URBAN | CROSSROADS

PATTERSON & CAJALCO WAREHOUSE (PPT220024)

TRAFFIC ANALYSIS

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Reference Number	Agency	Date
14614-04 TA Report	County of Riverside	November 21, 2023

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CAMUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CMP	Congestion Management Program
DIF	Development Impact Fee
EAP	Existing Plus Ambient Growth Plus Project
EAPC	Existing Plus Ambient Growth Plus Project Plus Cumulative
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
OPR	Office of Planning and Research
PHF	Peak Hour Factor
Project	Patterson & Cajalco Warehouse
RCTC	Riverside County Transportation Commission
RTA	Riverside Transit Authority
SCAG	Southern California Association of Governments
sf	Square Feet
SHS	State Highway System
TA	Traffic Analysis
TUMF	Transportation Uniform Mitigation Fee
WRCOG	Western Riverside Council of Governments
v/c	Volume to Capacity
VMT	Vehicle Miles Traveled
vphgpl	Vehicles per Hour Green per Lane

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1 INTRODUCTION

This report presents the results of the Traffic Analysis (TA) for Patterson & Cajalco Warehouse development ("Project"), which is located on the west side of Patterson Avenue and mid-point between Old Cajalco Road and Rider Street in the County of Riverside, 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 the County's General Plan level of service goals and policies. This TA 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 through consultation with County of Riverside staff during the scoping process. (1) The Project traffic study scoping agreement is provided in Appendix 1.1 of this TA, which has been reviewed and approved by the County of Riverside.

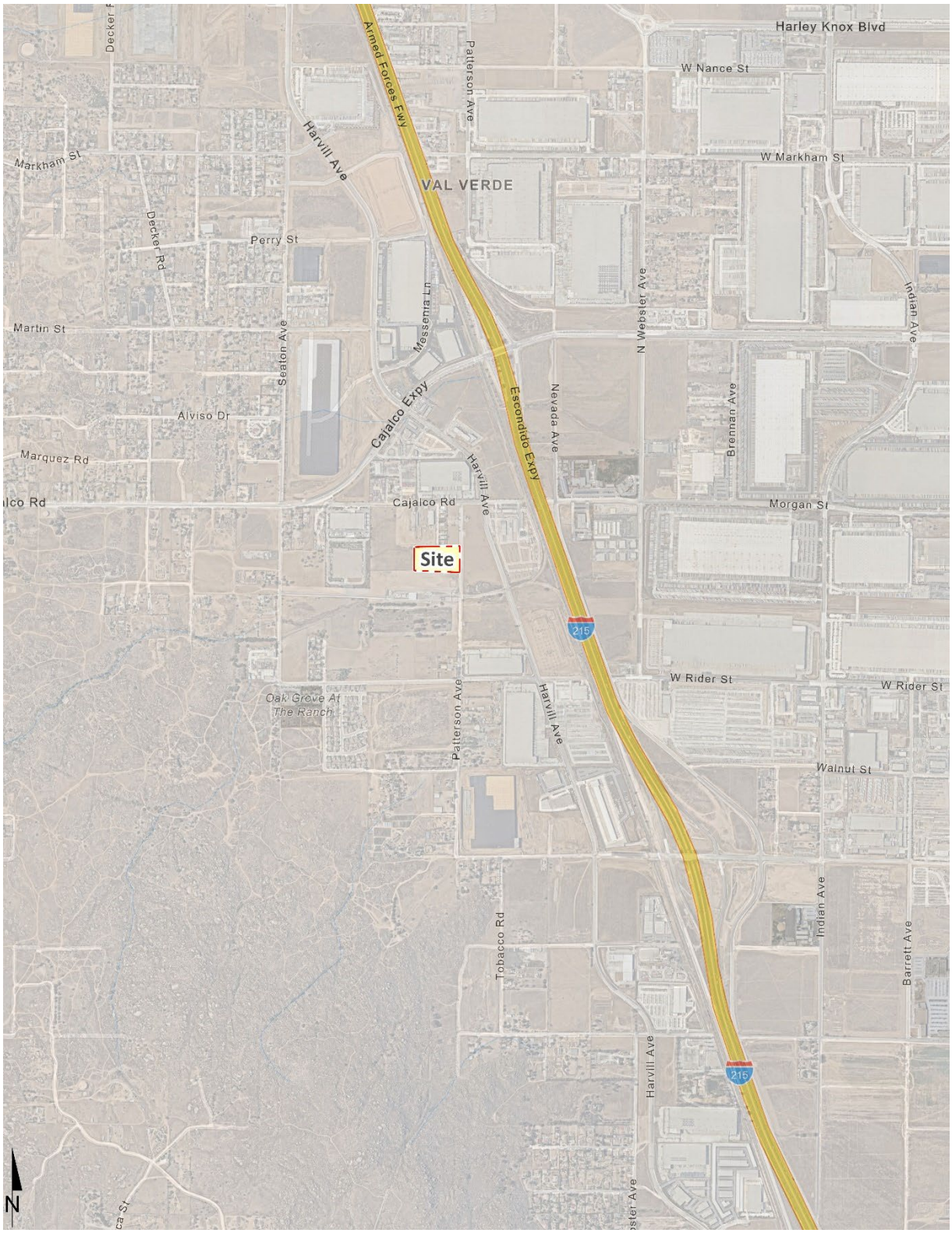
1.1 SUMMARY OF FINDINGS

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

- Patterson Avenue is not designated as a General Plan roadway adjacent to the Project, however, it is recommended that Patterson Avenue be constructed as an Industrial Collector (78-foot right-of-way). The Project should construct its ultimate half-section along its frontage between the northern and southern Project boundaries. Frontage improvements include pavement, curb-and-gutter, sidewalk