 131.4	Intersection LOS: F
Intersection Capacity Utilization 107.4%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
 2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)
 08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 				 			 	
Traffic Volume (veh/h)	103	87	203	958	95	103	227	509	1243	165	509	91
Future Volume (veh/h)	103	87	203	958	95	103	227	509	1243	165	509	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	107	91	118	998	99	82	236	530	1131	172	530	88
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	215	182	674	482	408	188	1358	606	148	1097	181
Arrive On Green	0.05	0.11	0.11	0.19	0.26	0.26	0.11	0.38	0.38	0.08	0.36	0.36
Sat Flow, veh/h	3456	1870	1585	3456	1870	1583	1781	3554	1585	1781	3051	505
Grp Volume(v), veh/h	107	91	118	998	99	82	236	530	1131	172	308	310
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1583	1781	1777	1585	1781	1777	1779
Q Serve(g_s), s	2.7	4.0	6.4	17.4	3.7	3.6	9.4	9.7	34.1	7.4	12.0	12.1
Cycle Q Clear(g_c), s	2.7	4.0	6.4	17.4	3.7	3.6	9.4	9.7	34.1	7.4	12.0	12.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	180	215	182	674	482	408	188	1358	606	148	639	640
V/C Ratio(X)	0.59	0.42	0.65	1.48	0.21	0.20	1.26	0.39	1.87	1.16	0.48	0.48
Avail Cap(c_a), veh/h	279	650	550	674	863	731	188	1358	606	148	639	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	36.7	37.8	35.9	26.0	25.9	39.9	20.0	27.6	40.9	22.1	22.2
Incr Delay (d2), s/veh	3.1	1.3	3.8	224.6	0.2	0.2	151.9	0.2	396.8	125.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.8	2.5	27.9	1.6	1.3	11.9	3.8	78.3	8.2	4.7	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.5	38.1	41.6	260.6	26.2	26.2	191.8	20.2	424.4	166.1	22.7	22.7
LnGrp LOS	D	D	D	F	C	C	F	C	F	F	C	C
Approach Vol, veh/h		316			1179			1897			790	
Approach Delay, s/veh		41.6			224.6			282.5			53.9	
Approach LOS		D			F			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	39.2	22.0	16.1	14.0	37.2	9.2	28.8				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	7.4	34.1	17.4	31.0	9.4	32.1	7.2	41.2				
Max Q Clear Time (g_c+I1), s	9.4	36.1	19.4	8.4	11.4	14.1	4.7	5.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	3.2	0.1	0.7				
Intersection Summary												
HCM 6th Ctrl Delay	204.8											
HCM 6th LOS	F											

Timings
3: Redlands Av & I-215 NB Ramps

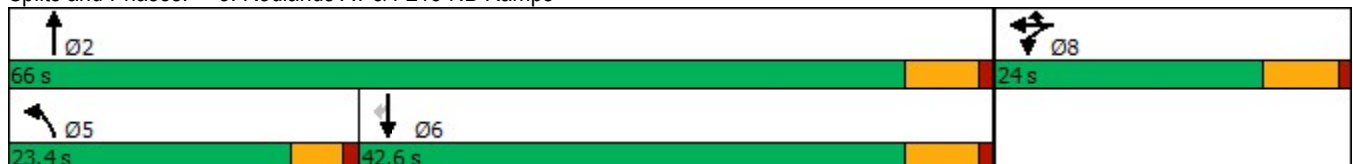


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	361	4	768	187	1212	1324	345
Future Volume (vph)	361	4	768	187	1212	1324	345
Turn Type	Split	NA	Prot	Prot	NA	NA	Perm
Protected Phases	8	8	8	5	2	6	
Permitted Phases							6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	9.5	11.0	31.0	31.0
Total Split (s)	24.0	24.0	24.0	23.4	66.0	42.6	42.6
Total Split (%)	26.7%	26.7%	26.7%	26.0%	73.3%	47.3%	47.3%
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.5	6.0	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min
Act Effct Green (s)	18.2	18.2	18.2	9.6	44.2	30.0	30.0
Actuated g/C Ratio	0.24	0.24	0.24	0.13	0.59	0.40	0.40
v/c Ratio	0.82	0.99	0.94	0.44	0.60	0.53	0.42
Control Delay	47.4	68.3	57.6	34.4	10.6	17.6	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay	47.4	68.3	57.6	34.4	10.8	17.6	3.4
LOS	D	E	E	C	B	B	A
Approach Delay		58.5			13.9	14.6	
Approach LOS		E			B	B	

Intersection Summary

Cycle Length: 90	
Actuated Cycle Length: 74.6	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 26.2	Intersection LOS: C
Intersection Capacity Utilization 75.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 3: Redlands Av & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 3: Redlands Av & I-215 NB Ramps

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↔	↗	↙↗	↕			↕↕↕	↗
Traffic Volume (veh/h)	0	0	0	361	4	768	187	1212	0	0	1324	345
Future Volume (veh/h)	0	0	0	361	4	768	187	1212	0	0	1324	345
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				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				249	0	775	193	1249	0	0	1365	272
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				486	0	864	309	1924	0	0	2458	606
Arrive On Green				0.27	0.00	0.27	0.09	0.54	0.00	0.00	0.38	0.38
Sat Flow, veh/h				1781	0	3170	3456	3647	0	0	6696	1585
Grp Volume(v), veh/h				249	0	775	193	1249	0	0	1365	272
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1609	1585
Q Serve(g_s), s				7.6	0.0	15.2	3.5	16.0	0.0	0.0	10.7	8.3
Cycle Q Clear(g_c), s				7.6	0.0	15.2	3.5	16.0	0.0	0.0	10.7	8.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				486	0	864	309	1924	0	0	2458	606
V/C Ratio(X)				0.51	0.00	0.90	0.62	0.65	0.00	0.00	0.56	0.45
Avail Cap(c_a), veh/h				497	0	884	1012	3305	0	0	3650	899
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				19.8	0.0	22.6	28.3	10.5	0.0	0.0	15.6	14.9
Incr Delay (d2), s/veh				0.8	0.0	11.6	2.1	0.4	0.0	0.0	0.2	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.9	0.0	6.3	1.4	5.0	0.0	0.0	3.5	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				20.7	0.0	34.2	30.4	10.8	0.0	0.0	15.8	15.4
LnGrp LOS				C	A	C	C	B	A	A	B	B
Approach Vol, veh/h					1024			1442			1637	
Approach Delay, s/veh					30.9			13.5			15.8	
Approach LOS					C			B			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		40.9			10.3	30.7		23.6				
Change Period (Y+Rc), s		6.0			4.5	6.0		6.0				
Max Green Setting (Gmax), s		60.0			18.9	36.6		18.0				
Max Q Clear Time (g_c+I1), s		18.0			5.5	12.7		17.2				
Green Ext Time (p_c), s		12.1			0.5	11.9		0.4				

Intersection Summary

HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Timings
4: Redlands Av & I-215 SB Ramps

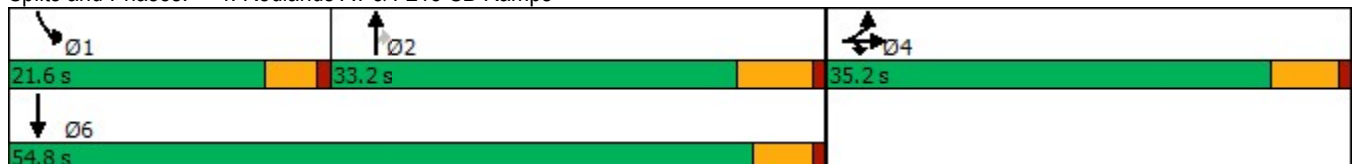


Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	397	2	230	1003	461	647	1040
Future Volume (vph)	397	2	230	1003	461	647	1040
Turn Type	Split	NA	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	4	2		1	6
Permitted Phases					2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.3	23.3	23.3	23.7	23.7	9.6	32.0
Total Split (s)	35.2	35.2	35.2	33.2	33.2	21.6	54.8
Total Split (%)	39.1%	39.1%	39.1%	36.9%	36.9%	24.0%	60.9%
Yellow Time (s)	4.5	4.5	4.5	5.0	5.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	6.0	6.0	4.5	5.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	Min
Act Effct Green (s)	15.8	15.8	15.8	22.7	22.7	17.4	45.8
Actuated g/C Ratio	0.22	0.22	0.22	0.31	0.31	0.24	0.63
v/c Ratio	0.60	0.61	0.49	0.50	0.39	0.79	0.47
Control Delay	33.0	32.2	18.3	21.5	3.2	36.6	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	33.0	32.2	18.3	21.5	3.2	36.6	8.8
LOS	C	C	B	C	A	D	A
Approach Delay		28.2		15.7			19.4
Approach LOS		C		B			B

Intersection Summary

Cycle Length: 90	
Actuated Cycle Length: 72.3	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 19.5	Intersection LOS: B
Intersection Capacity Utilization 75.2%	ICU Level of Service D
Analysis Period (min) 15	





















Splits and Phases: 4: Redlands Av & I-215 SB Ramps



HCM 6th Signalized Intersection Summary
 4: Redlands Av & I-215 SB Ramps

Prairie View Apartments (JN 13747)

08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	397	2	230	0	0	0	0	1003	461	647	1040	0
Future Volume (veh/h)	397	2	230	0	0	0	0	1003	461	647	1040	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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	449	0	101				0	1013	421	654	1051	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	654	0	291				0	1980	858	807	2198	0
Arrive On Green	0.18	0.00	0.18				0.00	0.31	0.31	0.23	0.62	0.00
Sat Flow, veh/h	3563	0	1585				0	6696	2790	3456	3647	0
Grp Volume(v), veh/h	449	0	101				0	1013	421	654	1051	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1609	1395	1728	1777	0
Q Serve(g_s), s	6.8	0.0	3.2				0.0	7.5	7.2	10.4	9.3	0.0
Cycle Q Clear(g_c), s	6.8	0.0	3.2				0.0	7.5	7.2	10.4	9.3	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	654	0	291				0	1980	858	807	2198	0
V/C Ratio(X)	0.69	0.00	0.35				0.00	0.51	0.49	0.81	0.48	0.00
Avail Cap(c_a), veh/h	1820	0	810				0	3011	1305	1017	3045	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.2	0.0	20.7				0.0	16.5	16.4	21.1	6.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.7				0.0	0.2	0.4	4.0	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	2.6	0.0	1.1				0.0	2.5	2.1	4.2	2.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.5	0.0	21.4				0.0	16.7	16.8	25.1	6.2	0.0
LnGrp LOS	C	A	C				A	B	B	C	A	A
Approach Vol, veh/h		550						1434			1705	
Approach Delay, s/veh		23.1						16.8			13.4	
Approach LOS		C						B			B	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	18.1	23.9		16.2				42.0				
Change Period (Y+Rc), s	4.5	6.0		5.5				* 6				
Max Green Setting (Gmax), s	17.1	27.2		29.7				* 50				
Max Q Clear Time (g_c+I1), s	12.4	9.5		8.8				11.3				
Green Ext Time (p_c), s	1.2	8.4		1.8				9.2				
Intersection Summary												
HCM 6th Ctrl Delay			16.2									
HCM 6th LOS			B									
Notes												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑			↑
Traffic Vol, veh/h	27	3	148	0	0	81
Future Vol, veh/h	27	3	148	0	0	81
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, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	3	161	0	0	88

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	249	161	0	-	-	-
Stage 1	161	-	-	-	-	-
Stage 2	88	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	739	884	-	0	0	-
Stage 1	868	-	-	0	0	-
Stage 2	935	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	739	884	-	-	-	-
Mov Cap-2 Maneuver	798	-	-	-	-	-
Stage 1	868	-	-	-	-	-
Stage 2	935	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 806	-
HCM Lane V/C Ratio	- 0.04	-
HCM Control Delay (s)	- 9.7	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.1	-

Intersection						
Int Delay, s/veh	3.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	46	25	27	102	70	39
Future Vol, veh/h	46	25	27	102	70	39
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	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	38	38	38	38
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	121	66	71	268	184	103

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	646	236	287	0	-	0
Stage 1	236	-	-	-	-	-
Stage 2	410	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	436	803	1275	-	-	-
Stage 1	803	-	-	-	-	-
Stage 2	670	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	412	803	1275	-	-	-
Mov Cap-2 Maneuver	511	-	-	-	-	-
Stage 1	758	-	-	-	-	-
Stage 2	670	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14	1.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1275	-	586	-	-
HCM Lane V/C Ratio	0.056	-	0.319	-	-
HCM Control Delay (s)	8	-	14	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.4	-	-

Intersection						
Int Delay, s/veh	4.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕	↕	↕	
Traffic Vol, veh/h	127	1146	1080	10	15	100
Future Vol, veh/h	127	1146	1080	10	15	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	210	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	140	1259	1187	11	16	110

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1198	0	-	0	2726 1187
Stage 1	-	-	-	-	1187 -
Stage 2	-	-	-	-	1539 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	583	-	-	-	23 230
Stage 1	-	-	-	-	290 -
Stage 2	-	-	-	-	195 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	583	-	-	-	~ 5 230
Mov Cap-2 Maneuver	-	-	-	-	52 -
Stage 1	-	-	-	-	58 -
Stage 2	-	-	-	-	195 -

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	82.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	583	-	-	-	159
HCM Lane V/C Ratio	0.239	-	-	-	0.795
HCM Control Delay (s)	13.1	0	-	-	82.6
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	0.9	-	-	-	5.1

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	5	19	64	330	248	28
Future Vol, veh/h	5	19	64	330	248	28
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, %	2	2	2	2	2	2
Mvmt Flow	5	21	70	359	270	30

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	784	285	300	0	-	0
Stage 1	285	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	362	754	1261	-	-	-
Stage 1	763	-	-	-	-	-
Stage 2	610	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	337	754	1261	-	-	-
Mov Cap-2 Maneuver	337	-	-	-	-	-
Stage 1	710	-	-	-	-	-
Stage 2	610	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.3	1.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1261	-	599	-	-
HCM Lane V/C Ratio	0.055	-	0.044	-	-
HCM Control Delay (s)	8	0	11.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	-	-

Intersection												
Int Delay, s/veh	33.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	303	847	0	0	645	61	0	0	0	47	0	201
Future Vol, veh/h	303	847	0	0	645	61	0	0	0	47	0	201
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	-	0	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	337	941	0	0	717	68	0	0	0	52	0	223

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	785	0	0	941	0	0	2478	2400	941	2366	2366	751
Stage 1	-	-	-	-	-	-	1615	1615	-	751	751	-
Stage 2	-	-	-	-	-	-	863	785	-	1615	1615	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	834	-	-	729	-	-	20	33	319	~24	35	411
Stage 1	-	-	-	-	-	-	131	163	-	403	418	-
Stage 2	-	-	-	-	-	-	349	404	-	131	163	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	834	-	-	729	-	-	6	20	319	~16	21	411
Mov Cap-2 Maneuver	-	-	-	-	-	-	6	20	-	59	77	-
Stage 1	-	-	-	-	-	-	78	97	-	240	418	-
Stage 2	-	-	-	-	-	-	159	404	-	78	97	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.2	0	0	265.7
HCM LOS			A	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	834	-	-	729	-	-	193
HCM Lane V/C Ratio	-	0.404	-	-	-	-	-	1.428
HCM Control Delay (s)	0	12.2	-	-	0	-	-	265.7
HCM Lane LOS		A	B	-	A	-	-	F
HCM 95th %tile Q(veh)	-	2	-	-	0	-	-	16.6

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

**APPENDIX 6.3: OPENING YEAR CUMULATIVE (2024) WITHOUT
PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS
WORKSHEETS**

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **OYC (2024) NP Conditions - Weekday PM Peak Hour**

Major Street Name = **Wilson Avenue**

Total of Both Approaches (VPH) = **209**

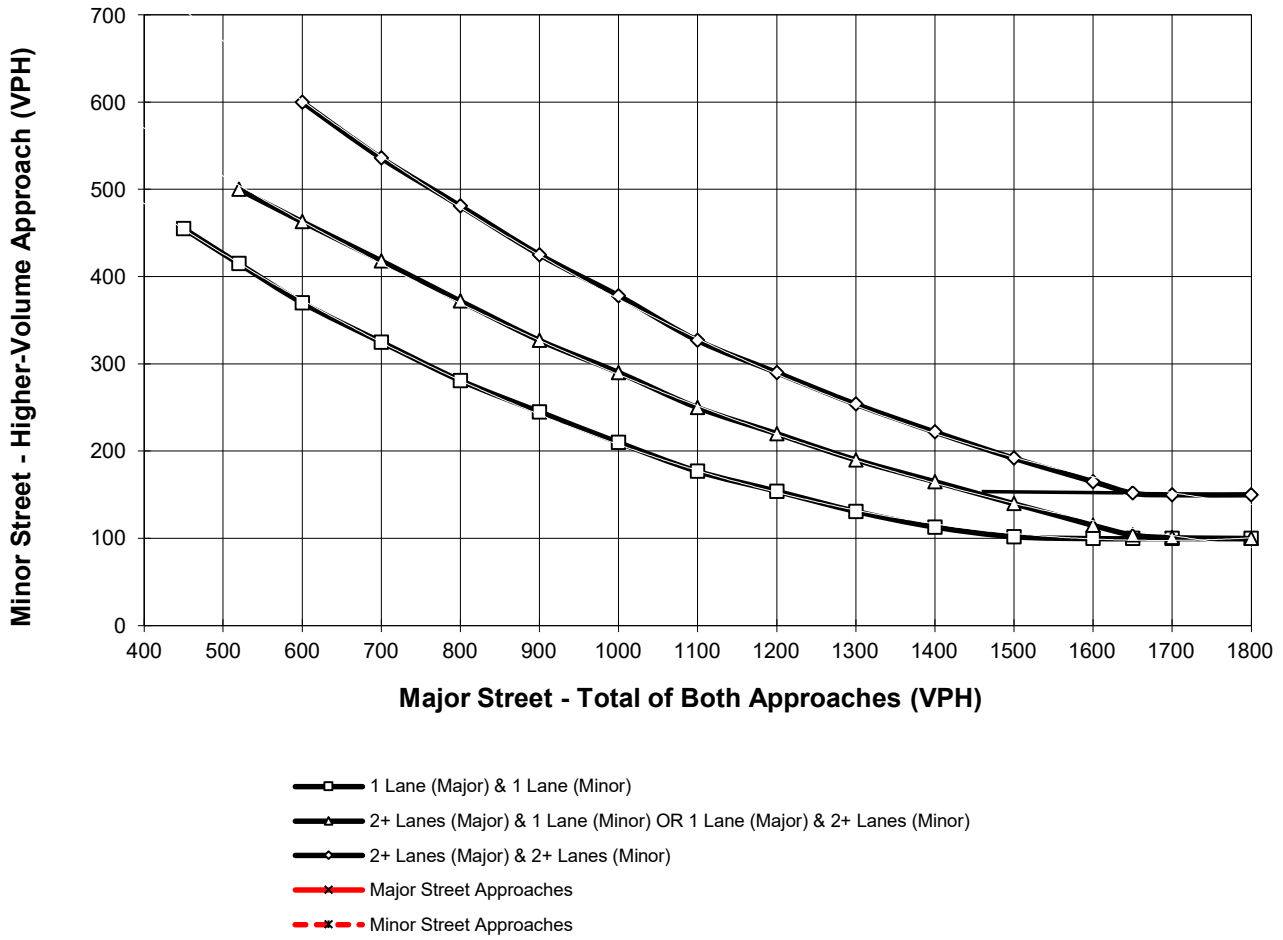
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Dale Street**

High Volume Approach (VPH) = **72**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane



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**APPENDIX 6.4: OPENING YEAR CUMULATIVE (2024) WITH PROJECT
CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS**

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

<u>DIST</u>	<u>CO</u>	<u>RTE</u>	<u>PM</u>	<u>CALC</u>	<u>TRAFFIC CONDITIONS</u>	<u>OYC (2024) WP</u>
Jurisdiction: <u>County of Riverside</u>				<u>JB</u>		<u>DATE 08/18/22</u>
Major Street: <u>Wilson Avenue</u>				<u>JB</u>		<u>DATE 08/18/22</u>
Minor Street: <u>Driveway 1</u>					Critical Approach Speed (Major) <u>30 mph</u>	
					Critical Approach Speed (Minor) <u>25 mph</u>	
Major Street Approach Lanes = <u>1</u>	lane	Minor Street Approach Lanes = <u>1</u>	lane			
Major Street Future ADT = <u>3,316</u>	vpd	Minor Street Future ADT = <u>266</u>	vpd			
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);	<input type="checkbox"/>	or	<input type="checkbox"/>			URBAN (U)
In built up area of isolated community of < 10,000 population	<input type="checkbox"/>					

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>	<u>RURAL</u>	Minimum Requirements			
XX		EADT			
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>	<u>Not Satisfied</u>	(Total of Both Approaches)		(One Direction Only)	
	XX	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
<u>1 3,316</u>	<u>1 266</u>	8,000	5,600	2,400	1,680
<u>2 +</u>	<u>1</u>	9,600	6,720	2,400	1,680
<u>2 +</u>	<u>2 +</u>	9,600	6,720	3,200	2,240
<u>1</u>	<u>2 +</u>	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>	<u>Not Satisfied</u>	(Total of Both Approaches)		(One Direction Only)	
	XX	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
<u>1 3,316</u>	<u>1 266</u>	12,000	8,400	1,200	850
<u>2 +</u>	<u>1</u>	14,400	10,080	1,200	850
<u>2 +</u>	<u>2 +</u>	14,400	10,080	1,600	1,120
<u>1</u>	<u>2 +</u>	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B		2 CONDITIONS		2 CONDITIONS	
<u>Satisfied</u>	<u>Not Satisfied</u>	80%		80%	
No one condition satisfied, but following conditions fulfilled 80% of more	XX				
	<u>A</u>				
	11%				
	<u>B</u>				
	22%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.



Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **OYC (2024) WP Conditions - Weekday PM Peak Hour**

Major Street Name = **Wilson Avenue**

Total of Both Approaches (VPH) = **236**

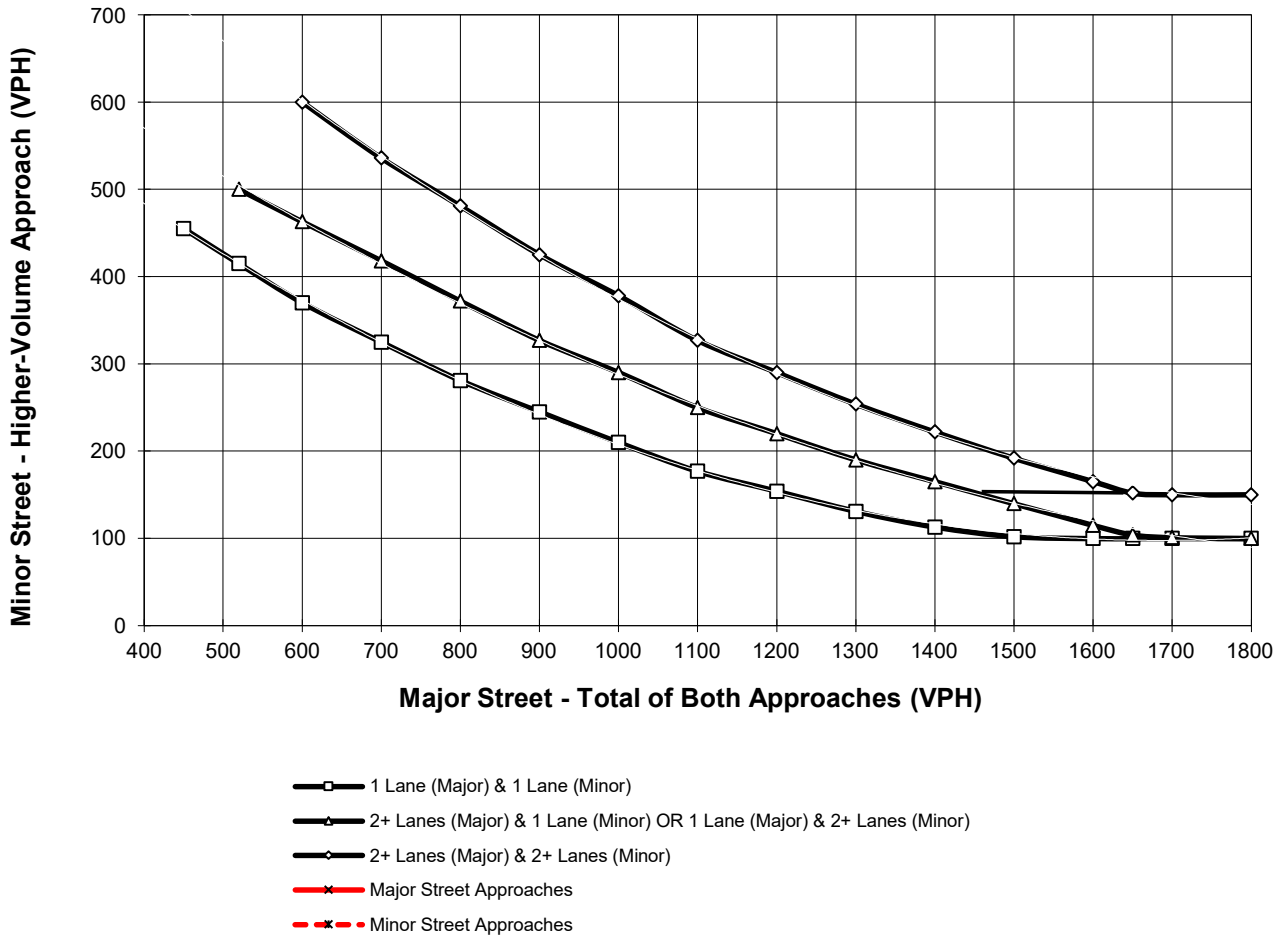
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Dale Street**

High Volume Approach (VPH) = **72**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane



Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

<u>DIST</u>	<u>CO</u>	<u>RTE</u>	<u>PM</u>	TRAFFIC CONDITIONS	OYC (2024) WP
Jurisdiction: <u>County of Riverside</u>				CALC <u>JB</u>	DATE <u>08/18/22</u>
Major Street: <u>Murrieta Road</u>				CHK <u>JB</u>	DATE <u>08/18/22</u>
Minor Street: <u>Driveway 2</u>				Critical Approach Speed (Major) <u>35</u> mph	
				Critical Approach Speed (Minor) <u>30</u> mph	
Major Street Approach Lanes =		<u>1</u>	lane	Minor Street Approach Lanes =	<u>1</u> lane
Major Street Future ADT =		<u>5,716</u>	vpd	Minor Street Future ADT =	<u>701</u> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);				<input type="checkbox"/>	URBAN (U)
In built up area of isolated community of < 10,000 population				<input type="checkbox"/>	

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>	<u>RURAL</u>	Minimum Requirements			
XX		EADT			
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>	<u>Not Satisfied</u>	(Total of Both Approaches)		(One Direction Only)	
	XX	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
<u>1 5,716</u>	<u>1 701</u>	8,000	5,600	2,400	1,680
<u>2 +</u>	<u>1</u>	9,600	6,720	2,400	1,680
<u>2 +</u>	<u>2 +</u>	9,600	6,720	3,200	2,240
<u>1</u>	<u>2 +</u>	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>	<u>Not Satisfied</u>	(Total of Both Approaches)		(One Direction Only)	
	XX	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
<u>1 5,716</u>	<u>1 701</u>	12,000	8,400	1,200	850
<u>2 +</u>	<u>1</u>	14,400	10,080	1,200	850
<u>2 +</u>	<u>2 +</u>	14,400	10,080	1,600	1,120
<u>1</u>	<u>2 +</u>	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B		2 CONDITIONS		2 CONDITIONS	
<u>Satisfied</u>	<u>Not Satisfied</u>	80%		80%	
No one condition satisfied, but following conditions fulfilled 80% of more	XX				
	A				
	29%				
	B				
	48%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.



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**APPENDIX 6.5: OPENING YEAR CUMULATIVE (2024) WITHOUT
PROJECT QUEUING ANALYSIS WORKSHEETS**

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Queues

3: Redlands Av & I-215 NB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	316	302	299	216	1130	1479	411
v/c Ratio	0.82	0.71	0.69	0.47	0.52	0.55	0.45
Control Delay	49.7	28.6	27.5	35.6	9.3	17.6	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay	49.7	28.6	27.5	35.6	9.5	17.6	3.4
Queue Length 50th (ft)	163	95	89	53	145	150	0
Queue Length 95th (ft)	#320	#227	#210	86	186	193	48
Internal Link Dist (ft)		1157			322	711	
Turn Bay Length (ft)	800		400				
Base Capacity (vph)	396	437	443	850	2783	3074	973
Starvation Cap Reductn	0	0	0	0	786	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.69	0.67	0.25	0.57	0.48	0.42

Intersection Summary

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

Queues

4: Redlands Av & I-215 SB Ramps



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	180	180	165	999	303	688	1122
v/c Ratio	0.55	0.48	0.45	0.51	0.28	0.78	0.49
Control Delay	32.2	17.6	16.5	20.3	3.3	33.5	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	32.2	17.6	16.5	20.3	3.3	33.5	7.7
Queue Length 50th (ft)	71	35	27	95	0	136	103
Queue Length 95th (ft)	141	97	84	143	27	#282	197
Internal Link Dist (ft)		878		463			322
Turn Bay Length (ft)	740		140		200		
Base Capacity (vph)	749	752	721	2617	1317	881	2646
Starvation Cap Reductn	0	0	0	0	0	0	693
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.24	0.23	0.38	0.23	0.78	0.57

Intersection Summary

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



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	335	410	399	193	1221	1342	347
v/c Ratio	0.81	0.95	0.90	0.43	0.58	0.52	0.41
Control Delay	46.8	58.8	49.6	34.3	10.5	17.5	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay	46.8	58.8	49.6	34.3	10.6	17.5	3.4
Queue Length 50th (ft)	155	163	147	43	164	130	0
Queue Length 95th (ft)	#348	#408	#371	79	212	172	46
Internal Link Dist (ft)		1157			322	711	
Turn Bay Length (ft)	800		400				
Base Capacity (vph)	412	430	441	885	2895	3198	963
Starvation Cap Reductn	0	0	0	0	659	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.95	0.90	0.22	0.55	0.42	0.36

Intersection Summary

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

Queues

Prairie View Apartments (JN 13747)

4: Redlands Av & I-215 SB Ramps

08/17/2022



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	213	213	195	999	466	639	1042
v/c Ratio	0.59	0.61	0.49	0.50	0.39	0.77	0.46
Control Delay	32.7	31.9	18.3	21.2	3.2	35.3	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	32.7	31.9	18.3	21.2	3.2	35.3	8.6
Queue Length 50th (ft)	90	89	42	101	0	139	107
Queue Length 95th (ft)	165	167	105	154	35	#273	204
Internal Link Dist (ft)		878		463			322
Turn Bay Length (ft)	740		140		200		
Base Capacity (vph)	710	678	688	2481	1364	835	2508
Starvation Cap Reductn	0	0	0	0	0	0	730
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.31	0.28	0.40	0.34	0.77	0.59

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

**APPENDIX 6.6: OPENING YEAR CUMULATIVE (2024) WITH PROJECT
QUEUING ANALYSIS WORKSHEETS**

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Queues

3: Redlands Av & I-215 NB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	324	303	298	216	1139	1518	426
v/c Ratio	0.84	0.71	0.69	0.48	0.52	0.56	0.46
Control Delay	51.0	29.0	27.4	35.9	9.4	17.9	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay	51.0	29.0	27.4	35.9	9.7	17.9	3.5
Queue Length 50th (ft)	168	97	90	53	147	156	0
Queue Length 95th (ft)	#330	#231	#210	86	188	199	49
Internal Link Dist (ft)		1157			322	711	
Turn Bay Length (ft)	800		400				
Base Capacity (vph)	390	429	436	836	2738	3025	972
Starvation Cap Reductn	0	0	0	0	783	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.71	0.68	0.26	0.58	0.50	0.44

Intersection Summary

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

Queues

4: Redlands Av & I-215 SB Ramps



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	183	182	165	1003	303	712	1136
v/c Ratio	0.56	0.48	0.45	0.51	0.28	0.81	0.50
Control Delay	32.4	17.7	16.5	20.4	3.3	35.2	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	32.4	17.7	16.5	20.4	3.3	35.2	7.9
Queue Length 50th (ft)	72	36	27	95	0	142	106
Queue Length 95th (ft)	143	100	84	144	28	#299	202
Internal Link Dist (ft)		878		463			322
Turn Bay Length (ft)	740		140		200		
Base Capacity (vph)	748	750	719	2611	1315	879	2640
Starvation Cap Reductn	0	0	0	0	0	0	689
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.24	0.23	0.38	0.23	0.81	0.58

Intersection Summary

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



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	335	421	412	193	1249	1365	356
v/c Ratio	0.82	0.99	0.94	0.44	0.60	0.53	0.42
Control Delay	47.4	68.3	57.6	34.4	10.6	17.6	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay	47.4	68.3	57.6	34.4	10.8	17.6	3.4
Queue Length 50th (ft)	160	~184	164	44	169	133	0
Queue Length 95th (ft)	#348	#429	#393	79	220	175	46
Internal Link Dist (ft)		1157			322	711	
Turn Bay Length (ft)	800		400				
Base Capacity (vph)	410	425	436	880	2881	3182	965
Starvation Cap Reductn	0	0	0	0	671	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.99	0.94	0.22	0.57	0.43	0.37

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

4: Redlands Av & I-215 SB Ramps



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	221	217	197	1013	466	654	1051
v/c Ratio	0.60	0.61	0.49	0.50	0.39	0.79	0.47
Control Delay	33.0	32.2	18.3	21.5	3.2	36.6	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	33.0	32.2	18.3	21.5	3.2	36.6	8.8
Queue Length 50th (ft)	94	92	43	104	0	144	111
Queue Length 95th (ft)	170	171	105	157	35	#284	208
Internal Link Dist (ft)		878		463			322
Turn Bay Length (ft)	740		140		200		
Base Capacity (vph)	704	671	683	2459	1356	828	2487
Starvation Cap Reductn	0	0	0	0	0	0	726
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.32	0.29	0.41	0.34	0.79	0.60

Intersection Summary

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

**APPENDIX 6.7: OPENING YEAR CUMULATIVE (2024) WITH PROJECT
CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS
WITH IMPROVEMENTS**

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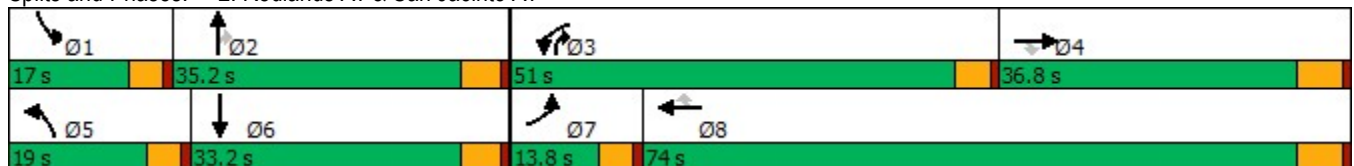
Timings
2: Redlands Av & San Jacinto Av

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	103	36	161	1045	85	108	153	420	932	127	525
Future Volume (vph)	103	36	161	1045	85	108	153	420	932	127	525
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4		3	8		5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	4	3	8	8	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	36.8	36.8	9.6	30.8	30.8	9.6	32.1	9.6	9.6	32.1
Total Split (s)	13.8	36.8	36.8	51.0	74.0	74.0	19.0	35.2	51.0	17.0	33.2
Total Split (%)	9.9%	26.3%	26.3%	36.4%	52.9%	52.9%	13.6%	25.1%	36.4%	12.1%	23.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.1	4.6	4.6	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	None	Min
Act Effct Green (s)	8.6	13.7	13.7	46.6	51.8	51.8	14.5	29.3	81.0	12.5	27.3
Actuated g/C Ratio	0.07	0.11	0.11	0.38	0.42	0.42	0.12	0.24	0.66	0.10	0.22
v/c Ratio	0.47	0.20	0.55	0.88	0.12	0.17	0.83	0.54	0.43	0.80	0.85
Control Delay	62.7	50.5	14.4	44.7	22.0	4.0	84.3	43.9	1.2	85.1	56.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.7	50.5	14.4	44.7	22.0	4.0	84.3	43.9	1.2	85.1	56.1
LOS	E	D	B	D	C	A	F	D	A	F	E
Approach Delay		35.3			39.6			21.6			61.1
Approach LOS		D			D			C			E

Intersection Summary





























Cycle Length: 140	
Actuated Cycle Length: 122.3	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 36.3	Intersection LOS: D
Intersection Capacity Utilization 75.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)
08/18/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 				 	 		 	
Traffic Volume (veh/h)	103	36	161	1045	85	108	153	420	932	127	525	88
Future Volume (veh/h)	103	36	161	1045	85	108	153	420	932	127	525	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	41	82	1188	97	66	174	477	559	144	597	55
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	189	160	1328	791	670	206	864	1914	175	720	66
Arrive On Green	0.05	0.10	0.10	0.37	0.42	0.42	0.12	0.23	0.23	0.10	0.21	0.21
Sat Flow, veh/h	3563	1870	1585	3563	1870	1584	1781	3741	3170	1781	3374	310
Grp Volume(v), veh/h	117	41	82	1188	97	66	174	477	559	144	330	322
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1584	1781	1870	1585	1781	1870	1814
Q Serve(g_s), s	3.3	2.1	5.0	32.0	3.2	2.6	9.8	11.5	8.6	8.1	17.2	17.3
Cycle Q Clear(g_c), s	3.3	2.1	5.0	32.0	3.2	2.6	9.8	11.5	8.6	8.1	17.2	17.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	181	189	160	1328	791	670	206	864	1914	175	399	387
V/C Ratio(X)	0.65	0.22	0.51	0.89	0.12	0.10	0.84	0.55	0.29	0.83	0.83	0.83
Avail Cap(c_a), veh/h	321	569	482	1621	1251	1060	252	1104	2118	217	516	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	42.1	43.4	30.1	17.9	17.7	44.2	34.5	9.7	45.1	38.3	38.3
Incr Delay (d2), s/veh	3.8	0.6	2.5	5.9	0.1	0.1	19.3	0.6	0.1	18.7	8.6	9.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.9	2.0	13.7	1.3	0.9	5.3	5.2	2.6	4.3	8.4	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	42.7	46.0	36.0	18.0	17.8	63.5	35.1	9.8	63.8	46.9	47.3
LnGrp LOS	D	D	D	D	B	B	E	D	A	E	D	D
Approach Vol, veh/h		240			1351			1210			796	
Approach Delay, s/veh		48.0			33.8			27.5			50.1	
Approach LOS		D			C			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	28.7	42.6	16.1	16.4	26.9	9.8	48.9				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	12.4	30.1	46.4	31.0	14.4	28.1	9.2	68.2				
Max Q Clear Time (g_c+I1), s	10.1	13.5	34.0	7.0	11.8	19.3	5.3	5.2				
Green Ext Time (p_c), s	0.1	5.1	4.0	0.4	0.1	2.4	0.1	0.7				
Intersection Summary												
HCM 6th Ctrl Delay			36.2									
HCM 6th LOS			D									

Intersection						
Int Delay, s/veh	2.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	90	845	1145	12	12	149
Future Vol, veh/h	90	845	1145	12	12	149
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	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	108	1018	1380	14	14	180

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1394	0	-	0	2621 697
Stage 1	-	-	-	-	1387 -
Stage 2	-	-	-	-	1234 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	489	-	-	-	23 384
Stage 1	-	-	-	-	198 -
Stage 2	-	-	-	-	274 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	489	-	-	-	18 384
Mov Cap-2 Maneuver	-	-	-	-	98 -
Stage 1	-	-	-	-	154 -
Stage 2	-	-	-	-	274 -

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	33.1
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	489	-	-	-	315
HCM Lane V/C Ratio	0.222	-	-	-	0.616
HCM Control Delay (s)	14.4	-	-	-	33.1
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0.8	-	-	-	3.8

Timings
9: San Jacinto Av & Murrieta Rd

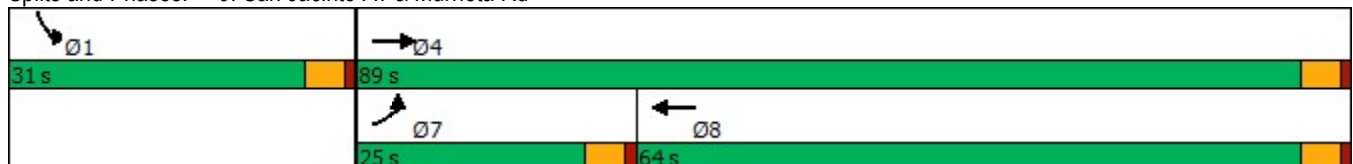


Lane Group	EBL	EBT	WBT	SBL
Lane Configurations				
Traffic Volume (vph)	225	552	679	54
Future Volume (vph)	225	552	679	54
Turn Type	Prot	NA	NA	Prot
Protected Phases	7	4	8	1
Permitted Phases				
Detector Phase	7	4	8	1
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	22.6	22.6	9.6
Total Split (s)	25.0	89.0	64.0	31.0
Total Split (%)	20.8%	74.2%	53.3%	25.8%
Yellow Time (s)	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6
Lead/Lag	Lead		Lag	
Lead-Lag Optimize?	Yes		Yes	
Recall Mode	None	None	None	None
Act Effct Green (s)	19.4	77.9	53.8	19.6
Actuated g/C Ratio	0.18	0.73	0.50	0.18
v/c Ratio	0.83	0.48	0.93	0.87
Control Delay	66.8	8.1	43.1	40.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	66.8	8.1	43.1	40.8
LOS	E	A	D	D
Approach Delay		25.1	43.1	40.8
Approach LOS		C	D	D

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 107	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 35.2	Intersection LOS: D
Intersection Capacity Utilization 83.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 9: San Jacinto Av & Murrieta Rd



HCM 6th Signalized Intersection Summary
 9: San Jacinto Av & Murrieta Rd

Prairie View Apartments (JN 13747)
 08/18/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations							
Traffic Volume (veh/h)	225	552	679	54	54	291	
Future Volume (veh/h)	225	552	679	54	54	291	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach		No	No		No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	265	649	799	64	64	342	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	293	1296	835	67	58	309	
Arrive On Green	0.16	0.69	0.49	0.49	0.23	0.23	
Sat Flow, veh/h	1781	1870	1709	137	254	1356	
Grp Volume(v), veh/h	265	649	0	863	407	0	
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1846	1614	0	
Q Serve(g_s), s	16.9	18.9	0.0	52.0	26.4	0.0	
Cycle Q Clear(g_c), s	16.9	18.9	0.0	52.0	26.4	0.0	
Prop In Lane	1.00			0.07	0.16	0.84	
Lane Grp Cap(c), veh/h	293	1296	0	902	368	0	
V/C Ratio(X)	0.91	0.50	0.00	0.96	1.11	0.00	
Avail Cap(c_a), veh/h	314	1362	0	946	368	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh	47.5	8.4	0.0	28.4	44.7	0.0	
Incr Delay (d2), s/veh	27.2	0.3	0.0	19.1	79.1	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	9.5	6.4	0.0	25.7	18.4	0.0	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	74.7	8.7	0.0	47.6	123.8	0.0	
LnGrp LOS	E	A	A	D	F	A	
Approach Vol, veh/h		914	863		407		
Approach Delay, s/veh		27.8	47.6		123.8		
Approach LOS		C	D		F		
Timer - Assigned Phs				4	6	7	8
Phs Duration (G+Y+Rc), s				84.9	31.0	23.6	61.2
Change Period (Y+Rc), s				4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s				84.4	26.4	20.4	59.4
Max Q Clear Time (g_c+I1), s				20.9	28.4	18.9	54.0
Green Ext Time (p_c), s				4.5	0.0	0.1	2.6
Intersection Summary							
HCM 6th Ctrl Delay			53.5				
HCM 6th LOS			D				

Timings
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

08/18/2022

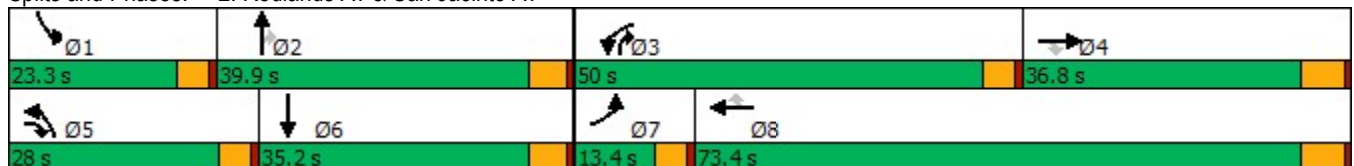


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖↗	↖	↑↘
Traffic Volume (vph)	103	87	203	958	95	103	227	509	1243	165	509
Future Volume (vph)	103	87	203	958	95	103	227	509	1243	165	509
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8		5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	8	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	36.8	9.6	9.6	30.8	30.8	9.6	32.1	9.6	9.6	32.1
Total Split (s)	13.4	36.8	28.0	50.0	73.4	73.4	28.0	39.9	50.0	23.3	35.2
Total Split (%)	8.9%	24.5%	18.7%	33.3%	48.9%	48.9%	18.7%	26.6%	33.3%	15.5%	23.5%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	4.8	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	5.8	4.6	5.1	4.6	4.6	5.1
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	None	Min
Act Effct Green (s)	8.4	17.9	45.1	43.9	53.3	53.3	21.4	31.2	80.3	16.7	26.6
Actuated g/C Ratio	0.06	0.14	0.35	0.34	0.41	0.41	0.16	0.24	0.62	0.13	0.20
v/c Ratio	0.47	0.36	0.35	0.84	0.13	0.15	0.81	0.59	0.56	0.76	0.83
Control Delay	70.2	55.7	20.4	49.0	24.9	3.8	76.6	48.5	5.2	78.7	60.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	70.2	55.7	20.4	49.0	24.9	3.8	76.6	48.5	5.3	78.7	60.6
LOS	E	E	C	D	C	A	E	D	A	E	E
Approach Delay		41.3			43.0			24.6			64.5
Approach LOS		D			D			C			E

Intersection Summary

Cycle Length: 150
 Actuated Cycle Length: 130.2
 Natural Cycle: 120
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 38.2
 Intersection LOS: D
 Intersection Capacity Utilization 76.7%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
 2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)
 08/18/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑	↔	↔↔	↑	↔	↔	↑↑	↔↔	↔	↑↔	
Traffic Volume (veh/h)	103	87	203	958	95	103	227	509	1243	165	509	91
Future Volume (veh/h)	103	87	203	958	95	103	227	509	1243	165	509	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	107	91	107	998	99	55	236	530	696	172	530	53
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	203	417	1153	716	606	275	894	1784	208	673	67
Arrive On Green	0.05	0.11	0.11	0.32	0.38	0.38	0.15	0.24	0.24	0.12	0.20	0.20
Sat Flow, veh/h	3563	1870	1585	3563	1870	1584	1781	3741	3170	1781	3346	334
Grp Volume(v), veh/h	107	91	107	998	99	55	236	530	696	172	296	287
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1584	1781	1870	1585	1781	1870	1809
Q Serve(g_s), s	2.8	4.3	5.1	25.0	3.3	2.1	12.2	11.9	11.7	8.9	14.2	14.3
Cycle Q Clear(g_c), s	2.8	4.3	5.1	25.0	3.3	2.1	12.2	11.9	11.7	8.9	14.2	14.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	177	203	417	1153	716	606	275	894	1784	208	376	364
V/C Ratio(X)	0.61	0.45	0.26	0.87	0.14	0.09	0.86	0.59	0.39	0.83	0.79	0.79
Avail Cap(c_a), veh/h	331	612	763	1706	1334	1129	440	1373	2190	351	594	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	39.6	27.6	30.1	19.1	18.7	39.1	32.0	11.6	40.9	35.9	36.0
Incr Delay (d2), s/veh	3.3	1.6	0.3	3.3	0.1	0.1	9.4	0.6	0.1	8.1	3.6	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.0	1.9	10.4	1.3	0.7	5.9	5.3	3.6	4.2	6.5	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.5	41.2	27.9	33.4	19.2	18.8	48.4	32.6	11.8	49.0	39.6	39.8
LnGrp LOS	D	D	C	C	B	B	D	C	B	D	D	D
Approach Vol, veh/h		305			1152			1462			755	
Approach Delay, s/veh		38.7			31.5			25.2			41.8	
Approach LOS		D			C			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.7	27.8	35.3	16.1	19.3	24.2	9.3	42.1				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	18.7	34.8	45.4	31.0	23.4	30.1	8.8	67.6				
Max Q Clear Time (g_c+I1), s	10.9	13.9	27.0	7.1	14.2	16.3	4.8	5.3				
Green Ext Time (p_c), s	0.2	6.7	3.7	0.7	0.4	2.7	0.1	0.7				
Intersection Summary												
HCM 6th Ctrl Delay			31.7									
HCM 6th LOS			C									

Intersection						
Int Delay, s/veh	1.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑	↕		↘	
Traffic Vol, veh/h	127	1146	1080	10	15	100
Future Vol, veh/h	127	1146	1080	10	15	100
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	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	140	1259	1187	11	16	110

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1198	0	-	0	2732 599
Stage 1	-	-	-	-	1193 -
Stage 2	-	-	-	-	1539 -
Critical Hdwy	4.13	-	-	-	6.63 6.93
Critical Hdwy Stg 1	-	-	-	-	5.83 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	2.219	-	-	-	3.519 3.319
Pot Cap-1 Maneuver	580	-	-	-	19 446
Stage 1	-	-	-	-	251 -
Stage 2	-	-	-	-	194 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	580	-	-	-	~ 14 446
Mov Cap-2 Maneuver	-	-	-	-	94 -
Stage 1	-	-	-	-	191 -
Stage 2	-	-	-	-	194 -

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	25.5
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	580	-	-	-	300
HCM Lane V/C Ratio	0.241	-	-	-	0.421
HCM Control Delay (s)	13.2	-	-	-	25.5
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0.9	-	-	-	2

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Timings
9: San Jacinto Av & Murrieta Rd

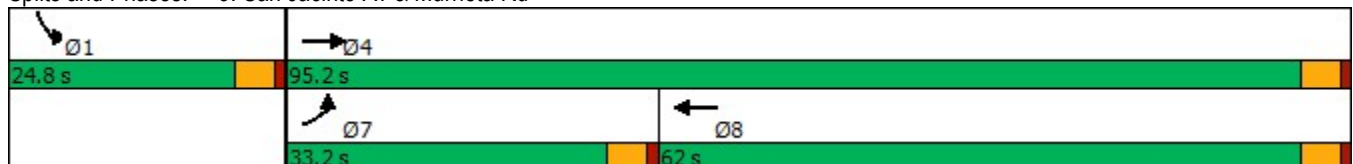


Lane Group	EBL	EBT	WBT	SBL
Lane Configurations	↖	↗	↘	↙
Traffic Volume (vph)	303	847	645	47
Future Volume (vph)	303	847	645	47
Turn Type	Prot	NA	NA	Prot
Protected Phases	7	4	8	1
Permitted Phases				
Detector Phase	7	4	8	1
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	22.6	22.6	9.6
Total Split (s)	33.2	95.2	62.0	24.8
Total Split (%)	27.7%	79.3%	51.7%	20.7%
Yellow Time (s)	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6
Lead/Lag	Lead		Lag	
Lead-Lag Optimize?	Yes		Yes	
Recall Mode	None	None	None	None
Act Effct Green (s)	23.9	76.2	47.4	13.2
Actuated g/C Ratio	0.24	0.77	0.48	0.13
v/c Ratio	0.79	0.66	0.89	0.78
Control Delay	52.6	8.5	38.5	36.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	52.6	8.5	38.5	36.3
LOS	D	A	D	D
Approach Delay		20.1	38.5	36.3
Approach LOS		C	D	D

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 99.2	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 28.2	Intersection LOS: C
Intersection Capacity Utilization 80.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 9: San Jacinto Av & Murrieta Rd



HCM 6th Signalized Intersection Summary
 9: San Jacinto Av & Murrieta Rd

Prairie View Apartments (JN 13747)
 08/18/2022

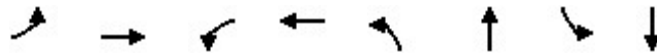


Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	↖	↑	↗		↙	↘	
Traffic Volume (veh/h)	303	847	645	61	47	201	
Future Volume (veh/h)	303	847	645	61	47	201	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach		No	No		No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	337	941	717	68	52	223	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	375	1347	781	74	57	246	
Arrive On Green	0.21	0.72	0.46	0.46	0.19	0.19	
Sat Flow, veh/h	1781	1870	1682	160	305	1309	
Grp Volume(v), veh/h	337	941	0	785	276	0	
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1842	1620	0	
Q Serve(g_s), s	18.5	28.4	0.0	40.0	16.8	0.0	
Cycle Q Clear(g_c), s	18.5	28.4	0.0	40.0	16.8	0.0	
Prop In Lane	1.00			0.09	0.19	0.81	
Lane Grp Cap(c), veh/h	375	1347	0	855	305	0	
V/C Ratio(X)	0.90	0.70	0.00	0.92	0.91	0.00	
Avail Cap(c_a), veh/h	507	1687	0	1052	326	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh	38.6	7.9	0.0	25.1	39.9	0.0	
Incr Delay (d2), s/veh	15.2	0.9	0.0	11.0	26.6	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	9.2	8.4	0.0	18.2	8.8	0.0	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	53.8	8.8	0.0	36.1	66.6	0.0	
LnGrp LOS	D	A	A	D	E	A	
Approach Vol, veh/h		1278	785		276		
Approach Delay, s/veh		20.7	36.1		66.6		
Approach LOS		C	D		E		
Timer - Assigned Phs				4	6	7	8
Phs Duration (G+Y+Rc), s				77.0	23.5	25.7	51.2
Change Period (Y+Rc), s				4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s				90.6	20.2	28.6	57.4
Max Q Clear Time (g_c+I1), s				30.4	18.8	20.5	42.0
Green Ext Time (p_c), s				8.6	0.1	0.6	4.6
Intersection Summary							
HCM 6th Ctrl Delay			31.3				
HCM 6th LOS			C				

**APPENDIX 7.1: HORIZON YEAR (2045) WITHOUT PROJECT
CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS**

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Timings
1: Redlands Av & Dale St

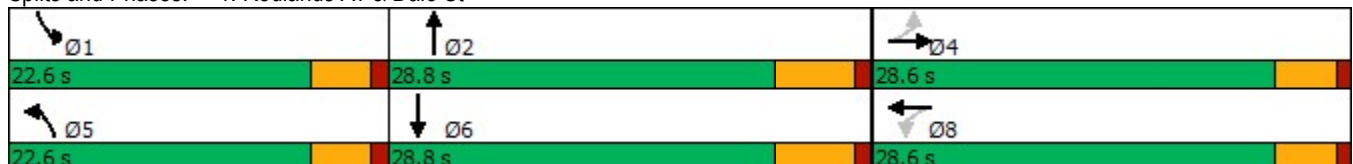


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↖	↗	↖	↗
Traffic Volume (vph)	106	9	59	27	91	499	36	646
Future Volume (vph)	106	9	59	27	91	499	36	646
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	28.6	28.6	28.6	28.6	22.6	28.6	22.6	24.8
Total Split (s)	28.6	28.6	28.6	28.6	22.6	28.8	22.6	28.8
Total Split (%)	35.8%	35.8%	35.8%	35.8%	28.3%	36.0%	28.3%	36.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		15.5		15.5	8.5	28.2	6.4	24.0
Actuated g/C Ratio		0.25		0.25	0.14	0.46	0.11	0.39
v/c Ratio		0.73		0.49	0.46	0.40	0.24	0.76
Control Delay		28.8		20.1	32.9	14.3	31.9	23.6
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		28.8		20.1	32.9	14.3	31.9	23.6
LOS		C		C	C	B	C	C
Approach Delay		28.8		20.1		17.0		23.9
Approach LOS		C		C		B		C

Intersection Summary

Cycle Length: 80	
Actuated Cycle Length: 60.8	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 21.9	Intersection LOS: C
Intersection Capacity Utilization 59.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 1: Redlands Av & Dale St



HCM 6th Signalized Intersection Summary
 1: Redlands Av & Dale St

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Volume (veh/h)	106	9	105	59	27	61	91	499	28	36	646	195
Future Volume (veh/h)	106	9	105	59	27	61	91	499	28	36	646	195
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	11	131	74	34	76	114	624	35	45	808	244
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	34	170	214	106	152	148	1440	81	83	1035	312
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.08	0.42	0.42	0.05	0.38	0.38
Sat Flow, veh/h	674	152	757	493	472	679	1781	3421	192	1781	2689	812
Grp Volume(v), veh/h	274	0	0	184	0	0	114	324	335	45	534	518
Grp Sat Flow(s),veh/h/ln	1583	0	0	1643	0	0	1781	1777	1836	1781	1777	1724
Q Serve(g_s), s	3.0	0.0	0.0	0.0	0.0	0.0	3.1	6.3	6.3	1.2	12.9	12.9
Cycle Q Clear(g_c), s	7.5	0.0	0.0	4.5	0.0	0.0	3.1	6.3	6.3	1.2	12.9	12.9
Prop In Lane	0.48		0.48	0.40		0.41	1.00		0.10	1.00		0.47
Lane Grp Cap(c), veh/h	465	0	0	472	0	0	148	748	773	83	684	663
V/C Ratio(X)	0.59	0.00	0.00	0.39	0.00	0.00	0.77	0.43	0.43	0.54	0.78	0.78
Avail Cap(c_a), veh/h	848	0	0	865	0	0	658	838	866	658	838	813
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	0.0	0.0	16.4	0.0	0.0	21.9	10.0	10.0	22.7	13.2	13.2
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.5	0.0	0.0	3.2	0.4	0.4	2.0	3.9	4.0
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	2.6	0.0	0.0	1.6	0.0	0.0	1.2	1.8	1.8	0.5	4.4	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	0.0	0.0	16.9	0.0	0.0	25.1	10.4	10.4	24.7	17.1	17.2
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		274			184			773			1097	
Approach Delay, s/veh		18.6			16.9			12.6			17.5	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	26.3		15.6	8.7	24.6		15.6				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	18.0	23.0		24.0	18.0	23.0		24.0				
Max Q Clear Time (g_c+I1), s	3.2	8.3		9.5	5.1	14.9		6.5				
Green Ext Time (p_c), s	0.0	3.2		1.5	0.1	3.9		1.0				
Intersection Summary												
HCM 6th Ctrl Delay				15.9								
HCM 6th LOS				B								

Timings
2: Redlands Av & San Jacinto Av

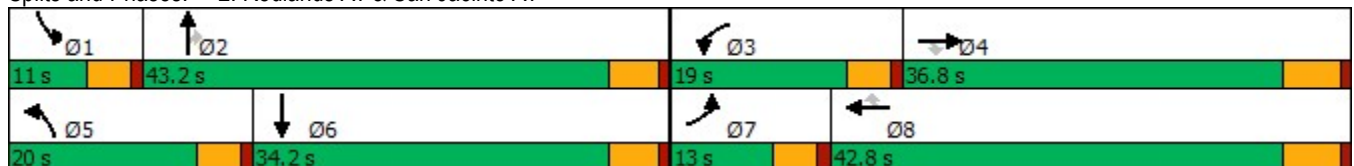


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↖↗
Traffic Volume (vph)	254	109	270	1120	350	119	210	462	1009	140	553
Future Volume (vph)	254	109	270	1120	350	119	210	462	1009	140	553
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	36.8	36.8	9.6	30.8	30.8	9.6	32.1	32.1	9.6	32.1
Total Split (s)	13.0	36.8	36.8	19.0	42.8	42.8	20.0	43.2	43.2	11.0	34.2
Total Split (%)	11.8%	33.5%	33.5%	17.3%	38.9%	38.9%	18.2%	39.3%	39.3%	10.0%	31.1%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.1	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.1	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	8.4	20.3	20.3	14.5	26.4	26.4	15.5	38.3	38.3	6.4	29.2
Actuated g/C Ratio	0.08	0.20	0.20	0.15	0.26	0.26	0.16	0.38	0.38	0.06	0.29
v/c Ratio	1.00	0.33	0.58	2.56	0.81	0.26	0.87	0.39	1.15	1.41	0.84
Control Delay	99.6	35.3	11.3	727.9	47.5	4.0	73.4	24.4	93.5	262.2	40.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	99.6	35.3	11.3	727.9	47.5	4.0	73.4	24.4	93.5	262.2	40.9
LOS	F	D	B	F	D	A	E	C	F	F	D
Approach Delay		50.9			523.8			72.0			75.6
Approach LOS		D			F			E			E

Intersection Summary

Cycle Length: 110	
Actuated Cycle Length: 99.7	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 2.56	
Intersection Signal Delay: 219.6	Intersection LOS: F
Intersection Capacity Utilization 91.5%	ICU Level of Service F
Analysis Period (min) 15	

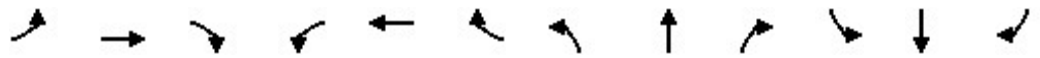
Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↑↗	
Traffic Volume (veh/h)	254	109	270	1120	350	119	210	462	1009	140	553	200
Future Volume (veh/h)	254	109	270	1120	350	119	210	462	1009	140	553	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	289	124	206	1273	398	108	239	525	969	159	628	219
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	347	294	513	462	391	271	1396	623	118	792	276
Arrive On Green	0.09	0.19	0.19	0.15	0.25	0.25	0.15	0.39	0.39	0.07	0.31	0.31
Sat Flow, veh/h	3456	1870	1585	3456	1870	1583	1781	3554	1585	1781	2583	900
Grp Volume(v), veh/h	289	124	206	1273	398	108	239	525	969	159	432	415
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1583	1781	1777	1585	1781	1777	1707
Q Serve(g_s), s	8.1	5.6	11.8	14.4	19.7	5.3	12.7	10.2	38.1	6.4	21.6	21.6
Cycle Q Clear(g_c), s	8.1	5.6	11.8	14.4	19.7	5.3	12.7	10.2	38.1	6.4	21.6	21.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	299	347	294	513	462	391	271	1396	623	118	545	523
V/C Ratio(X)	0.97	0.36	0.70	2.48	0.86	0.28	0.88	0.38	1.56	1.35	0.79	0.79
Avail Cap(c_a), veh/h	299	598	507	513	714	604	283	1396	623	118	545	523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	34.5	37.0	41.3	34.9	29.5	40.2	21.0	29.4	45.3	30.8	30.8
Incr Delay (d2), s/veh	42.5	0.6	3.0	672.1	6.7	0.4	25.3	0.2	258.0	204.2	7.8	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	2.5	4.6	53.7	9.3	2.0	7.4	4.1	57.8	9.4	9.8	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.7	35.1	40.0	713.4	41.6	29.9	65.5	21.1	287.4	249.5	38.6	39.0
LnGrp LOS	F	D	D	F	D	C	E	C	F	F	D	D
Approach Vol, veh/h		619			1779			1733			1006	
Approach Delay, s/veh		60.8			521.6			176.2			72.1	
Approach LOS		E			F			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	43.2	19.0	23.8	19.4	34.8	13.0	29.8				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	6.4	38.1	14.4	31.0	15.4	29.1	8.4	37.0				
Max Q Clear Time (g_c+I1), s	8.4	40.1	16.4	13.8	14.7	23.6	10.1	21.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.1	0.0	2.3	0.0	2.2				
Intersection Summary												
HCM 6th Ctrl Delay			261.5									
HCM 6th LOS			F									

Timings
3: Redlands Av & I-215 NB Ramps

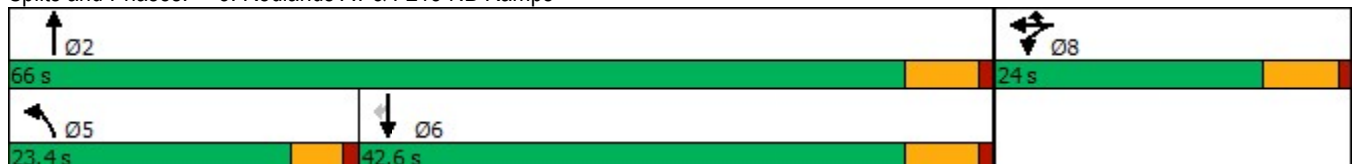


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	394	3	532	595	1135	1448	403
Future Volume (vph)	394	3	532	595	1135	1448	403
Turn Type	Split	NA	Prot	Prot	NA	NA	Perm
Protected Phases	8	8	8	5	2	6	
Permitted Phases							6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	9.5	11.0	31.0	31.0
Total Split (s)	24.0	24.0	24.0	23.4	66.0	42.6	42.6
Total Split (%)	26.7%	26.7%	26.7%	26.0%	73.3%	47.3%	47.3%
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.5	6.0	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min
Act Effect Green (s)	18.0	18.0	18.0	18.8	58.7	35.4	35.4
Actuated g/C Ratio	0.20	0.20	0.20	0.21	0.66	0.40	0.40
v/c Ratio	1.06	0.94	0.89	0.92	0.54	0.64	0.50
Control Delay	103.1	61.7	52.2	54.8	9.0	22.8	3.9
Queue Delay	0.0	0.0	0.0	0.0	1.4	0.0	0.0
Total Delay	103.1	61.7	52.2	54.8	10.4	22.8	3.9
LOS	F	E	D	D	B	C	A
Approach Delay		73.1			25.7	18.7	
Approach LOS		E			C	B	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 88.7
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.06
 Intersection Signal Delay: 32.6
 Intersection LOS: C
 Intersection Capacity Utilization 72.1%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 3: Redlands Av & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 3: Redlands Av & I-215 NB Ramps

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↔	↗	↖↗	↕			↑↑↑	↗
Traffic Volume (veh/h)	0	0	0	394	3	532	595	1135	0	0	1448	403
Future Volume (veh/h)	0	0	0	394	3	532	595	1135	0	0	1448	403
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				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				579	0	290	669	1275	0	0	1627	362
Peak Hour Factor				0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				740	0	329	750	2301	0	0	2421	596
Arrive On Green				0.21	0.00	0.21	0.22	0.65	0.00	0.00	0.38	0.38
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	6696	1585
Grp Volume(v), veh/h				579	0	290	669	1275	0	0	1627	362
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1609	1585
Q Serve(g_s), s				12.8	0.0	14.7	15.6	16.4	0.0	0.0	17.5	15.3
Cycle Q Clear(g_c), s				12.8	0.0	14.7	15.6	16.4	0.0	0.0	17.5	15.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				740	0	329	750	2301	0	0	2421	596
V/C Ratio(X)				0.78	0.00	0.88	0.89	0.55	0.00	0.00	0.67	0.61
Avail Cap(c_a), veh/h				773	0	344	787	2571	0	0	2839	699
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				31.1	0.0	31.9	31.5	8.0	0.0	0.0	21.6	20.9
Incr Delay (d2), s/veh				5.0	0.0	21.7	12.1	0.2	0.0	0.0	0.5	1.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.6	0.0	7.2	7.5	5.1	0.0	0.0	6.2	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				36.1	0.0	53.6	43.6	8.2	0.0	0.0	22.1	22.0
LnGrp LOS				D	A	D	D	A	A	A	C	C
Approach Vol, veh/h					869			1944			1989	
Approach Delay, s/veh					41.9			20.4			22.1	
Approach LOS					D			C			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		59.7			22.5	37.2		23.2				
Change Period (Y+Rc), s		6.0			4.5	6.0		6.0				
Max Green Setting (Gmax), s		60.0			18.9	36.6		18.0				
Max Q Clear Time (g_c+I1), s		18.4			17.6	19.5		16.7				
Green Ext Time (p_c), s		12.5			0.4	11.7		0.5				

Intersection Summary

HCM 6th Ctrl Delay	25.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Timings
4: Redlands Av & I-215 SB Ramps

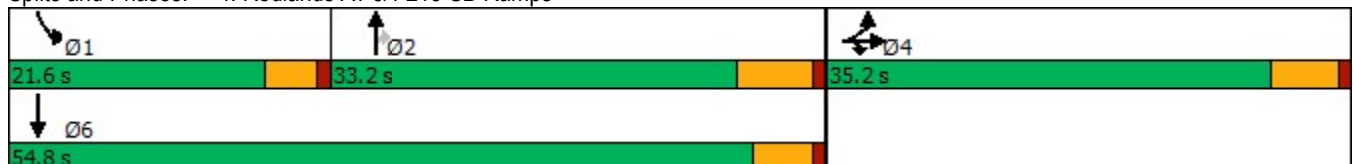


Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	317	0	209	1515	324	689	1165
Future Volume (vph)	317	0	209	1515	324	689	1165
Turn Type	Split	NA	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	4	2		1	6
Permitted Phases					2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.3	23.3	23.3	23.7	23.7	9.6	32.0
Total Split (s)	35.2	35.2	35.2	33.2	33.2	21.6	54.8
Total Split (%)	39.1%	39.1%	39.1%	36.9%	36.9%	24.0%	60.9%
Yellow Time (s)	4.5	4.5	4.5	5.0	5.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	6.0	6.0	4.5	5.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	Min
Act Effct Green (s)	14.6	14.6	14.6	27.3	27.3	17.2	50.0
Actuated g/C Ratio	0.19	0.19	0.19	0.36	0.36	0.23	0.67
v/c Ratio	0.61	0.52	0.50	0.72	0.29	0.97	0.54
Control Delay	35.5	19.6	18.6	23.3	3.0	56.4	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Total Delay	35.5	19.6	18.6	23.3	3.0	56.4	9.2
LOS	D	B	B	C	A	E	A
Approach Delay		24.7		19.7			26.8
Approach LOS		C		B			C

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 75.1
 Natural Cycle: 75
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.97
 Intersection Signal Delay: 23.5
 Intersection LOS: C
 Intersection Capacity Utilization 72.1%
 ICU Level of Service C
 Analysis Period (min) 15





















Splits and Phases: 4: Redlands Av & I-215 SB Ramps



HCM 6th Signalized Intersection Summary
 4: Redlands Av & I-215 SB Ramps

Prairie View Apartments (JN 13747)

08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	317	0	209	0	0	0	0	1515	324	689	1165	0
Future Volume (veh/h)	317	0	209	0	0	0	0	1515	324	689	1165	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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	392	0	94				0	1665	307	757	1280	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	558	0	248				0	2346	1017	845	2399	0
Arrive On Green	0.16	0.00	0.16				0.00	0.36	0.36	0.24	0.68	0.00
Sat Flow, veh/h	3563	0	1585				0	6696	2790	3456	3647	0
Grp Volume(v), veh/h	392	0	94				0	1665	307	757	1280	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1609	1395	1728	1777	0
Q Serve(g_s), s	7.1	0.0	3.6				0.0	15.2	5.4	14.5	12.5	0.0
Cycle Q Clear(g_c), s	7.1	0.0	3.6				0.0	15.2	5.4	14.5	12.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	558	0	248				0	2346	1017	845	2399	0
V/C Ratio(X)	0.70	0.00	0.38				0.00	0.71	0.30	0.90	0.53	0.00
Avail Cap(c_a), veh/h	1548	0	689				0	2560	1110	864	2589	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.3	0.0	25.8				0.0	18.6	15.5	25.0	5.6	0.0
Incr Delay (d2), s/veh	1.6	0.0	1.0				0.0	0.8	0.2	11.8	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	2.9	0.0	1.3				0.0	5.2	1.6	6.8	3.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	0.0	26.8				0.0	19.5	15.7	36.8	5.8	0.0
LnGrp LOS	C	A	C				A	B	B	D	A	A
Approach Vol, veh/h		486						1972			2037	
Approach Delay, s/veh		28.5						18.9			17.3	
Approach LOS		C						B			B	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	21.2	30.9	16.2	52.1								
Change Period (Y+Rc), s	4.5	6.0	5.5	* 6								
Max Green Setting (Gmax), s	17.1	27.2	29.7	* 50								
Max Q Clear Time (g_c+I1), s	16.5	17.2	9.1	14.5								
Green Ext Time (p_c), s	0.2	7.8	1.6	12.0								

Intersection Summary

HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	28	29	108	71	19
Future Vol, veh/h	32	28	29	108	71	19
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	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	32	33	123	81	22

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	281	92	103	0	0
Stage 1	92	-	-	-	-
Stage 2	189	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	709	965	1489	-	-
Stage 1	932	-	-	-	-
Stage 2	843	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	693	965	1489	-	-
Mov Cap-2 Maneuver	714	-	-	-	-
Stage 1	911	-	-	-	-
Stage 2	843	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.8	1.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1489	-	813	-	-
HCM Lane V/C Ratio	0.022	-	0.084	-	-
HCM Control Delay (s)	7.5	-	9.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection						
Int Delay, s/veh	24.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	99	913	1241	13	13	154
Future Vol, veh/h	99	913	1241	13	13	154
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	210	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	119	1100	1495	16	16	186

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1511	0	-	0	2833 1495
Stage 1	-	-	-	-	1495 -
Stage 2	-	-	-	-	1338 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	443	-	-	-	19 ~ 151
Stage 1	-	-	-	-	205 -
Stage 2	-	-	-	-	245 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	443	-	-	-	~ 6 ~ 151
Mov Cap-2 Maneuver	-	-	-	-	47 -
Stage 1	-	-	-	-	63 -
Stage 2	-	-	-	-	245 -

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	\$ 347.1
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	443	-	-	-	129
HCM Lane V/C Ratio	0.269	-	-	-	1.56
HCM Control Delay (s)	16.1	0	-	-	\$ 347.1
HCM Lane LOS	C	A	-	-	F
HCM 95th %tile Q(veh)	1.1	-	-	-	14.3

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	223.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗		↕			↕			↕	
Traffic Vol, veh/h	231	736	0	0	981	63	0	0	0	84	0	339
Future Vol, veh/h	231	736	0	0	981	63	0	0	0	84	0	339
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	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	272	866	0	0	1154	74	0	0	0	99	0	399

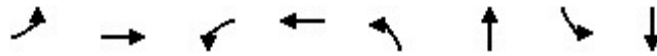
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1228	0	0	866	0	0	2801	2638	866	2601	2601	1191
Stage 1	-	-	-	-	-	-	1410	1410	-	1191	1191	-
Stage 2	-	-	-	-	-	-	1391	1228	-	1410	1410	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	568	-	-	777	-	-	12	23	353	~ 16	25	~ 228
Stage 1	-	-	-	-	-	-	172	205	-	229	261	-
Stage 2	-	-	-	-	-	-	176	250	-	172	205	-
Platoon blocked, %		-	-	-	-	-						
Mov Cap-1 Maneuver	568	-	-	777	-	-	12	353	~ 10	13	~ 228	
Mov Cap-2 Maneuver	-	-	-	-	-	-	12	-	~ 51	74	-	
Stage 1	-	-	-	-	-	-	90	107	-	119	261	-
Stage 2	-	-	-	-	-	-	-	250	-	~ 90	107	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.1	0	0	\$ 1276
HCM LOS			A	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	568	-	-	777	-	-	135
HCM Lane V/C Ratio	-	0.478	-	-	-	-	-	3.686
HCM Control Delay (s)		0	17	-	-	0	-	-\$ 1276
HCM Lane LOS		A	C	-	-	A	-	F
HCM 95th %tile Q(veh)		-	2.6	-	-	0	-	49.1

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Timings
1: Redlands Av & Dale St

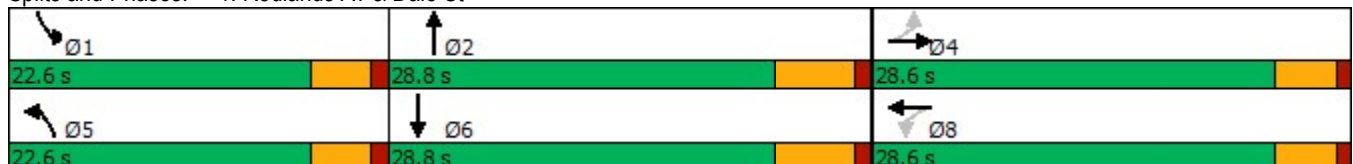


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↗	↕	↗	↕
Traffic Volume (vph)	7	4	22	5	45	683	60	641
Future Volume (vph)	7	4	22	5	45	683	60	641
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	28.6	28.6	28.6	28.6	22.6	28.6	22.6	24.8
Total Split (s)	28.6	28.6	28.6	28.6	22.6	28.8	22.6	28.8
Total Split (%)	35.8%	35.8%	35.8%	35.8%	28.3%	36.0%	28.3%	36.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		9.0		9.0	6.5	27.6	6.9	30.0
Actuated g/C Ratio		0.20		0.20	0.15	0.62	0.15	0.67
v/c Ratio		0.11		0.21	0.19	0.37	0.24	0.33
Control Delay		10.9		11.4	24.5	11.9	24.1	9.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		10.9		11.4	24.5	11.9	24.1	9.9
LOS		B		B	C	B	C	A
Approach Delay		10.9		11.4		12.6		11.0
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 44.7
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.37
 Intersection Signal Delay: 11.8
 Intersection Capacity Utilization 43.4%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service A

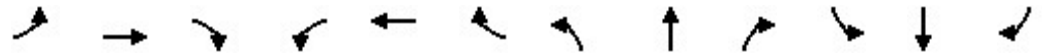
Splits and Phases: 1: Redlands Av & Dale St



HCM 6th Signalized Intersection Summary
 1: Redlands Av & Dale St

Prairie View Apartments (JN 13747)

08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Volume (veh/h)	7	4	22	22	5	37	45	683	54	60	641	80
Future Volume (veh/h)	7	4	22	22	5	37	45	683	54	60	641	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	4	24	24	5	40	49	742	59	65	697	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	24	104	200	14	87	98	1230	98	122	1215	152
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.06	0.37	0.37	0.07	0.38	0.38
Sat Flow, veh/h	294	253	1095	512	152	916	1781	3334	265	1781	3179	397
Grp Volume(v), veh/h	36	0	0	69	0	0	49	395	406	65	389	395
Grp Sat Flow(s),veh/h/ln	1643	0	0	1580	0	0	1781	1777	1823	1781	1777	1799
Q Serve(g_s), s	0.0	0.0	0.0	0.6	0.0	0.0	0.9	5.8	5.8	1.1	5.6	5.6
Cycle Q Clear(g_c), s	0.6	0.0	0.0	1.3	0.0	0.0	0.9	5.8	5.8	1.1	5.6	5.6
Prop In Lane	0.22		0.67	0.35		0.58	1.00		0.15	1.00		0.22
Lane Grp Cap(c), veh/h	293	0	0	301	0	0	98	655	672	122	679	688
V/C Ratio(X)	0.12	0.00	0.00	0.23	0.00	0.00	0.50	0.60	0.60	0.53	0.57	0.57
Avail Cap(c_a), veh/h	1309	0	0	1298	0	0	1000	1275	1308	1000	1275	1291
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	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.4	0.0	0.0	13.7	0.0	0.0	14.7	8.2	8.2	14.4	7.8	7.8
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.0	1.5	0.9	0.9	1.3	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.4	0.0	0.0	0.3	1.2	1.2	0.4	1.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	0.0	14.1	0.0	0.0	16.2	9.1	9.1	15.8	8.6	8.6
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		36			69			850			849	
Approach Delay, s/veh		13.6			14.1			9.5			9.1	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	17.6		7.6	6.4	18.1		7.6				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	18.0	23.0		24.0	18.0	23.0		24.0				
Max Q Clear Time (g_c+I1), s	3.1	7.8		2.6	2.9	7.6		3.3				
Green Ext Time (p_c), s	0.0	4.0		0.1	0.0	4.0		0.3				

Intersection Summary

HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

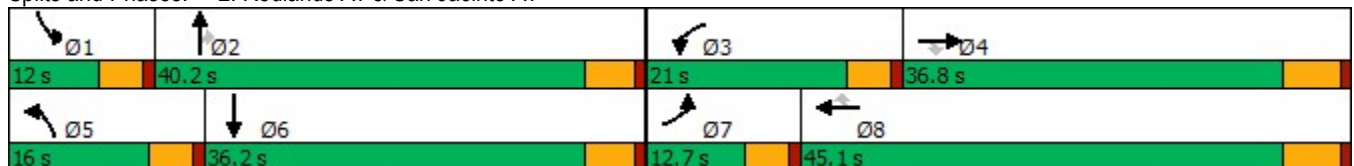
Timings
2: Redlands Av & San Jacinto Av

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	175	182	243	1037	197	113	284	591	1311	181	545
Future Volume (vph)	175	182	243	1037	197	113	284	591	1311	181	545
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	36.8	36.8	9.6	30.8	30.8	9.6	32.1	32.1	9.6	32.1
Total Split (s)	12.7	36.8	36.8	21.0	45.1	45.1	16.0	40.2	40.2	12.0	36.2
Total Split (%)	11.5%	33.5%	33.5%	19.1%	41.0%	41.0%	14.5%	36.5%	36.5%	10.9%	32.9%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.1	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.1	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	8.1	16.6	16.6	16.5	25.0	25.0	11.5	35.3	35.3	7.4	31.3
Actuated g/C Ratio	0.08	0.17	0.17	0.17	0.26	0.26	0.12	0.37	0.37	0.08	0.33
v/c Ratio	0.63	0.59	0.57	1.83	0.42	0.24	1.40	0.47	1.48	1.38	0.61
Control Delay	54.6	43.7	13.5	408.6	31.8	6.1	241.9	25.8	239.4	246.5	30.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.6	43.7	13.5	408.6	31.8	6.1	241.9	25.8	239.4	246.5	30.1
LOS	D	D	B	F	C	A	F	C	F	F	C
Approach Delay		34.6			319.7			182.0			76.5
Approach LOS		C			F			F			E

Intersection Summary

Cycle Length: 110	
Actuated Cycle Length: 96	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.83	
Intersection Signal Delay: 183.5	Intersection LOS: F
Intersection Capacity Utilization 113.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↑↗	
Traffic Volume (veh/h)	175	182	243	1037	197	113	284	591	1311	181	545	120
Future Volume (veh/h)	175	182	243	1037	197	113	284	591	1311	181	545	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	182	190	160	1080	205	93	296	616	1202	189	568	118
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	256	217	619	454	384	222	1362	608	144	995	206
Arrive On Green	0.07	0.14	0.14	0.18	0.24	0.24	0.12	0.38	0.38	0.08	0.34	0.34
Sat Flow, veh/h	3456	1870	1585	3456	1870	1583	1781	3554	1585	1781	2930	607
Grp Volume(v), veh/h	182	190	160	1080	205	93	296	616	1202	189	344	342
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1583	1781	1777	1585	1781	1777	1760
Q Serve(g_s), s	4.7	8.9	8.9	16.4	8.5	4.3	11.4	11.8	35.1	7.4	14.5	14.6
Cycle Q Clear(g_c), s	4.7	8.9	8.9	16.4	8.5	4.3	11.4	11.8	35.1	7.4	14.5	14.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	254	256	217	619	454	384	222	1362	608	144	604	598
V/C Ratio(X)	0.72	0.74	0.74	1.74	0.45	0.24	1.33	0.45	1.98	1.31	0.57	0.57
Avail Cap(c_a), veh/h	306	633	537	619	803	680	222	1362	608	144	604	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	37.9	37.9	37.6	29.5	27.9	40.1	21.1	28.2	42.1	24.7	24.8
Incr Delay (d2), s/veh	6.3	4.2	4.8	341.8	0.7	0.3	177.9	0.2	446.0	181.4	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.2	3.6	35.9	3.7	1.6	15.8	4.7	87.2	10.4	5.8	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.7	42.1	42.7	379.4	30.2	28.2	218.0	21.3	474.2	223.5	26.0	26.1
LnGrp LOS	D	D	D	F	C	C	F	C	F	F	C	C
Approach Vol, veh/h		532			1378			2114				875
Approach Delay, s/veh		44.2			303.7			306.4				68.7
Approach LOS		D			F			F				E
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	40.2	21.0	18.4	16.0	36.2	11.3	28.0				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	7.4	35.1	16.4	31.0	11.4	31.1	8.1	39.3				
Max Q Clear Time (g_c+I1), s	9.4	37.1	18.4	10.9	13.4	16.6	6.7	10.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.4	0.0	3.3	0.1	1.3				
Intersection Summary												
HCM 6th Ctrl Delay	234.7											
HCM 6th LOS	F											

Timings
3: Redlands Av & I-215 NB Ramps

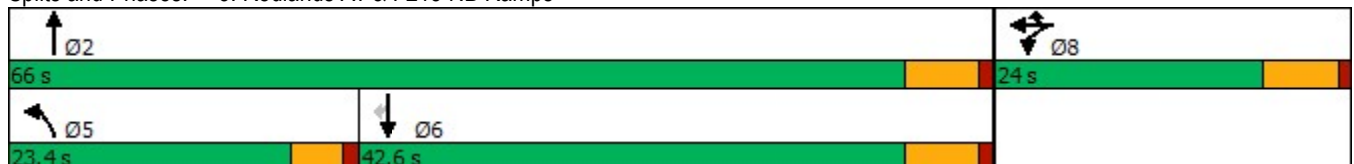


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	397	7	820	268	1302	1433	370
Future Volume (vph)	397	7	820	268	1302	1433	370
Turn Type	Split	NA	Prot	Prot	NA	NA	Perm
Protected Phases	8	8	8	5	2	6	
Permitted Phases							6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	9.5	11.0	31.0	31.0
Total Split (s)	24.0	24.0	24.0	23.4	66.0	42.6	42.6
Total Split (%)	26.7%	26.7%	26.7%	26.0%	73.3%	47.3%	47.3%
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.5	6.0	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min
Act Effct Green (s)	18.2	18.2	18.2	11.7	48.9	32.7	32.7
Actuated g/C Ratio	0.23	0.23	0.23	0.15	0.62	0.41	0.41
v/c Ratio	0.96	1.14	1.08	0.55	0.61	0.56	0.43
Control Delay	70.5	115.0	94.9	36.3	10.5	18.7	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	70.5	115.0	94.9	36.3	10.9	18.7	3.5
LOS	E	F	F	D	B	B	A
Approach Delay		94.9			15.2	15.6	
Approach LOS		F			B	B	

Intersection Summary

Cycle Length: 90	
Actuated Cycle Length: 79.2	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.14	
Intersection Signal Delay: 36.6	Intersection LOS: D
Intersection Capacity Utilization 79.8%	ICU Level of Service D
Analysis Period (min) 15	

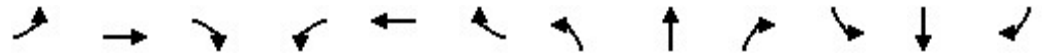
Splits and Phases: 3: Redlands Av & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 3: Redlands Av & I-215 NB Ramps

Prairie View Apartments (JN 13747)

08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↰	↰↰	↰	↰↰	↰↰			↑↑↑↑	↰
Traffic Volume (veh/h)	0	0	0	397	7	820	268	1302	0	0	1433	370
Future Volume (veh/h)	0	0	0	397	7	820	268	1302	0	0	1433	370
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				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				275	0	842	276	1342	0	0	1477	297
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				461	0	820	398	2022	0	0	2505	617
Arrive On Green				0.26	0.00	0.26	0.12	0.57	0.00	0.00	0.39	0.39
Sat Flow, veh/h				1781	0	3170	3456	3647	0	0	6696	1585
Grp Volume(v), veh/h				275	0	842	276	1342	0	0	1477	297
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1609	1585
Q Serve(g_s), s				9.4	0.0	18.0	5.3	18.2	0.0	0.0	12.7	9.8
Cycle Q Clear(g_c), s				9.4	0.0	18.0	5.3	18.2	0.0	0.0	12.7	9.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				461	0	820	398	2022	0	0	2505	617
V/C Ratio(X)				0.60	0.00	1.03	0.69	0.66	0.00	0.00	0.59	0.48
Avail Cap(c_a), veh/h				461	0	820	938	3062	0	0	3382	833
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				22.6	0.0	25.8	29.6	10.4	0.0	0.0	16.9	16.0
Incr Delay (d2), s/veh				2.1	0.0	38.6	2.2	0.4	0.0	0.0	0.2	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.8	0.0	10.3	2.2	5.7	0.0	0.0	4.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				24.7	0.0	64.4	31.8	10.8	0.0	0.0	17.1	16.6
LnGrp LOS				C	A	F	C	B	A	A	B	B
Approach Vol, veh/h					1117			1618			1774	
Approach Delay, s/veh					54.7			14.4			17.0	
Approach LOS					D			B			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		45.6			12.5	33.1		24.0				
Change Period (Y+Rc), s		6.0			4.5	6.0		6.0				
Max Green Setting (Gmax), s		60.0			18.9	36.6		18.0				
Max Q Clear Time (g_c+I1), s		20.2			7.3	14.7		20.0				
Green Ext Time (p_c), s		13.4			0.7	12.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Timings
4: Redlands Av & I-215 SB Ramps

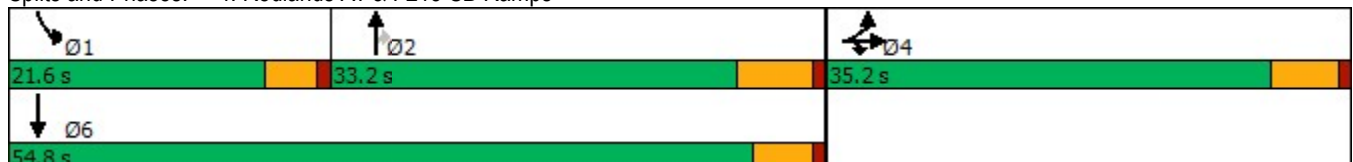


Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	421	3	439	1204	507	696	1261
Future Volume (vph)	421	3	439	1204	507	696	1261
Turn Type	Split	NA	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	4	2		1	6
Permitted Phases					2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.3	23.3	23.3	23.7	23.7	9.6	32.0
Total Split (s)	35.2	35.2	35.2	33.2	33.2	21.6	54.8
Total Split (%)	39.1%	39.1%	39.1%	36.9%	36.9%	24.0%	60.9%
Yellow Time (s)	4.5	4.5	4.5	5.0	5.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	6.0	6.0	4.5	5.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	Min
Act Effct Green (s)	20.6	20.6	20.6	25.5	25.5	17.3	48.5
Actuated g/C Ratio	0.26	0.26	0.26	0.32	0.32	0.22	0.61
v/c Ratio	0.70	0.68	0.61	0.59	0.41	0.94	0.59
Control Delay	35.7	30.3	23.2	24.7	3.4	55.5	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Total Delay	35.7	30.3	23.2	24.7	3.4	55.5	13.0
LOS	D	C	C	C	A	E	B
Approach Delay		29.9		18.4			28.1
Approach LOS		C		B			C

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 79.7
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 24.8
 Intersection LOS: C
 Intersection Capacity Utilization 79.8%
 ICU Level of Service D
 Analysis Period (min) 15





















Splits and Phases: 4: Redlands Av & I-215 SB Ramps



HCM 6th Signalized Intersection Summary
 4: Redlands Av & I-215 SB Ramps

Prairie View Apartments (JN 13747)

08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	421	3	439	0	0	0	0	1204	507	696	1261	0
Future Volume (veh/h)	421	3	439	0	0	0	0	1204	507	696	1261	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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	539	0	242				0	1216	467	703	1274	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	750	0	334				0	2046	887	810	2199	0
Arrive On Green	0.21	0.00	0.21				0.00	0.32	0.32	0.23	0.62	0.00
Sat Flow, veh/h	3563	0	1585				0	6696	2790	3456	3647	0
Grp Volume(v), veh/h	539	0	242				0	1216	467	703	1274	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1609	1395	1728	1777	0
Q Serve(g_s), s	9.5	0.0	9.6				0.0	10.7	9.3	13.2	14.4	0.0
Cycle Q Clear(g_c), s	9.5	0.0	9.6				0.0	10.7	9.3	13.2	14.4	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	750	0	334				0	2046	887	810	2199	0
V/C Ratio(X)	0.72	0.00	0.72				0.00	0.59	0.53	0.87	0.58	0.00
Avail Cap(c_a), veh/h	1568	0	698				0	2594	1125	876	2623	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.8	0.0	24.8				0.0	19.4	18.8	24.8	7.6	0.0
Incr Delay (d2), s/veh	1.3	0.0	3.0				0.0	0.3	0.5	8.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	3.5				0.0	3.7	2.8	6.0	4.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.1	0.0	27.8				0.0	19.6	19.3	33.6	7.9	0.0
LnGrp LOS	C	A	C				A	B	B	C	A	A
Approach Vol, veh/h		781						1683			1977	
Approach Delay, s/veh		26.6						19.5			17.0	
Approach LOS		C						B			B	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	20.3	27.4	19.7	47.8								
Change Period (Y+Rc), s	4.5	6.0	5.5	* 6								
Max Green Setting (Gmax), s	17.1	27.2	29.7	* 50								
Max Q Clear Time (g_c+I1), s	15.2	12.7	11.6	16.4								
Green Ext Time (p_c), s	0.6	8.7	2.6	11.7								

Intersection Summary

HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	4.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	51	28	29	112	71	18
Future Vol, veh/h	51	28	29	112	71	18
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	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	38	38	38	38
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	134	74	76	295	187	47

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	658	211	234	0	0
Stage 1	211	-	-	-	-
Stage 2	447	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	429	829	1333	-	-
Stage 1	824	-	-	-	-
Stage 2	644	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	405	829	1333	-	-
Mov Cap-2 Maneuver	503	-	-	-	-
Stage 1	777	-	-	-	-
Stage 2	644	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.5	1.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1333	-	584	-	-
HCM Lane V/C Ratio	0.057	-	0.356	-	-
HCM Control Delay (s)	7.9	-	14.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.6	-	-

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	140	1204	1176	11	16	105
Future Vol, veh/h	140	1204	1176	11	16	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	210	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	154	1323	1292	12	18	115

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1304	0	-	0	2923 1292
Stage 1	-	-	-	-	1292 -
Stage 2	-	-	-	-	1631 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	531	-	-	-	~ 17 199
Stage 1	-	-	-	-	258 -
Stage 2	-	-	-	-	176 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	531	-	-	-	0 199
Mov Cap-2 Maneuver	-	-	-	-	0 -
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	176 -

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	53.4
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	531	-	-	-	199
HCM Lane V/C Ratio	0.29	-	-	-	0.668
HCM Control Delay (s)	14.5	0	-	-	53.4
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	1.2	-	-	-	4.1

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	45.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↖		↕			↕			↕	
Traffic Vol, veh/h	323	956	0	0	710	60	0	0	0	43	0	209
Future Vol, veh/h	323	956	0	0	710	60	0	0	0	43	0	209
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	-	0	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	359	1062	0	0	789	67	0	0	0	48	0	232

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	856	0	0	1062	0	0	2719	2636	1062	2603	2603	823
Stage 1	-	-	-	-	-	-	1780	1780	-	823	823	-
Stage 2	-	-	-	-	-	-	939	856	-	1780	1780	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	784	-	-	656	-	-	14	24	272	~16	25	373
Stage 1	-	-	-	-	-	-	105	135	-	368	388	-
Stage 2	-	-	-	-	-	-	317	374	-	105	135	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	784	-	-	656	-	-	3	13	272	~10	14	373
Mov Cap-2 Maneuver	-	-	-	-	-	-	3	13	-	~43	59	-
Stage 1	-	-	-	-	-	-	57	73	-	199	388	-
Stage 2	-	-	-	-	-	-	120	374	-	57	73	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.4	0	0	\$ 401.2
HCM LOS			A	F

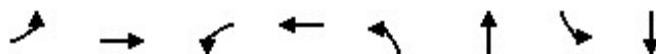
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	784	-	-	656	-	-	162
HCM Lane V/C Ratio	-	0.458	-	-	-	-	-	1.728
HCM Control Delay (s)	0	13.4	-	-	0	-	-	\$ 401.2
HCM Lane LOS	A	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	2.4	-	-	0	-	-	20

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

**APPENDIX 7.2: HORIZON YEAR (2045) WITH PROJECT CONDITIONS
INTERSECTION OPERATIONS ANALYSIS WORKSHEETS**

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Timings
1: Redlands Av & Dale St

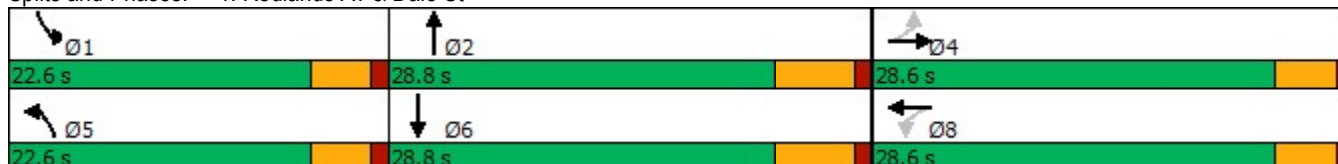


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↙	↕	↙	↕
Traffic Volume (vph)	106	9	81	27	91	499	36	646
Future Volume (vph)	106	9	81	27	91	499	36	646
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	28.6	28.6	28.6	28.6	22.6	28.6	22.6	24.8
Total Split (s)	28.6	28.6	28.6	28.6	22.6	28.8	22.6	28.8
Total Split (%)	35.8%	35.8%	35.8%	35.8%	28.3%	36.0%	28.3%	36.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		15.9		15.9	8.5	28.1	6.4	24.0
Actuated g/C Ratio		0.26		0.26	0.14	0.46	0.10	0.39
v/c Ratio		0.74		0.63	0.46	0.41	0.24	0.77
Control Delay		30.1		25.1	33.2	14.5	32.1	24.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		30.1		25.1	33.2	14.5	32.1	24.0
LOS		C		C	C	B	C	C
Approach Delay		30.1		25.1		17.3		24.3
Approach LOS		C		C		B		C

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 61.2
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 22.7
 Intersection LOS: C
 Intersection Capacity Utilization 58.4%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1: Redlands Av & Dale St



HCM 6th Signalized Intersection Summary
 1: Redlands Av & Dale St

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Volume (veh/h)	106	9	105	81	27	74	91	499	28	36	646	195
Future Volume (veh/h)	106	9	105	81	27	74	91	499	28	36	646	195
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	11	131	101	34	92	114	624	35	45	808	244
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	260	34	170	236	83	145	148	1439	81	83	1033	312
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.08	0.42	0.42	0.05	0.38	0.38
Sat Flow, veh/h	667	153	750	574	369	643	1781	3421	192	1781	2689	812
Grp Volume(v), veh/h	274	0	0	227	0	0	114	324	335	45	534	518
Grp Sat Flow(s),veh/h/ln	1569	0	0	1586	0	0	1781	1777	1836	1781	1777	1724
Q Serve(g_s), s	1.6	0.0	0.0	0.0	0.0	0.0	3.1	6.3	6.3	1.2	12.9	12.9
Cycle Q Clear(g_c), s	7.6	0.0	0.0	6.0	0.0	0.0	3.1	6.3	6.3	1.2	12.9	12.9
Prop In Lane	0.48		0.48	0.44		0.41	1.00		0.10	1.00		0.47
Lane Grp Cap(c), veh/h	464	0	0	465	0	0	148	747	772	83	683	662
V/C Ratio(X)	0.59	0.00	0.00	0.49	0.00	0.00	0.77	0.43	0.43	0.54	0.78	0.78
Avail Cap(c_a), veh/h	840	0	0	847	0	0	655	835	863	655	835	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	0.0	0.0	16.9	0.0	0.0	22.0	10.0	10.0	22.8	13.3	13.3
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.8	0.0	0.0	3.2	0.4	0.4	2.0	3.9	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	2.1	0.0	0.0	1.2	1.8	1.8	0.5	4.4	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.7	0.0	0.0	17.7	0.0	0.0	25.1	10.4	10.4	24.8	17.2	17.3
LnGrp LOS	B	A	A	B	A	A	C	B	B	C	B	B
Approach Vol, veh/h		274			227			773			1097	
Approach Delay, s/veh		18.7			17.7			12.6			17.6	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	26.4		15.7	8.7	24.6		15.7				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	18.0	23.0		24.0	18.0	23.0		24.0				
Max Q Clear Time (g_c+I1), s	3.2	8.3		9.6	5.1	14.9		8.0				
Green Ext Time (p_c), s	0.0	3.1		1.5	0.1	3.8		1.2				

Intersection Summary												
HCM 6th Ctrl Delay				16.1								
HCM 6th LOS				B								

Timings
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

08/17/2022

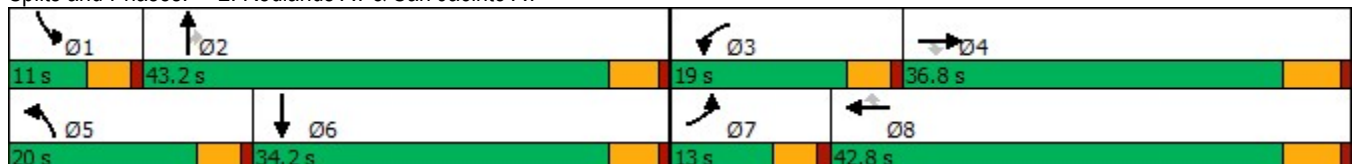


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↖↗
Traffic Volume (vph)	254	109	270	1146	350	119	210	462	1024	140	575
Future Volume (vph)	254	109	270	1146	350	119	210	462	1024	140	575
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	36.8	36.8	9.6	30.8	30.8	9.6	32.1	32.1	9.6	32.1
Total Split (s)	13.0	36.8	36.8	19.0	42.8	42.8	20.0	43.2	43.2	11.0	34.2
Total Split (%)	11.8%	33.5%	33.5%	17.3%	38.9%	38.9%	18.2%	39.3%	39.3%	10.0%	31.1%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.1	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.1	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	8.4	20.3	20.3	14.5	26.4	26.4	15.5	38.3	38.3	6.4	29.2
Actuated g/C Ratio	0.08	0.20	0.20	0.15	0.26	0.26	0.16	0.38	0.38	0.06	0.29
v/c Ratio	1.00	0.33	0.58	2.61	0.81	0.26	0.87	0.39	1.16	1.41	0.86
Control Delay	99.6	35.3	11.5	753.6	47.5	4.0	73.4	24.4	100.6	262.2	42.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	99.6	35.3	11.5	753.6	47.5	4.0	73.4	24.4	100.6	262.2	42.7
LOS	F	D	B	F	D	A	E	C	F	F	D
Approach Delay		51.0			545.3			76.4			76.3
Approach LOS		D			F			E			E

Intersection Summary

Cycle Length: 110	
Actuated Cycle Length: 99.7	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 2.61	
Intersection Signal Delay: 228.9	Intersection LOS: F
Intersection Capacity Utilization 92.4%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
 2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑	↔	↔↔	↑	↔	↔	↑↑	↔	↔	↑↔	
Traffic Volume (veh/h)	254	109	270	1146	350	119	210	462	1024	140	575	200
Future Volume (veh/h)	254	109	270	1146	350	119	210	462	1024	140	575	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	289	124	206	1302	398	108	239	525	986	159	653	219
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	347	294	513	462	391	271	1396	623	118	801	268
Arrive On Green	0.09	0.19	0.19	0.15	0.25	0.25	0.15	0.39	0.39	0.07	0.31	0.31
Sat Flow, veh/h	3456	1870	1585	3456	1870	1583	1781	3554	1585	1781	2612	876
Grp Volume(v), veh/h	289	124	206	1302	398	108	239	525	986	159	444	428
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1583	1781	1777	1585	1781	1777	1711
Q Serve(g_s), s	8.1	5.6	11.8	14.4	19.7	5.3	12.7	10.2	38.1	6.4	22.4	22.4
Cycle Q Clear(g_c), s	8.1	5.6	11.8	14.4	19.7	5.3	12.7	10.2	38.1	6.4	22.4	22.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	299	347	294	513	462	391	271	1396	623	118	545	525
V/C Ratio(X)	0.97	0.36	0.70	2.54	0.86	0.28	0.88	0.38	1.58	1.35	0.81	0.82
Avail Cap(c_a), veh/h	299	598	507	513	714	604	283	1396	623	118	545	525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	34.5	37.0	41.3	34.9	29.5	40.2	21.0	29.4	45.3	31.1	31.1
Incr Delay (d2), s/veh	42.5	0.6	3.0	697.4	6.7	0.4	25.3	0.2	270.1	204.2	9.3	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	2.5	4.6	55.5	9.3	2.0	7.4	4.1	59.8	9.4	10.3	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	86.7	35.1	40.0	738.7	41.6	29.9	65.5	21.1	299.5	249.5	40.4	40.7
LnGrp LOS	F	D	D	F	D	C	E	C	F	F	D	D
Approach Vol, veh/h		619			1808			1750			1031	
Approach Delay, s/veh		60.8			542.9			184.0			72.8	
Approach LOS		E			F			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	43.2	19.0	23.8	19.4	34.8	13.0	29.8				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	6.4	38.1	14.4	31.0	15.4	29.1	8.4	37.0				
Max Q Clear Time (g_c+I1), s	8.4	40.1	16.4	13.8	14.7	24.4	10.1	21.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.1	0.0	2.1	0.0	2.2				

Intersection Summary												
HCM 6th Ctrl Delay	272.0											
HCM 6th LOS	F											

Timings
3: Redlands Av & I-215 NB Ramps

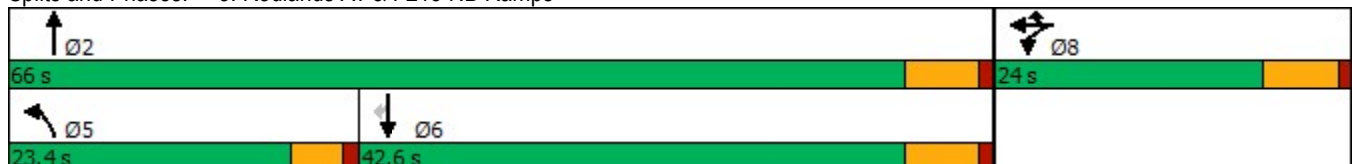


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	394	3	539	595	1143	1483	416
Future Volume (vph)	394	3	539	595	1143	1483	416
Turn Type	Split	NA	Prot	Prot	NA	NA	Perm
Protected Phases	8	8	8	5	2	6	
Permitted Phases							6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	9.5	11.0	31.0	31.0
Total Split (s)	24.0	24.0	24.0	23.4	66.0	42.6	42.6
Total Split (%)	26.7%	26.7%	26.7%	26.0%	73.3%	47.3%	47.3%
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.5	6.0	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min
Act Effct Green (s)	18.0	18.0	18.0	18.8	59.0	35.7	35.7
Actuated g/C Ratio	0.20	0.20	0.20	0.21	0.66	0.40	0.40
v/c Ratio	1.08	0.94	0.90	0.92	0.55	0.65	0.51
Control Delay	109.1	63.2	54.4	55.1	9.0	23.0	4.0
Queue Delay	0.0	0.0	0.0	0.0	1.5	0.0	0.0
Total Delay	109.1	63.2	54.4	55.1	10.5	23.0	4.0
LOS	F	E	D	E	B	C	A
Approach Delay		76.4			25.8	18.8	
Approach LOS		E			C	B	

Intersection Summary

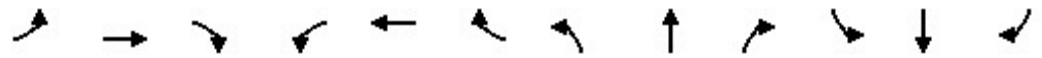
Cycle Length: 90	
Actuated Cycle Length: 89	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 33.3	Intersection LOS: C
Intersection Capacity Utilization 73.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 3: Redlands Av & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 3: Redlands Av & I-215 NB Ramps

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↔	↗	↖↗	↕			↑↑↑	↗
Traffic Volume (veh/h)	0	0	0	394	3	539	595	1143	0	0	1483	416
Future Volume (veh/h)	0	0	0	394	3	539	595	1143	0	0	1483	416
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				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				581	0	295	669	1284	0	0	1666	376
Peak Hour Factor				0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				743	0	331	747	2304	0	0	2437	600
Arrive On Green				0.21	0.00	0.21	0.22	0.65	0.00	0.00	0.38	0.38
Sat Flow, veh/h				3563	0	1585	3456	3647	0	0	6696	1585
Grp Volume(v), veh/h				581	0	295	669	1284	0	0	1666	376
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1609	1585
Q Serve(g_s), s				13.0	0.0	15.2	15.8	16.7	0.0	0.0	18.2	16.2
Cycle Q Clear(g_c), s				13.0	0.0	15.2	15.8	16.7	0.0	0.0	18.2	16.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				743	0	331	747	2304	0	0	2437	600
V/C Ratio(X)				0.78	0.00	0.89	0.90	0.56	0.00	0.00	0.68	0.63
Avail Cap(c_a), veh/h				763	0	340	778	2538	0	0	2803	691
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				31.4	0.0	32.3	32.0	8.1	0.0	0.0	21.9	21.3
Incr Delay (d2), s/veh				5.1	0.0	23.9	12.7	0.2	0.0	0.0	0.6	1.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.7	0.0	7.6	7.6	5.2	0.0	0.0	6.5	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				36.6	0.0	56.2	44.7	8.3	0.0	0.0	22.5	22.7
LnGrp LOS				D	A	E	D	A	A	A	C	C
Approach Vol, veh/h					876			1953			2042	
Approach Delay, s/veh					43.2			20.8			22.5	
Approach LOS					D			C			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		60.5			22.7	37.8		23.5				
Change Period (Y+Rc), s		6.0			4.5	6.0		6.0				
Max Green Setting (Gmax), s		60.0			18.9	36.6		18.0				
Max Q Clear Time (g_c+I1), s		18.7			17.8	20.2		17.2				
Green Ext Time (p_c), s		12.6			0.3	11.6		0.3				

Intersection Summary

HCM 6th Ctrl Delay	25.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Timings
4: Redlands Av & I-215 SB Ramps

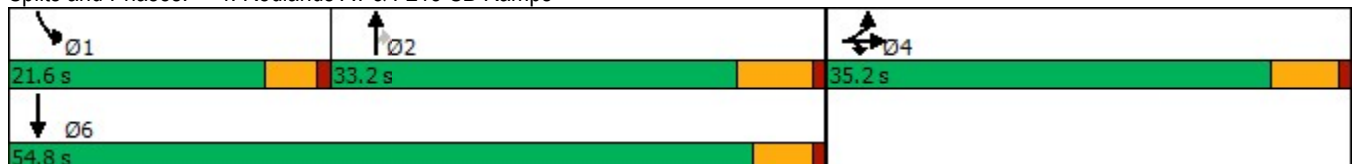


Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	321	0	209	1519	324	711	1178
Future Volume (vph)	321	0	209	1519	324	711	1178
Turn Type	Split	NA	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	4	2		1	6
Permitted Phases					2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.3	23.3	23.3	23.7	23.7	9.6	32.0
Total Split (s)	35.2	35.2	35.2	33.2	33.2	21.6	54.8
Total Split (%)	39.1%	39.1%	39.1%	36.9%	36.9%	24.0%	60.9%
Yellow Time (s)	4.5	4.5	4.5	5.0	5.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	6.0	6.0	4.5	5.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	Min
Act Effct Green (s)	14.9	14.9	14.9	27.3	27.3	17.2	50.0
Actuated g/C Ratio	0.20	0.20	0.20	0.36	0.36	0.23	0.66
v/c Ratio	0.61	0.52	0.49	0.72	0.29	1.00	0.55
Control Delay	35.3	19.6	18.3	23.6	3.1	64.6	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Total Delay	35.3	19.6	18.3	23.6	3.1	64.6	9.6
LOS	D	B	B	C	A	E	A
Approach Delay		24.6		20.0			30.3
Approach LOS		C		B			C

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 75.5
 Natural Cycle: 75
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.00
 Intersection Signal Delay: 25.1
 Intersection LOS: C
 Intersection Capacity Utilization 73.0%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 4: Redlands Av & I-215 SB Ramps



HCM 6th Signalized Intersection Summary
 4: Redlands Av & I-215 SB Ramps

Prairie View Apartments (JN 13747)
 08/17/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	321	0	209	0	0	0	0	1519	324	711	1178	0
Future Volume (veh/h)	321	0	209	0	0	0	0	1519	324	711	1178	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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	397	0	94				0	1669	307	781	1295	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	562	0	250				0	2333	1012	856	2401	0
Arrive On Green	0.16	0.00	0.16				0.00	0.36	0.36	0.25	0.68	0.00
Sat Flow, veh/h	3563	0	1585				0	6696	2790	3456	3647	0
Grp Volume(v), veh/h	397	0	94				0	1669	307	781	1295	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1609	1395	1728	1777	0
Q Serve(g_s), s	7.3	0.0	3.7				0.0	15.4	5.4	15.2	12.8	0.0
Cycle Q Clear(g_c), s	7.3	0.0	3.7				0.0	15.4	5.4	15.2	12.8	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	562	0	250				0	2333	1012	856	2401	0
V/C Ratio(X)	0.71	0.00	0.38				0.00	0.72	0.30	0.91	0.54	0.00
Avail Cap(c_a), veh/h	1533	0	682				0	2536	1099	856	2564	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	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.5	0.0	26.0				0.0	18.9	15.8	25.2	5.7	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.9				0.0	0.9	0.2	13.9	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	2.9	0.0	1.3				0.0	5.3	1.6	7.4	3.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.2	0.0	27.0				0.0	19.8	15.9	39.1	5.9	0.0
LnGrp LOS	C	A	C				A	B	B	D	A	A
Approach Vol, veh/h		491						1976			2076	
Approach Delay, s/veh		28.8						19.2			18.4	
Approach LOS		C						B			B	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	21.6	31.0	16.4	52.6								
Change Period (Y+Rc), s	4.5	6.0	5.5	* 6								
Max Green Setting (Gmax), s	17.1	27.2	29.7	* 50								
Max Q Clear Time (g_c+I1), s	17.2	17.4	9.3	14.8								
Green Ext Time (p_c), s	0.0	7.6	1.6	12.2								

Intersection Summary												
HCM 6th Ctrl Delay			19.9									
HCM 6th LOS			B									

Notes
 User approved volume balancing among the lanes for turning movement.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↑			↑
Traffic Vol, veh/h	44	4	141	0	0	92
Future Vol, veh/h	44	4	141	0	0	92
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, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	4	153	0	0	100

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	253	153	0	-	-	-
Stage 1	153	-	-	-	-	-
Stage 2	100	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	736	893	-	0	0	-
Stage 1	875	-	-	0	0	-
Stage 2	924	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	736	893	-	-	-	-
Mov Cap-2 Maneuver	799	-	-	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	924	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 806	-
HCM Lane V/C Ratio	- 0.065	-
HCM Control Delay (s)	- 9.8	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.2	-

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	28	29	108	80	54
Future Vol, veh/h	32	28	29	108	80	54
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	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	32	33	123	91	61

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	311	122	152	0	0
Stage 1	122	-	-	-	-
Stage 2	189	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	681	929	1429	-	-
Stage 1	903	-	-	-	-
Stage 2	843	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	665	929	1429	-	-
Mov Cap-2 Maneuver	696	-	-	-	-
Stage 1	882	-	-	-	-
Stage 2	843	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	1.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1429	-	788	-	-
HCM Lane V/C Ratio	0.023	-	0.087	-	-
HCM Control Delay (s)	7.6	-	10	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection						
Int Delay, s/veh	30					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↑	↑	↑
Traffic Vol, veh/h	99	928	1258	13	13	163
Future Vol, veh/h	99	928	1258	13	13	163
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	210	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	119	1118	1516	16	16	196

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1532	0	-	0	2872 1516
Stage 1	-	-	-	-	1516 -
Stage 2	-	-	-	-	1356 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	434	-	-	-	18 ~ 147
Stage 1	-	-	-	-	200 -
Stage 2	-	-	-	-	240 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	434	-	-	-	~ 5 ~ 147
Mov Cap-2 Maneuver	-	-	-	-	42 -
Stage 1	-	-	-	-	55 -
Stage 2	-	-	-	-	240 -

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	\$ 412.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	434	-	-	-	124
HCM Lane V/C Ratio	0.275	-	-	-	1.71
HCM Control Delay (s)	16.4	0	-	-	\$ 412.6
HCM Lane LOS	C	A	-	-	F
HCM 95th %tile Q(veh)	1.1	-	-	-	16

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	9	30	20	286	346	8
Future Vol, veh/h	9	30	20	286	346	8
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, %	2	2	2	2	2	2
Mvmt Flow	10	33	22	311	376	9

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	736	381	385	0	-	0
Stage 1	381	-	-	-	-	-
Stage 2	355	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	386	666	1173	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	377	666	1173	-	-	-
Mov Cap-2 Maneuver	377	-	-	-	-	-
Stage 1	675	-	-	-	-	-
Stage 2	710	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.9	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1173	-	566	-	-
HCM Lane V/C Ratio	0.019	-	0.075	-	-
HCM Control Delay (s)	8.1	0	11.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection												
Int Delay, s/veh	288.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗		↕			↕			↕	
Traffic Vol, veh/h	246	736	0	0	981	67	0	0	0	97	0	356
Future Vol, veh/h	246	736	0	0	981	67	0	0	0	97	0	356
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	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	289	866	0	0	1154	79	0	0	0	114	0	419

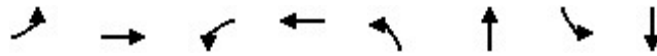
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1233	0	0	866	0	0	2847	2677	866	2638	2638	1194
Stage 1	-	-	-	-	-	-	1444	1444	-	1194	1194	-
Stage 2	-	-	-	-	-	-	1403	1233	-	1444	1444	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	565	-	-	777	-	-	11	22	353	~ 15	23	~ 227
Stage 1	-	-	-	-	-	-	164	197	-	228	260	-
Stage 2	-	-	-	-	-	-	173	249	-	164	197	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	565	-	-	777	-	-	11	353	~ 9	11	~ 227	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	11	-	~ 46	68	-	-
Stage 1	-	-	-	-	-	-	80	96	~ 111	260	-	-
Stage 2	-	-	-	-	-	-	249	-	~ 80	96	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.5	0	0	\$ 1571.2
HCM LOS			A	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	565	-	-	777	-	-	123
HCM Lane V/C Ratio	-	0.512	-	-	-	-	-	4.333
HCM Control Delay (s)	0	17.9	-	-	0	-	-	\$ 1571.2
HCM Lane LOS	A	C	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	2.9	-	-	0	-	-	54.9

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Timings
1: Redlands Av & Dale St

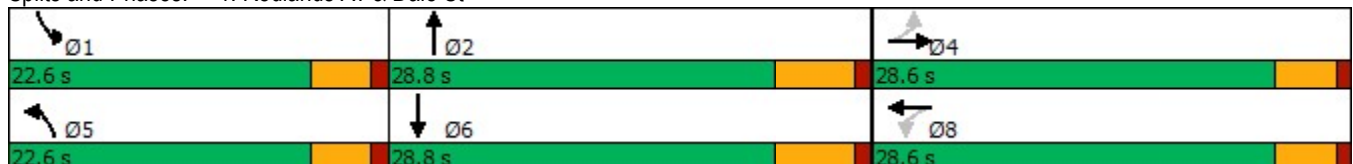


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕	↗	↕	↗	↕
Traffic Volume (vph)	7	4	36	5	45	683	60	641
Future Volume (vph)	7	4	36	5	45	683	60	641
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	28.6	28.6	28.6	28.6	22.6	28.6	22.6	24.8
Total Split (s)	28.6	28.6	28.6	28.6	22.6	28.8	22.6	28.8
Total Split (%)	35.8%	35.8%	35.8%	35.8%	28.3%	36.0%	28.3%	36.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		9.2		9.2	6.4	24.6	6.9	27.1
Actuated g/C Ratio		0.20		0.20	0.14	0.53	0.15	0.58
v/c Ratio		0.11		0.28	0.20	0.43	0.25	0.39
Control Delay		10.9		12.3	25.1	13.0	24.8	10.9
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		10.9		12.3	25.1	13.0	24.8	10.9
LOS		B		B	C	B	C	B
Approach Delay		10.9		12.3		13.7		12.0
Approach LOS		B		B		B		B

Intersection Summary

Cycle Length: 80
 Actuated Cycle Length: 46.5
 Natural Cycle: 80
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.43
 Intersection Signal Delay: 12.8
 Intersection LOS: B
 Intersection Capacity Utilization 46.5%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 1: Redlands Av & Dale St



HCM 6th Signalized Intersection Summary
 1: Redlands Av & Dale St

Prairie View Apartments (JN 13747)

08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Volume (veh/h)	7	4	22	36	5	45	45	683	54	60	641	80
Future Volume (veh/h)	7	4	22	36	5	45	45	683	54	60	641	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	4	24	39	5	49	49	742	59	65	697	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	163	30	117	221	13	87	98	1220	97	122	1206	150
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.05	0.37	0.37	0.07	0.38	0.38
Sat Flow, veh/h	269	283	1106	611	126	821	1781	3334	265	1781	3179	397
Grp Volume(v), veh/h	36	0	0	93	0	0	49	395	406	65	389	395
Grp Sat Flow(s),veh/h/ln	1658	0	0	1558	0	0	1781	1777	1823	1781	1777	1799
Q Serve(g_s), s	0.0	0.0	0.0	1.1	0.0	0.0	0.9	5.9	5.9	1.2	5.7	5.7
Cycle Q Clear(g_c), s	0.6	0.0	0.0	1.8	0.0	0.0	0.9	5.9	5.9	1.2	5.7	5.7
Prop In Lane	0.22		0.67	0.42		0.53	1.00		0.15	1.00		0.22
Lane Grp Cap(c), veh/h	310	0	0	321	0	0	98	650	667	122	674	682
V/C Ratio(X)	0.12	0.00	0.00	0.29	0.00	0.00	0.50	0.61	0.61	0.53	0.58	0.58
Avail Cap(c_a), veh/h	1288	0	0	1270	0	0	983	1254	1286	983	1254	1269
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	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	0.0	13.8	0.0	0.0	15.0	8.4	8.4	14.7	8.0	8.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.5	0.0	0.0	1.5	0.9	0.9	1.4	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.6	0.0	0.0	0.3	1.3	1.3	0.4	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.5	0.0	0.0	14.3	0.0	0.0	16.4	9.3	9.3	16.0	8.8	8.8
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		36			93			850			849	
Approach Delay, s/veh		13.5			14.3			9.7			9.4	
Approach LOS		B			B			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	17.7		8.0	6.4	18.2		8.0				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	18.0	23.0		24.0	18.0	23.0		24.0				
Max Q Clear Time (g_c+I1), s	3.2	7.9		2.6	2.9	7.7		3.8				
Green Ext Time (p_c), s	0.0	4.0		0.1	0.0	4.0		0.4				

Intersection Summary

HCM 6th Ctrl Delay	9.9
HCM 6th LOS	A

Timings
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

08/17/2022

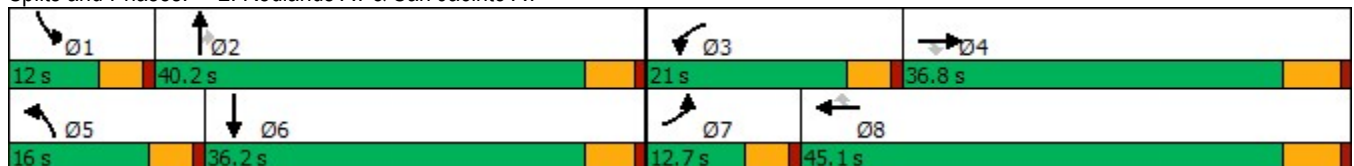


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖	↖	↑↗
Traffic Volume (vph)	175	182	243	1053	197	113	284	591	1362	181	559
Future Volume (vph)	175	182	243	1053	197	113	284	591	1362	181	559
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	4	3	8	8	5	2	2	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	9.6	36.8	36.8	9.6	30.8	30.8	9.6	32.1	32.1	9.6	32.1
Total Split (s)	12.7	36.8	36.8	21.0	45.1	45.1	16.0	40.2	40.2	12.0	36.2
Total Split (%)	11.5%	33.5%	33.5%	19.1%	41.0%	41.0%	14.5%	36.5%	36.5%	10.9%	32.9%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.1	4.1	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.1	5.1	4.6	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min
Act Effct Green (s)	8.1	16.6	16.6	16.5	25.0	25.0	11.5	35.3	35.3	7.4	31.3
Actuated g/C Ratio	0.08	0.17	0.17	0.17	0.26	0.26	0.12	0.37	0.37	0.08	0.33
v/c Ratio	0.63	0.59	0.57	1.86	0.42	0.24	1.40	0.47	1.53	1.38	0.62
Control Delay	54.6	43.7	13.9	421.2	31.8	6.1	241.9	25.8	264.9	246.5	30.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.6	43.7	13.9	421.2	31.8	6.1	241.9	25.8	264.9	246.5	30.5
LOS	D	D	B	F	C	A	F	C	F	F	C
Approach Delay		34.8			330.5			198.8			76.0
Approach LOS		C			F			F			E

Intersection Summary

Cycle Length: 110	
Actuated Cycle Length: 96	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.86	
Intersection Signal Delay: 194.0	Intersection LOS: F
Intersection Capacity Utilization 116.9%	ICU Level of Service H
Analysis Period (min) 15	



































Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 		 	 		 	 	 	 	 	 	 
Traffic Volume (veh/h)	175	182	243	1053	197	113	284	591	1362	181	559	120
Future Volume (veh/h)	175	182	243	1053	197	113	284	591	1362	181	559	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	182	190	160	1097	205	93	296	616	1255	189	582	118
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	256	217	619	454	384	222	1362	608	144	1000	202
Arrive On Green	0.07	0.14	0.14	0.18	0.24	0.24	0.12	0.38	0.38	0.08	0.34	0.34
Sat Flow, veh/h	3456	1870	1585	3456	1870	1583	1781	3554	1585	1781	2944	595
Grp Volume(v), veh/h	182	190	160	1097	205	93	296	616	1255	189	351	349
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1870	1583	1781	1777	1585	1781	1777	1762
Q Serve(g_s), s	4.7	8.9	8.9	16.4	8.5	4.3	11.4	11.8	35.1	7.4	14.9	14.9
Cycle Q Clear(g_c), s	4.7	8.9	8.9	16.4	8.5	4.3	11.4	11.8	35.1	7.4	14.9	14.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	254	256	217	619	454	384	222	1362	608	144	604	599
V/C Ratio(X)	0.72	0.74	0.74	1.77	0.45	0.24	1.33	0.45	2.07	1.31	0.58	0.58
Avail Cap(c_a), veh/h	306	633	537	619	803	680	222	1362	608	144	604	599
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	37.9	37.9	37.6	29.5	27.9	40.1	21.1	28.2	42.1	24.9	24.9
Incr Delay (d2), s/veh	6.3	4.2	4.8	354.0	0.7	0.3	177.9	0.2	485.0	181.4	1.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.2	3.6	37.0	3.7	1.6	15.8	4.7	93.8	10.4	6.0	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.7	42.1	42.7	391.6	30.2	28.2	218.0	21.3	513.3	223.5	26.3	26.3
LnGrp LOS	D	D	D	F	C	C	F	C	F	F	C	C
Approach Vol, veh/h		532			1395			2167			889	
Approach Delay, s/veh		44.2			314.3			333.1			68.2	
Approach LOS		D			F			F			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	40.2	21.0	18.4	16.0	36.2	11.3	28.0				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	7.4	35.1	16.4	31.0	11.4	31.1	8.1	39.3				
Max Q Clear Time (g_c+I1), s	9.4	37.1	18.4	10.9	13.4	16.9	6.7	10.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.4	0.0	3.4	0.1	1.3				
Intersection Summary												
HCM 6th Ctrl Delay	249.7											
HCM 6th LOS	F											

Timings
3: Redlands Av & I-215 NB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	397	7	843	268	1330	1455	378
Future Volume (vph)	397	7	843	268	1330	1455	378
Turn Type	Split	NA	Prot	Prot	NA	NA	Perm
Protected Phases	8	8	8	5	2	6	
Permitted Phases							6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	11.0	11.0	9.5	11.0	31.0	31.0
Total Split (s)	24.0	24.0	24.0	23.4	66.0	42.6	42.6
Total Split (%)	26.7%	26.7%	26.7%	26.0%	73.3%	47.3%	47.3%
Yellow Time (s)	5.0	5.0	5.0	3.5	5.0	5.0	5.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.5	6.0	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min
Act Effct Green (s)	18.2	18.2	18.2	11.7	49.0	32.8	32.8
Actuated g/C Ratio	0.23	0.23	0.23	0.15	0.62	0.41	0.41
v/c Ratio	0.96	1.20	1.09	0.54	0.63	0.57	0.44
Control Delay	70.9	139.4	98.8	36.3	10.7	18.8	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	70.9	139.4	98.8	36.3	11.1	18.8	3.5
LOS	E	F	F	D	B	B	A
Approach Delay		105.5			15.3	15.6	
Approach LOS		F			B	B	

Intersection Summary

Cycle Length: 90	
Actuated Cycle Length: 79.3	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.20	
Intersection Signal Delay: 39.5	Intersection LOS: D
Intersection Capacity Utilization 81.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 3: Redlands Av & I-215 NB Ramps



HCM 6th Signalized Intersection Summary
 3: Redlands Av & I-215 NB Ramps

Prairie View Apartments (JN 13747)
 08/17/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↶	↷	↶	↶↷	↶↷			↑↑↑↑	↶
Traffic Volume (veh/h)	0	0	0	397	7	843	268	1330	0	0	1455	378
Future Volume (veh/h)	0	0	0	397	7	843	268	1330	0	0	1455	378
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				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				275	0	866	276	1371	0	0	1500	306
Peak Hour Factor				0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				458	0	814	397	2032	0	0	2526	622
Arrive On Green				0.26	0.00	0.26	0.11	0.57	0.00	0.00	0.39	0.39
Sat Flow, veh/h				1781	0	3170	3456	3647	0	0	6696	1585
Grp Volume(v), veh/h				275	0	866	276	1371	0	0	1500	306
Grp Sat Flow(s),veh/h/ln				1781	0	1585	1728	1777	0	0	1609	1585
Q Serve(g_s), s				9.5	0.0	18.0	5.4	18.8	0.0	0.0	12.9	10.2
Cycle Q Clear(g_c), s				9.5	0.0	18.0	5.4	18.8	0.0	0.0	12.9	10.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				458	0	814	397	2032	0	0	2526	622
V/C Ratio(X)				0.60	0.00	1.06	0.69	0.67	0.00	0.00	0.59	0.49
Avail Cap(c_a), veh/h				458	0	814	932	3043	0	0	3361	828
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	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				22.9	0.0	26.0	29.8	10.5	0.0	0.0	16.9	16.0
Incr Delay (d2), s/veh				2.2	0.0	49.7	2.2	0.4	0.0	0.0	0.2	0.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.8	0.0	11.6	2.2	5.9	0.0	0.0	4.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				25.1	0.0	75.8	32.0	10.9	0.0	0.0	17.1	16.6
LnGrp LOS				C	A	F	C	B	A	A	B	B
Approach Vol, veh/h					1141			1647			1806	
Approach Delay, s/veh					63.6			14.4			17.0	
Approach LOS					E			B			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		46.1			12.6	33.5		24.0				
Change Period (Y+Rc), s		6.0			4.5	6.0		6.0				
Max Green Setting (Gmax), s		60.0			18.9	36.6		18.0				
Max Q Clear Time (g_c+I1), s		20.8			7.4	14.9		20.0				
Green Ext Time (p_c), s		13.8			0.7	12.6		0.0				

Intersection Summary

HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Timings
4: Redlands Av & I-215 SB Ramps

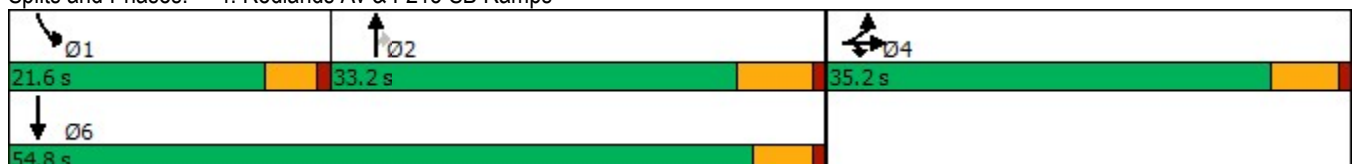


Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	435	3	439	1218	507	710	1269
Future Volume (vph)	435	3	439	1218	507	710	1269
Turn Type	Split	NA	Prot	NA	Perm	Prot	NA
Protected Phases	4	4	4	2		1	6
Permitted Phases					2		
Detector Phase	4	4	4	2	2	1	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.3	23.3	23.3	23.7	23.7	9.6	32.0
Total Split (s)	35.2	35.2	35.2	33.2	33.2	21.6	54.8
Total Split (%)	39.1%	39.1%	39.1%	36.9%	36.9%	24.0%	60.9%
Yellow Time (s)	4.5	4.5	4.5	5.0	5.0	3.5	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	6.0	6.0	4.5	5.0
Lead/Lag				Lag	Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	Yes	
Recall Mode	None	None	None	Min	Min	None	Min
Act Effct Green (s)	20.9	20.9	20.9	25.9	25.9	17.3	48.8
Actuated g/C Ratio	0.26	0.26	0.26	0.32	0.32	0.22	0.61
v/c Ratio	0.70	0.68	0.62	0.59	0.41	0.97	0.60
Control Delay	36.1	30.7	23.6	24.8	3.4	61.0	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Total Delay	36.1	30.7	23.6	24.8	3.4	61.0	13.3
LOS	D	C	C	C	A	E	B
Approach Delay		30.3		18.5			30.4
Approach LOS		C		B			C

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 80.3
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.97
 Intersection Signal Delay: 25.9
 Intersection LOS: C
 Intersection Capacity Utilization 81.6%
 ICU Level of Service D
 Analysis Period (min) 15





















Splits and Phases: 4: Redlands Av & I-215 SB Ramps



HCM 6th Signalized Intersection Summary
 4: Redlands Av & I-215 SB Ramps

Prairie View Apartments (JN 13747)

08/17/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	435	3	439	0	0	0	0	1218	507	710	1269	0
Future Volume (veh/h)	435	3	439	0	0	0	0	1218	507	710	1269	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	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	553	0	242				0	1230	467	717	1282	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	758	0	337				0	2041	885	816	2200	0
Arrive On Green	0.21	0.00	0.21				0.00	0.32	0.32	0.24	0.62	0.00
Sat Flow, veh/h	3563	0	1585				0	6696	2790	3456	3647	0
Grp Volume(v), veh/h	553	0	242				0	1230	467	717	1282	0
Grp Sat Flow(s),veh/h/ln	1781	0	1585				0	1609	1395	1728	1777	0
Q Serve(g_s), s	9.9	0.0	9.7				0.0	11.0	9.4	13.7	14.7	0.0
Cycle Q Clear(g_c), s	9.9	0.0	9.7				0.0	11.0	9.4	13.7	14.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	758	0	337				0	2041	885	816	2200	0
V/C Ratio(X)	0.73	0.00	0.72				0.00	0.60	0.53	0.88	0.58	0.00
Avail Cap(c_a), veh/h	1546	0	688				0	2557	1109	864	2586	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	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.1	0.0	25.0				0.0	19.7	19.2	25.2	7.8	0.0
Incr Delay (d2), s/veh	1.4	0.0	2.9				0.0	0.3	0.5	9.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	3.5				0.0	3.8	2.8	6.3	4.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.5	0.0	27.9				0.0	20.0	19.6	35.1	8.0	0.0
LnGrp LOS	C	A	C				A	C	B	D	A	A
Approach Vol, veh/h		795						1697			1999	
Approach Delay, s/veh		26.9						19.9			17.7	
Approach LOS		C						B			B	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	20.7	27.7	20.1	48.4								
Change Period (Y+Rc), s	4.5	6.0	5.5	* 6								
Max Green Setting (Gmax), s	17.1	27.2	29.7	* 50								
Max Q Clear Time (g_c+I1), s	15.7	13.0	11.9	16.7								
Green Ext Time (p_c), s	0.5	8.7	2.7	11.8								
Intersection Summary												
HCM 6th Ctrl Delay			20.2									
HCM 6th LOS			C									
Notes												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↑		↑			↑
Traffic Vol, veh/h	27	3	163	0	0	89
Future Vol, veh/h	27	3	163	0	0	89
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, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	3	177	0	0	97

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	274	177	0	-	-	-
Stage 1	177	-	-	-	-	-
Stage 2	97	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	-	-
Pot Cap-1 Maneuver	716	866	-	0	0	-
Stage 1	854	-	-	0	0	-
Stage 2	927	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	716	866	-	-	-	-
Mov Cap-2 Maneuver	784	-	-	-	-	-
Stage 1	854	-	-	-	-	-
Stage 2	927	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 791	-
HCM Lane V/C Ratio	- 0.041	-
HCM Control Delay (s)	- 9.7	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.1	-

Intersection						
Int Delay, s/veh	4.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	51	28	29	112	76	40
Future Vol, veh/h	51	28	29	112	76	40
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	-	75	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	38	38	38	38
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	134	74	76	295	200	105

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	700	253	305	0	0
Stage 1	253	-	-	-	-
Stage 2	447	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	405	786	1256	-	-
Stage 1	789	-	-	-	-
Stage 2	644	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	380	786	1256	-	-
Mov Cap-2 Maneuver	486	-	-	-	-
Stage 1	741	-	-	-	-
Stage 2	644	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.1	1.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1256	-	562	-	-
HCM Lane V/C Ratio	0.061	-	0.37	-	-
HCM Control Delay (s)	8.1	-	15.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	1.7	-	-

Intersection						
Int Delay, s/veh	3.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	140	1255	1187	11	16	110
Future Vol, veh/h	140	1255	1187	11	16	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	210	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	154	1379	1304	12	18	121

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	1316	0	-	0	2991 1304
Stage 1	-	-	-	-	1304 -
Stage 2	-	-	-	-	1687 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	525	-	-	-	~ 15 196
Stage 1	-	-	-	-	254 -
Stage 2	-	-	-	-	165 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	525	-	-	-	0 196
Mov Cap-2 Maneuver	-	-	-	-	0 -
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	165 -

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	58.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	525	-	-	-	196
HCM Lane V/C Ratio	0.293	-	-	-	0.706
HCM Control Delay (s)	14.7	0	-	-	58.3
HCM Lane LOS	B	A	-	-	F
HCM 95th %tile Q(veh)	1.2	-	-	-	4.5

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T		T		T	
Traffic Vol, veh/h	5	19	64	363	273	28
Future Vol, veh/h	5	19	64	363	273	28
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, %	2	2	2	2	2	2
Mvmt Flow	5	21	70	395	297	30

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	847	312	327	0	-	0
Stage 1	312	-	-	-	-	-
Stage 2	535	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	332	728	1233	-	-	-
Stage 1	742	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	308	728	1233	-	-	-
Mov Cap-2 Maneuver	308	-	-	-	-	-
Stage 1	688	-	-	-	-	-
Stage 2	587	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	1.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1233	-	567	-	-
HCM Lane V/C Ratio	0.056	-	0.046	-	-
HCM Control Delay (s)	8.1	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	-	-

Intersection												
Int Delay, s/veh	81.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗		↕			↕			↕	
Traffic Vol, veh/h	374	956	0	0	710	74	0	0	0	51	0	220
Future Vol, veh/h	374	956	0	0	710	74	0	0	0	51	0	220
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	-	0	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	416	1062	0	0	789	82	0	0	0	57	0	244

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	871	0	0	1062	0	0	2846	2765	1062	2724	2724	830
Stage 1	-	-	-	-	-	-	1894	1894	-	830	830	-
Stage 2	-	-	-	-	-	-	952	871	-	1894	1894	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	774	-	-	656	-	-	11	19	272	~13	21	370
Stage 1	-	-	-	-	-	-	90	118	-	364	385	-
Stage 2	-	-	-	-	-	-	312	368	-	90	118	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	774	-	-	656	-	-	2	9	272	~7	10	370
Mov Cap-2 Maneuver	-	-	-	-	-	-	2	9	-	~33	46	-
Stage 1	-	-	-	-	-	-	42	55	-	169	385	-
Stage 2	-	-	-	-	-	-	106	368	-	~42	55	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.2	0	0	\$ 695.9
HCM LOS			A	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	774	-	-	656	-	-	127
HCM Lane V/C Ratio	-	0.537	-	-	-	-	-	2.371
HCM Control Delay (s)	0	14.9	-	-	0	-	-	\$ 695.9
HCM Lane LOS	A	B	-	-	A	-	-	F
HCM 95th %tile Q(veh)	-	3.2	-	-	0	-	-	26.1

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

**APPENDIX 7.3: HORIZON YEAR (2045) WITHOUT PROJECT
CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS**

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Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **HY (2045) NP Conditions - Weekday PM Peak Hour**

Major Street Name = **Wilson Avenue**

Total of Both Approaches (VPH) = **230**

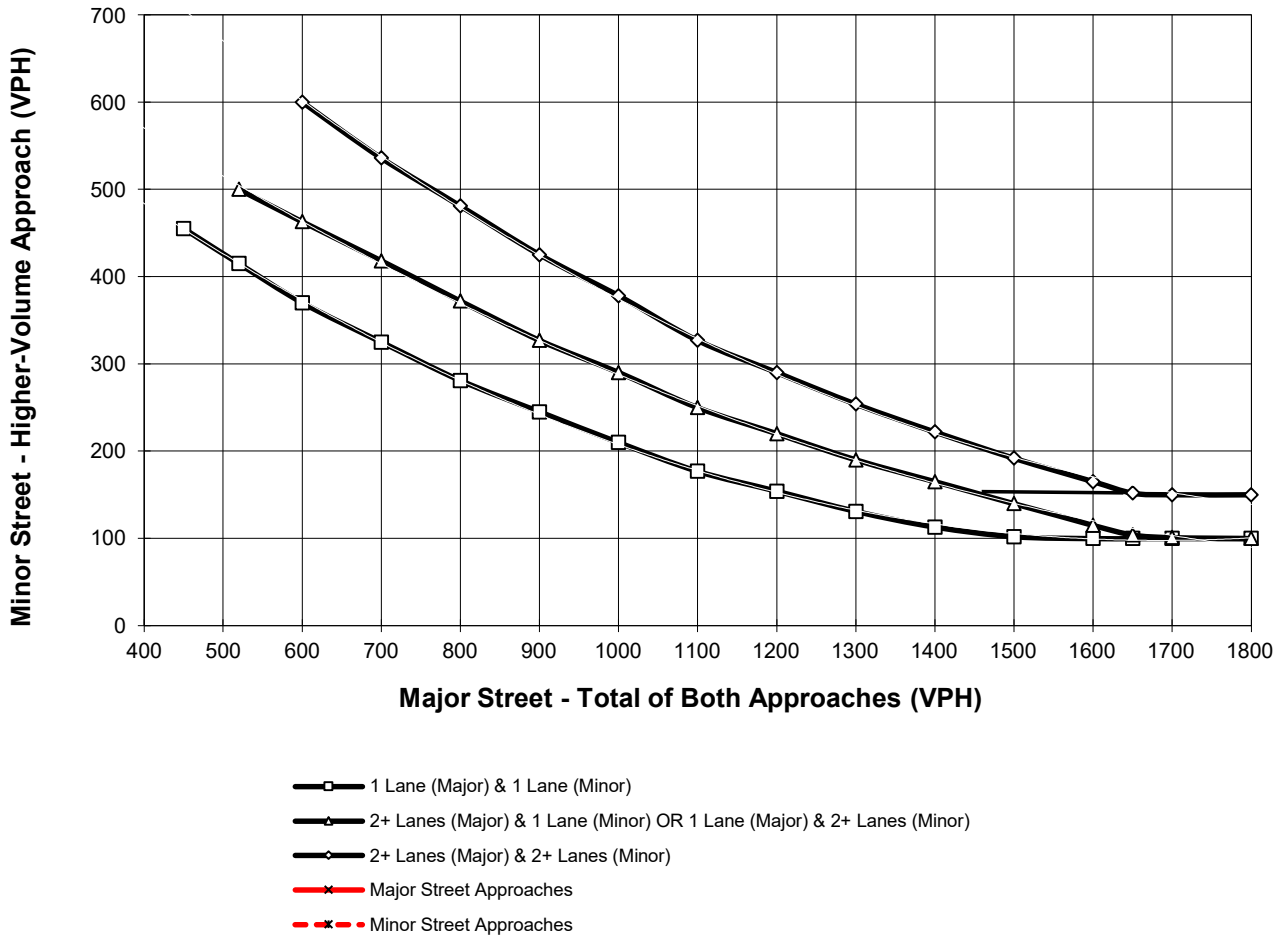
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Dale Street**

High Volume Approach (VPH) = **79**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane



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**APPENDIX 7.4: HORIZON YEAR (2045) WITH PROJECT CONDITIONS
TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS**

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

<u>DIST</u>	<u>CO</u>	<u>RTE</u>	<u>PM</u>	<u>CALC</u>	<u>TRAFFIC CONDITIONS</u>	<u>HY (2045) WP</u>
Jurisdiction: <u>County of Riverside</u>				CHK <u>JB</u>		DATE <u>08/18/22</u>
Major Street: <u>Wilson Avenue</u>				CHK <u>JB</u>	Critical Approach Speed (Major) <u>30</u> mph	DATE <u>08/18/22</u>
Minor Street: <u>Driveway 1</u>					Critical Approach Speed (Minor) <u>25</u> mph	
Major Street Approach Lanes = <u>1</u>	lane	Minor Street Approach Lanes = <u>1</u>	lane			
Major Street Future ADT = <u>3,621</u>	vpd	Minor Street Future ADT = <u>266</u>	vpd			
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);	<input type="checkbox"/>	or	<input type="checkbox"/>			URBAN (U)
In built up area of isolated community of < 10,000 population	<input type="checkbox"/>		<input type="checkbox"/>			

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>	<u>RURAL</u>	Minimum Requirements			
XX		EADT			
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>	<u>Not Satisfied</u>	(Total of Both Approaches)		(One Direction Only)	
	XX	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
1 3,621	1 266	8,000	5,600	2,400	1,680
2 +	1	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>	<u>Not Satisfied</u>	(Total of Both Approaches)		(One Direction Only)	
	XX	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
1 3,621	1 266	12,000	8,400	1,200	850
2 +	1	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B		2 CONDITIONS		2 CONDITIONS	
<u>Satisfied</u>	<u>Not Satisfied</u>	80%		80%	
No one condition satisfied, but following conditions fulfilled 80% of more	XX				
	A				
	11%				
	B				
	22%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.



Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **HY (2045) WP Conditions - Weekday PM Peak Hour**

Major Street Name = **Wilson Avenue**

Total of Both Approaches (VPH) = **257**

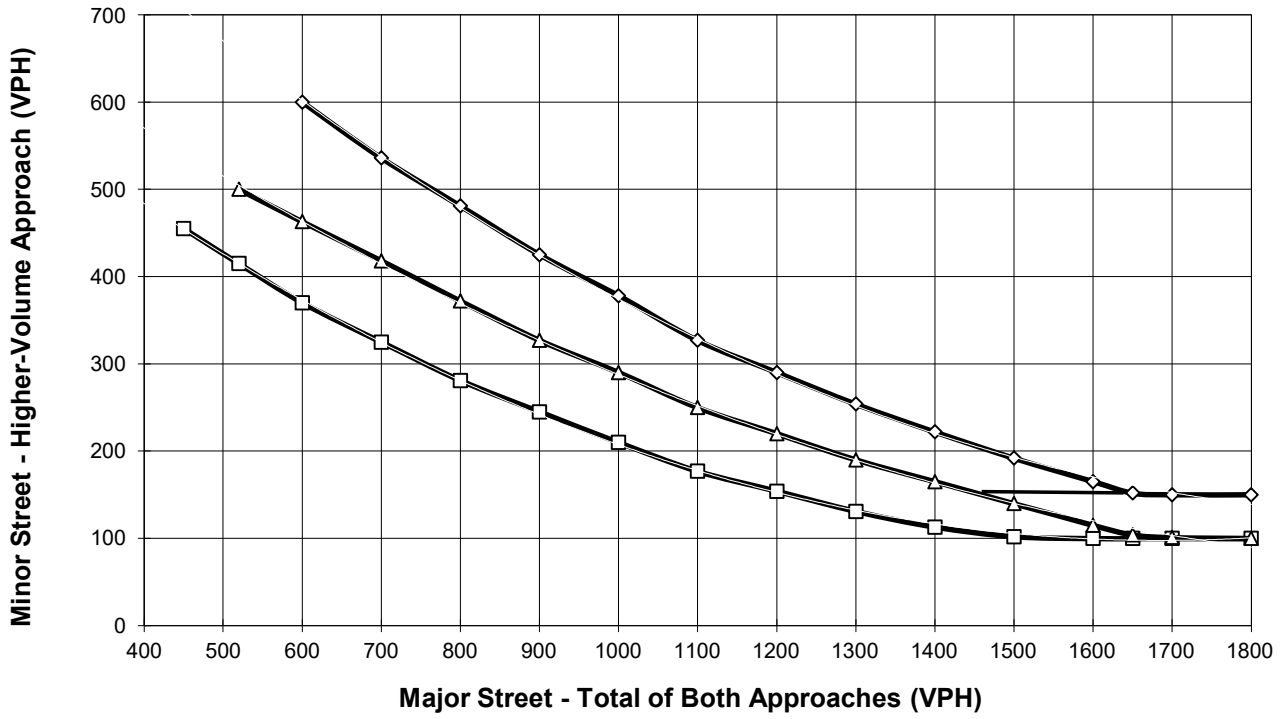
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Dale Street**

High Volume Approach (VPH) = **79**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



- 1 Lane (Major) & 1 Lane (Minor)
- △— 2+ Lanes (Major) & 1 Lane (Minor) OR 1 Lane (Major) & 2+ Lanes (Minor)
- ◇— 2+ Lanes (Major) & 2+ Lanes (Minor)
- x— Major Street Approaches
- x— Minor Street Approaches

*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane



Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

<u>DIST</u>	<u>CO</u>	<u>RTE</u>	<u>PM</u>	<u>CALC</u>	<u>TRAFFIC CONDITIONS</u>	<u>HY (2045) WP</u>
Jurisdiction: <u>County of Riverside</u>				<u>JB</u>		<u>DATE 08/18/22</u>
Major Street: <u>Murrieta Road</u>				<u>JB</u>		<u>DATE 08/18/22</u>
Minor Street: <u>Driveway 2</u>					Critical Approach Speed (Major) <u>35 mph</u>	
					Critical Approach Speed (Minor) <u>30 mph</u>	
Major Street Approach Lanes =		<u>1</u>	lane	Minor Street Approach Lanes =		<u>1</u> lane
Major Street Future ADT =		<u>6,218</u>	vpd	Minor Street Future ADT =		<u>701</u> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph);					<input type="checkbox"/>	
					or	URBAN (U)
In built up area of isolated community of < 10,000 population					<input type="checkbox"/>	

(Based on Estimated Average Daily Traffic - See Note)

<u>URBAN</u>	<u>RURAL</u>	Minimum Requirements			
XX		EADT			
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>	<u>Not Satisfied</u>	(Total of Both Approaches)		(One Direction Only)	
	XX	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
<u>1 6,218</u>	<u>1 701</u>	8,000	5,600	2,400	1,680
<u>2 +</u>	<u>1</u>	9,600	6,720	2,400	1,680
<u>2 +</u>	<u>2 +</u>	9,600	6,720	3,200	2,240
<u>1</u>	<u>2 +</u>	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street		Vehicles Per Day on Higher-Volume Minor Street Approach	
<u>Satisfied</u>	<u>Not Satisfied</u>	(Total of Both Approaches)		(One Direction Only)	
	XX	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
<u>1 6,218</u>	<u>1 701</u>	12,000	8,400	1,200	850
<u>2 +</u>	<u>1</u>	14,400	10,080	1,200	850
<u>2 +</u>	<u>2 +</u>	14,400	10,080	1,600	1,120
<u>1</u>	<u>2 +</u>	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B		2 CONDITIONS		2 CONDITIONS	
<u>Satisfied</u>	<u>Not Satisfied</u>	80%		80%	
No one condition satisfied, but following conditions fulfilled 80% of more	XX				
	<u>A</u>				
	29%				
	<u>B</u>				
	52%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.



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**APPENDIX 7.5: HORIZON YEAR (2045) WITHOUT PROJECT QUEUING
ANALYSIS WORKSHEETS**

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Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	363	346	335	669	1275	1627	453
v/c Ratio	1.06	0.94	0.89	0.92	0.54	0.64	0.50
Control Delay	103.1	61.7	52.2	54.8	9.0	22.8	3.9
Queue Delay	0.0	0.0	0.0	0.0	1.4	0.0	0.0
Total Delay	103.1	61.7	52.2	54.8	10.4	22.8	3.9
Queue Length 50th (ft)	~245	165	146	193	174	208	0
Queue Length 95th (ft)	#416	#347	#307	#292	219	243	53
Internal Link Dist (ft)		1157			322	711	
Turn Bay Length (ft)	800		400				
Base Capacity (vph)	341	370	378	732	2397	2647	919
Starvation Cap Reductn	0	0	0	0	856	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.06	0.94	0.89	0.91	0.83	0.61	0.49

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

Prairie View Apartments (JN 13747)

4: Redlands Av & I-215 SB Ramps

08/17/2022



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	198	198	182	1665	356	757	1280
v/c Ratio	0.61	0.52	0.50	0.72	0.29	0.97	0.54
Control Delay	35.5	19.6	18.6	23.3	3.0	56.4	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Total Delay	35.5	19.6	18.6	23.3	3.0	56.4	9.2
Queue Length 50th (ft)	89	47	38	190	0	180	142
Queue Length 95th (ft)	154	110	96	266	30	#331	251
Internal Link Dist (ft)		878		463			322
Turn Bay Length (ft)	740		140		200		
Base Capacity (vph)	666	679	651	2327	1239	784	2353
Starvation Cap Reductn	0	0	0	0	0	0	710
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.29	0.28	0.72	0.29	0.97	0.78

Intersection Summary

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



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	368	445	448	276	1342	1477	381
v/c Ratio	0.96	1.14	1.08	0.55	0.61	0.56	0.43
Control Delay	70.5	115.0	94.9	36.3	10.5	18.7	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	70.5	115.0	94.9	36.3	10.9	18.7	3.5
Queue Length 50th (ft)	~206	~275	~246	70	190	156	0
Queue Length 95th (ft)	#409	#498	#458	107	244	204	50
Internal Link Dist (ft)		1157			322	711	
Turn Bay Length (ft)	800		400				
Base Capacity (vph)	385	392	415	826	2706	2989	941
Starvation Cap Reductn	0	0	0	0	739	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	1.14	1.08	0.33	0.68	0.49	0.40

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

Prairie View Apartments (JN 13747)

4: Redlands Av & I-215 SB Ramps

08/17/2022



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	302	290	279	1216	512	703	1274
v/c Ratio	0.70	0.68	0.61	0.59	0.41	0.94	0.59
Control Delay	35.7	30.3	23.2	24.7	3.4	55.5	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Total Delay	35.7	30.3	23.2	24.7	3.4	55.5	13.0
Queue Length 50th (ft)	146	120	86	146	0	185	187
Queue Length 95th (ft)	232	209	167	209	38	#341	318
Internal Link Dist (ft)		878		463			322
Turn Bay Length (ft)	740		140		200		
Base Capacity (vph)	635	604	624	2218	1299	747	2242
Starvation Cap Reductn	0	0	0	0	0	0	655
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.48	0.45	0.55	0.39	0.94	0.80

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

APPENDIX 7.6: HORIZON YEAR (2045) WITH PROJECT QUEUING ANALYSIS WORKSHEETS

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3: Redlands Av & I-215 NB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	368	345	339	669	1284	1666	467
v/c Ratio	1.08	0.94	0.90	0.92	0.55	0.65	0.51
Control Delay	109.1	63.2	54.4	55.1	9.0	23.0	4.0
Queue Delay	0.0	0.0	0.0	0.0	1.5	0.0	0.0
Total Delay	109.1	63.2	54.4	55.1	10.5	23.0	4.0
Queue Length 50th (ft)	~251	165	149	193	176	215	0
Queue Length 95th (ft)	#425	#347	#314	#292	222	251	54
Internal Link Dist (ft)		1157			322	711	
Turn Bay Length (ft)	800		400				
Base Capacity (vph)	340	366	376	729	2387	2636	925
Starvation Cap Reductn	0	0	0	0	853	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.08	0.94	0.90	0.92	0.84	0.63	0.50

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

4: Redlands Av & I-215 SB Ramps



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	201	200	182	1669	356	781	1295
v/c Ratio	0.61	0.52	0.49	0.72	0.29	1.00	0.55
Control Delay	35.3	19.6	18.3	23.6	3.1	64.6	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Total Delay	35.3	19.6	18.3	23.6	3.1	64.6	9.6
Queue Length 50th (ft)	90	48	38	191	0	~189	145
Queue Length 95th (ft)	156	113	95	273	30	#353	266
Internal Link Dist (ft)		878		463			322
Turn Bay Length (ft)	740		140		200		
Base Capacity (vph)	664	676	649	2318	1235	780	2344
Starvation Cap Reductn	0	0	0	0	0	0	702
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.30	0.28	0.72	0.29	1.00	0.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

3: Redlands Av & I-215 NB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	368	465	452	276	1371	1500	390
v/c Ratio	0.96	1.20	1.09	0.54	0.63	0.57	0.44
Control Delay	70.9	139.4	98.8	36.3	10.7	18.8	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	70.9	139.4	98.8	36.3	11.1	18.8	3.5
Queue Length 50th (ft)	~206	~305	~251	70	196	159	0
Queue Length 95th (ft)	#409	#532	#464	107	252	209	50
Internal Link Dist (ft)		1157			322	711	
Turn Bay Length (ft)	800		400				
Base Capacity (vph)	385	388	414	825	2701	2983	945
Starvation Cap Reductn	0	0	0	0	728	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	1.20	1.09	0.33	0.69	0.50	0.41

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

4: Redlands Av & I-215 SB Ramps

08/17/2022



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	307	294	284	1230	512	717	1282
v/c Ratio	0.70	0.68	0.62	0.59	0.41	0.97	0.60
Control Delay	36.1	30.7	23.6	24.8	3.4	61.0	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Total Delay	36.1	30.7	23.6	24.8	3.4	61.0	13.3
Queue Length 50th (ft)	149	124	89	149	0	190	191
Queue Length 95th (ft)	236	213	170	212	38	#351	322
Internal Link Dist (ft)		878		463			322
Turn Bay Length (ft)	740		140		200		
Base Capacity (vph)	629	600	620	2197	1291	740	2221
Starvation Cap Reductn	0	0	0	0	0	0	651
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.49	0.46	0.56	0.40	0.97	0.82

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

**APPENDIX 7.7: HORIZON YEAR (2045) WITH PROJECT CONDITIONS
INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH
IMPROVEMENTS**

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Timings
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

08/18/2022

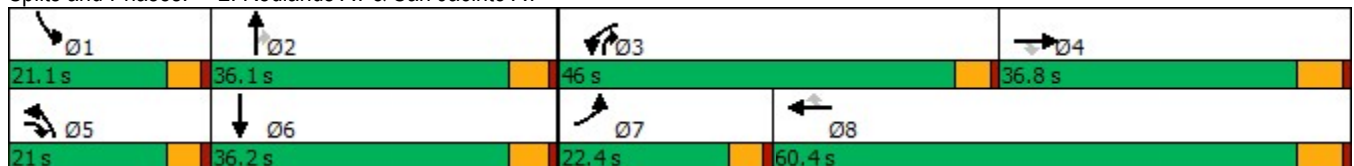


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖↗	↖	↑↘
Traffic Volume (vph)	254	109	270	1146	350	119	210	462	1024	140	575
Future Volume (vph)	254	109	270	1146	350	119	210	462	1024	140	575
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8		5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	8	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	36.8	9.6	9.6	30.8	30.8	9.6	32.1	9.6	9.6	32.1
Total Split (s)	22.4	36.8	21.0	46.0	60.4	60.4	21.0	36.1	46.0	21.1	36.2
Total Split (%)	16.0%	26.3%	15.0%	32.9%	43.1%	43.1%	15.0%	25.8%	32.9%	15.1%	25.9%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	4.8	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	5.8	4.6	5.1	4.6	4.6	5.1
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	None	Min
Act Effct Green (s)	14.8	15.9	38.2	41.6	42.6	42.6	16.5	32.7	79.4	15.0	31.2
Actuated g/C Ratio	0.12	0.13	0.30	0.33	0.34	0.34	0.13	0.26	0.63	0.12	0.25
v/c Ratio	0.69	0.53	0.57	1.11	0.63	0.22	1.03	0.54	0.50	0.75	0.96
Control Delay	62.7	58.6	29.5	101.1	39.9	5.4	120.1	43.7	4.4	76.1	67.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.7	58.6	29.5	101.1	39.9	5.4	120.1	43.7	4.4	76.1	67.3
LOS	E	E	C	F	D	A	F	D	A	E	E
Approach Delay		47.8			80.8			29.4			68.6
Approach LOS		D			F			C			E

Intersection Summary

Cycle Length: 140
 Actuated Cycle Length: 125.3
 Natural Cycle: 120
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.11
 Intersection Signal Delay: 56.3
 Intersection LOS: E
 Intersection Capacity Utilization 91.7%
 ICU Level of Service F
 Analysis Period (min) 15

Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)

08/18/2022



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖↗	↖	↑↗	
Traffic Volume (veh/h)	254	109	270	1146	350	119	210	462	1024	140	575	200
Future Volume (veh/h)	254	109	270	1146	350	119	210	462	1024	140	575	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	289	124	154	1302	398	68	239	525	582	159	653	113
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	356	203	391	1245	670	567	247	1003	1958	186	727	126
Arrive On Green	0.15	0.16	0.16	0.52	0.54	0.54	0.21	0.40	0.40	0.16	0.35	0.35
Sat Flow, veh/h	3563	1870	1585	3563	1870	1584	1781	3741	3170	1781	3106	537
Grp Volume(v), veh/h	289	124	154	1302	398	68	239	525	582	159	393	373
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1584	1781	1870	1585	1781	1870	1772
Q Serve(g_s), s	9.3	7.3	9.5	41.4	17.1	2.5	15.8	12.6	9.4	10.3	23.6	23.7
Cycle Q Clear(g_c), s	9.3	7.3	9.5	41.4	17.1	2.5	15.8	12.6	9.4	10.3	23.6	23.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.30
Lane Grp Cap(c), veh/h	356	203	391	1245	670	567	247	1003	1958	186	438	415
V/C Ratio(X)	0.81	0.61	0.39	1.05	0.59	0.12	0.97	0.52	0.30	0.85	0.90	0.90
Avail Cap(c_a), veh/h	535	489	634	1245	862	730	247	1003	1958	248	491	465
HCM Platoon Ratio	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	47.3	34.9	28.2	21.6	18.2	46.7	29.7	8.5	49.1	37.1	37.1
Incr Delay (d2), s/veh	5.7	3.0	0.6	38.3	0.8	0.1	48.5	0.5	0.1	19.2	17.8	18.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	3.4	3.4	20.1	6.1	0.9	9.7	5.2	2.5	5.2	11.4	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.0	50.3	35.6	66.5	22.4	18.3	95.2	30.2	8.6	68.3	54.9	56.0
LnGrp LOS	E	D	D	F	C	B	F	C	A	E	D	E
Approach Vol, veh/h		567			1768			1346			925	
Approach Delay, s/veh		48.7			54.7			32.4			57.7	
Approach LOS		D			D			C			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	36.9	46.0	18.6	21.0	32.8	16.4	48.2				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	16.5	31.0	41.4	31.0	16.4	31.1	17.8	54.6				
Max Q Clear Time (g_c+I1), s	12.3	14.6	43.4	11.5	17.8	25.7	11.3	19.1				
Green Ext Time (p_c), s	0.1	5.5	0.0	1.0	0.0	2.1	0.5	2.5				
Intersection Summary												
HCM 6th Ctrl Delay			48.1									
HCM 6th LOS			D									

Timings
7: San Jacinto Av & Wilson Av

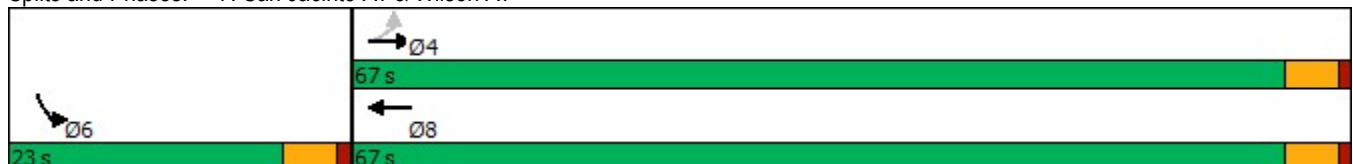


Lane Group	EBL	EBT	WBT	SBL
Lane Configurations				
Traffic Volume (vph)	99	928	1258	13
Future Volume (vph)	99	928	1258	13
Turn Type	Perm	NA	NA	Prot
Protected Phases		4	8	6
Permitted Phases	4			
Detector Phase	4	4	8	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.6	22.6	22.6	22.6
Total Split (s)	67.0	67.0	67.0	23.0
Total Split (%)	74.4%	74.4%	74.4%	25.6%
Yellow Time (s)	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	None	None	Min
Act Effct Green (s)	48.0	48.0	48.0	12.6
Actuated g/C Ratio	0.68	0.68	0.68	0.18
v/c Ratio	0.77	0.88	0.64	0.63
Control Delay	45.4	19.5	7.8	31.5
Queue Delay	0.0	0.3	0.0	0.0
Total Delay	45.4	19.8	7.8	31.5
LOS	D	B	A	C
Approach Delay		22.3	7.8	31.5
Approach LOS		C	A	C

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 70.6
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 15.5
 Intersection LOS: B
 Intersection Capacity Utilization 67.3%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 7: San Jacinto Av & Wilson Av



HCM 6th Signalized Intersection Summary
7: San Jacinto Av & Wilson Av

Prairie View Apartments (JN 13747)
08/18/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↑	↶↷		↶	
Traffic Volume (veh/h)	99	928	1258	13	13	163
Future Volume (veh/h)	99	928	1258	13	13	163
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	119	1118	1516	16	16	196
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	270	1319	2541	27	20	240
Arrive On Green	0.71	0.71	0.71	0.71	0.16	0.16
Sat Flow, veh/h	339	1870	3696	38	120	1472
Grp Volume(v), veh/h	119	1118	747	785	213	0
Grp Sat Flow(s),veh/h/ln	339	1870	1777	1864	1599	0
Q Serve(g_s), s	19.2	30.6	14.9	15.0	9.0	0.0
Cycle Q Clear(g_c), s	34.2	30.6	14.9	15.0	9.0	0.0
Prop In Lane	1.00			0.02	0.08	0.92
Lane Grp Cap(c), veh/h	270	1319	1253	1315	261	0
V/C Ratio(X)	0.44	0.85	0.60	0.60	0.82	0.00
Avail Cap(c_a), veh/h	333	1671	1587	1664	421	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.9	7.5	5.2	5.2	28.2	0.0
Incr Delay (d2), s/veh	1.1	3.5	0.5	0.4	6.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	7.2	2.9	3.1	3.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.1	11.0	5.7	5.7	34.7	0.0
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h		1237	1532		213	
Approach Delay, s/veh		11.4	5.7		34.7	
Approach LOS		B	A		C	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				53.9	16.0	53.9
Change Period (Y+Rc), s				4.6	4.6	4.6
Max Green Setting (Gmax), s				62.4	18.4	62.4
Max Q Clear Time (g_c+I1), s				36.2	11.0	17.0
Green Ext Time (p_c), s				13.1	0.4	14.2

Intersection Summary

HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Timings
9: San Jacinto Av & Murrieta Rd

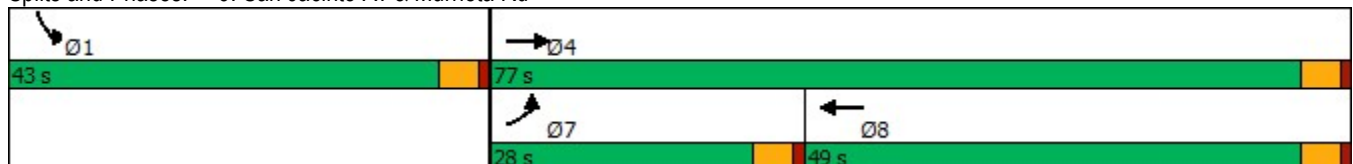


Lane Group	EBL	EBT	WBT	SBL
Lane Configurations				
Traffic Volume (vph)	246	736	981	97
Future Volume (vph)	246	736	981	97
Turn Type	Prot	NA	NA	Prot
Protected Phases	7	4	8	1
Permitted Phases				
Detector Phase	7	4	8	1
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	22.6	22.6	9.6
Total Split (s)	28.0	77.0	49.0	43.0
Total Split (%)	23.3%	64.2%	40.8%	35.8%
Yellow Time (s)	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6
Lead/Lag	Lead		Lag	
Lead-Lag Optimize?	Yes		Yes	
Recall Mode	None	None	None	None
Act Effct Green (s)	21.2	68.3	42.3	31.4
Actuated g/C Ratio	0.19	0.63	0.39	0.29
v/c Ratio	0.84	0.39	0.90	0.90
Control Delay	65.9	11.4	43.1	46.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	65.9	11.4	43.1	46.3
LOS	E	B	D	D
Approach Delay		25.0	43.1	46.3
Approach LOS		C	D	D

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 109.1	
Natural Cycle: 50	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 36.5	Intersection LOS: D
Intersection Capacity Utilization 81.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 9: San Jacinto Av & Murrieta Rd



HCM 6th Signalized Intersection Summary
 9: San Jacinto Av & Murrieta Rd

Prairie View Apartments (JN 13747)
 08/18/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	↶	↷	↶		↶		
Traffic Volume (veh/h)	246	736	981	67	97	356	
Future Volume (veh/h)	246	736	981	67	97	356	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach		No	No		No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	289	866	1154	79	114	419	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	318	2089	1247	85	115	423	
Arrive On Green	0.18	0.59	0.37	0.37	0.33	0.33	
Sat Flow, veh/h	1781	3647	3468	231	347	1274	
Grp Volume(v), veh/h	289	866	607	626	534	0	
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1829	1624	0	
Q Serve(g_s), s	18.4	15.3	37.8	37.9	37.8	0.0	
Cycle Q Clear(g_c), s	18.4	15.3	37.8	37.9	37.8	0.0	
Prop In Lane	1.00			0.13	0.21	0.78	
Lane Grp Cap(c), veh/h	318	2089	657	676	540	0	
V/C Ratio(X)	0.91	0.41	0.92	0.93	0.99	0.00	
Avail Cap(c_a), veh/h	361	2227	683	703	540	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh	46.5	13.0	34.9	34.9	38.4	0.0	
Incr Delay (d2), s/veh	24.3	0.1	18.1	17.9	35.9	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	10.0	5.6	18.7	19.2	20.0	0.0	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	70.8	13.1	53.0	52.8	74.3	0.0	
LnGrp LOS	E	B	D	D	E	A	
Approach Vol, veh/h		1155	1233		534		
Approach Delay, s/veh		27.5	52.9		74.3		
Approach LOS		C	D		E		
Timer - Assigned Phs				4	6	7	8
Phs Duration (G+Y+Rc), s				72.5	43.0	25.2	47.3
Change Period (Y+Rc), s				4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s				72.4	38.4	23.4	44.4
Max Q Clear Time (g_c+I1), s				17.3	39.8	20.4	39.9
Green Ext Time (p_c), s				6.6	0.0	0.3	2.8

Intersection Summary

HCM 6th Ctrl Delay	46.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Timings
2: Redlands Av & San Jacinto Av

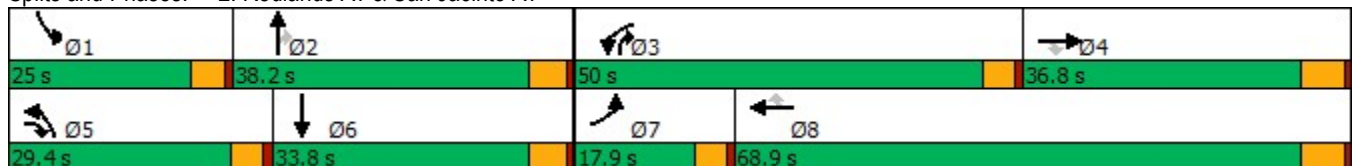


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖↗	↑	↖	↖↗	↑	↖	↖	↑↑	↖↗	↖	↑↗
Traffic Volume (vph)	175	182	243	1053	197	113	284	591	1362	181	559
Future Volume (vph)	175	182	243	1053	197	113	284	591	1362	181	559
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8		5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	8	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	10.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	36.8	9.6	9.6	30.8	30.8	9.6	32.1	9.6	9.6	32.1
Total Split (s)	17.9	36.8	29.4	50.0	68.9	68.9	29.4	38.2	50.0	25.0	33.8
Total Split (%)	11.9%	24.5%	19.6%	33.3%	45.9%	45.9%	19.6%	25.5%	33.3%	16.7%	22.5%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	4.8	3.6	4.1	3.6	3.6	4.1
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	5.8	4.6	5.1	4.6	4.6	5.1
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	Min	None	None	Min
Act Effct Green (s)	11.7	20.1	50.7	45.5	53.8	53.8	24.9	35.2	85.8	18.4	28.8
Actuated g/C Ratio	0.08	0.14	0.36	0.33	0.39	0.39	0.18	0.25	0.62	0.13	0.21
v/c Ratio	0.61	0.71	0.40	0.95	0.29	0.17	0.94	0.66	0.66	0.81	0.93
Control Delay	71.5	71.3	23.4	62.9	30.7	5.0	93.9	51.9	12.4	84.5	73.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Total Delay	71.5	71.3	23.4	62.9	30.7	5.0	93.9	51.9	12.7	84.5	73.2
LOS	E	E	C	E	C	A	F	D	B	F	E
Approach Delay		52.0			53.4			33.3			75.6
Approach LOS		D			D			C			E

Intersection Summary






























Cycle Length: 150
 Actuated Cycle Length: 139.3
 Natural Cycle: 120
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.95
 Intersection Signal Delay: 48.1
 Intersection LOS: D
 Intersection Capacity Utilization 91.5%
 ICU Level of Service F
 Analysis Period (min) 15

Splits and Phases: 2: Redlands Av & San Jacinto Av



HCM 6th Signalized Intersection Summary
2: Redlands Av & San Jacinto Av

Prairie View Apartments (JN 13747)
08/18/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 			 				 	 		 	
Traffic Volume (veh/h)	175	182	243	1053	197	113	284	591	1362	181	559	120
Future Volume (veh/h)	175	182	243	1053	197	113	284	591	1362	181	559	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	182	190	128	1097	205	61	296	616	759	189	582	63
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	235	485	1174	725	614	321	967	1865	216	662	72
Arrive On Green	0.10	0.19	0.19	0.49	0.58	0.58	0.27	0.39	0.39	0.18	0.30	0.30
Sat Flow, veh/h	3563	1870	1585	3563	1870	1584	1781	3741	3170	1781	3317	358
Grp Volume(v), veh/h	182	190	128	1097	205	61	296	616	759	189	328	317
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1584	1781	1870	1585	1781	1870	1805
Q Serve(g_s), s	6.1	11.9	7.2	35.3	6.7	2.1	19.7	16.3	15.5	12.6	20.3	20.4
Cycle Q Clear(g_c), s	6.1	11.9	7.2	35.3	6.7	2.1	19.7	16.3	15.5	12.6	20.3	20.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	242	235	485	1174	725	614	321	967	1865	216	373	360
V/C Ratio(X)	0.75	0.81	0.26	0.93	0.28	0.10	0.92	0.64	0.41	0.87	0.88	0.88
Avail Cap(c_a), veh/h	388	475	688	1326	967	819	362	1015	1905	298	440	425
HCM Platoon Ratio	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	48.1	29.6	29.6	17.0	16.1	43.7	32.7	11.2	49.0	41.3	41.3
Incr Delay (d2), s/veh	4.7	6.5	0.3	11.4	0.2	0.1	26.9	1.2	0.1	18.6	16.0	16.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	5.5	2.6	13.9	2.6	0.7	10.3	6.7	4.1	6.2	9.8	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.5	54.5	29.9	41.0	17.3	16.1	70.5	33.9	11.3	67.6	57.3	58.3
LnGrp LOS	E	D	C	D	B	B	E	C	B	E	E	E
Approach Vol, veh/h		500			1363			1671			834	
Approach Delay, s/veh		49.7			36.3			30.1			60.0	
Approach LOS		D			D			C			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.4	36.6	44.8	21.1	26.6	29.5	12.9	53.1				
Change Period (Y+Rc), s	4.6	5.1	4.6	5.8	4.6	5.1	4.6	5.8				
Max Green Setting (Gmax), s	20.4	33.1	45.4	31.0	24.8	28.7	13.3	63.1				
Max Q Clear Time (g_c+I1), s	14.6	18.3	37.3	13.9	21.7	22.4	8.1	8.7				
Green Ext Time (p_c), s	0.2	6.6	2.9	1.2	0.3	1.9	0.2	1.3				
Intersection Summary												
HCM 6th Ctrl Delay			40.0									
HCM 6th LOS			D									

Timings
7: San Jacinto Av & Wilson Av

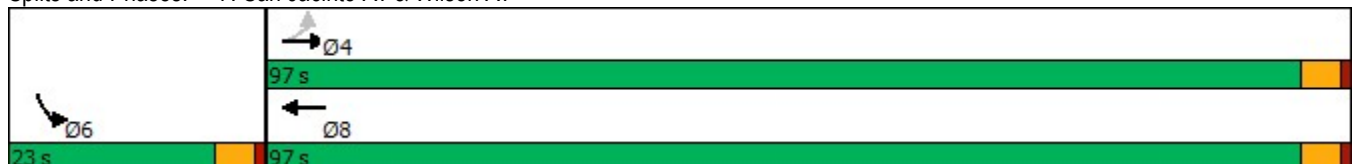


Lane Group	EBL	EBT	WBT	SBL
Lane Configurations				
Traffic Volume (vph)	140	1255	1187	16
Future Volume (vph)	140	1255	1187	16
Turn Type	Perm	NA	NA	Prot
Protected Phases		4	8	6
Permitted Phases	4			
Detector Phase	4	4	8	6
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	22.6	22.6	22.6	22.6
Total Split (s)	97.0	97.0	97.0	23.0
Total Split (%)	80.8%	80.8%	80.8%	19.2%
Yellow Time (s)	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	None	None	Min
Act Effct Green (s)	78.7	78.7	78.7	8.8
Actuated g/C Ratio	0.81	0.81	0.81	0.09
v/c Ratio	0.53	0.91	0.46	0.55
Control Delay	11.8	18.7	3.6	21.7
Queue Delay	0.0	2.0	0.0	0.0
Total Delay	11.8	20.7	3.6	21.7
LOS	B	C	A	C
Approach Delay		19.8	3.6	21.7
Approach LOS		B	A	C

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 97.1	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 12.8	Intersection LOS: B
Intersection Capacity Utilization 81.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 7: San Jacinto Av & Wilson Av



HCM 6th Signalized Intersection Summary
7: San Jacinto Av & Wilson Av

Prairie View Apartments (JN 13747)
08/18/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↑	↶↷		↶	
Traffic Volume (veh/h)	140	1255	1187	11	16	110
Future Volume (veh/h)	140	1255	1187	11	16	110
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	154	1379	1304	12	18	66
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	382	1534	2959	27	26	95
Arrive On Green	0.82	0.82	0.82	0.82	0.08	0.08
Sat Flow, veh/h	417	1870	3702	33	344	1262
Grp Volume(v), veh/h	154	1379	642	674	85	0
Grp Sat Flow(s),veh/h/ln	417	1870	1777	1864	1626	0
Q Serve(g_s), s	14.5	44.4	9.0	9.0	4.5	0.0
Cycle Q Clear(g_c), s	23.5	44.4	9.0	9.0	4.5	0.0
Prop In Lane	1.00			0.02	0.21	0.78
Lane Grp Cap(c), veh/h	382	1534	1457	1529	123	0
V/C Ratio(X)	0.40	0.90	0.44	0.44	0.69	0.00
Avail Cap(c_a), veh/h	477	1963	1865	1957	340	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.5	5.4	2.2	2.2	39.7	0.0
Incr Delay (d2), s/veh	0.7	5.0	0.2	0.2	6.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	6.6	0.9	1.0	2.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.2	10.4	2.4	2.4	46.5	0.0
LnGrp LOS	A	B	A	A	D	A
Approach Vol, veh/h		1533	1316		85	
Approach Delay, s/veh		10.0	2.4		46.5	
Approach LOS		B	A		D	
Timer - Assigned Phs				4	6	8
Phs Duration (G+Y+Rc), s				76.8	11.2	76.8
Change Period (Y+Rc), s				4.6	4.6	4.6
Max Green Setting (Gmax), s				92.4	18.4	92.4
Max Q Clear Time (g_c+I1), s				46.4	6.5	11.0
Green Ext Time (p_c), s				25.7	0.1	11.2

Intersection Summary

HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Timings
9: San Jacinto Av & Murrieta Rd



Lane Group	EBL	EBT	WBT	SBL
Lane Configurations				
Traffic Volume (vph)	374	956	710	51
Future Volume (vph)	374	956	710	51
Turn Type	Prot	NA	NA	Prot
Protected Phases	7	4	8	1
Permitted Phases				
Detector Phase	7	4	8	1
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	22.6	22.6	9.6
Total Split (s)	45.0	87.0	42.0	33.0
Total Split (%)	37.5%	72.5%	35.0%	27.5%
Yellow Time (s)	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	4.6	4.6	4.6
Lead/Lag	Lead		Lag	
Lead-Lag Optimize?	Yes		Yes	
Recall Mode	None	None	None	None
Act Effct Green (s)	26.1	59.0	27.9	13.8
Actuated g/C Ratio	0.32	0.71	0.34	0.17
v/c Ratio	0.75	0.42	0.74	0.73
Control Delay	36.5	5.8	30.2	27.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	36.5	5.8	30.2	27.6
LOS	D	A	C	C
Approach Delay		14.4	30.2	27.6
Approach LOS		B	C	C

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 82.8
 Natural Cycle: 55
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 21.1
 Intersection Capacity Utilization 70.6%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service C

Splits and Phases: 9: San Jacinto Av & Murrieta Rd



HCM 6th Signalized Intersection Summary
 9: San Jacinto Av & Murrieta Rd

Prairie View Apartments (JN 13747)
 08/18/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations							
Traffic Volume (veh/h)	374	956	710	74	51	220	
Future Volume (veh/h)	374	956	710	74	51	220	
Initial Q (Qb), veh	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach		No	No		No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	416	1062	789	82	57	244	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Percent Heavy Veh, %	2	2	2	2	2	2	
Cap, veh/h	478	2314	1032	107	67	286	
Arrive On Green	0.27	0.65	0.32	0.32	0.22	0.22	
Sat Flow, veh/h	1781	3647	3342	338	306	1309	
Grp Volume(v), veh/h	416	1062	431	440	302	0	
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1810	1620	0	
Q Serve(g_s), s	15.7	10.5	15.4	15.5	12.6	0.0	
Cycle Q Clear(g_c), s	15.7	10.5	15.4	15.5	12.6	0.0	
Prop In Lane	1.00			0.19	0.19	0.81	
Lane Grp Cap(c), veh/h	478	2314	564	575	354	0	
V/C Ratio(X)	0.87	0.46	0.76	0.76	0.85	0.00	
Avail Cap(c_a), veh/h	1019	4148	941	959	652	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh	24.6	6.1	21.7	21.7	26.5	0.0	
Incr Delay (d2), s/veh	5.0	0.1	2.2	2.2	5.9	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	6.5	2.5	5.9	6.0	5.1	0.0	
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	29.7	6.3	23.9	23.9	32.3	0.0	
LnGrp LOS	C	A	C	C	C	A	
Approach Vol, veh/h		1478	871		302		
Approach Delay, s/veh		12.9	23.9		32.3		
Approach LOS		B	C		C		
Timer - Assigned Phs				4	6	7	8
Phs Duration (G+Y+Rc), s				50.6	20.0	23.5	27.0
Change Period (Y+Rc), s				4.6	4.6	4.6	4.6
Max Green Setting (Gmax), s				82.4	28.4	40.4	37.4
Max Q Clear Time (g_c+I1), s				12.5	14.6	17.7	17.5
Green Ext Time (p_c), s				9.0	0.8	1.2	5.0

Intersection Summary

HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.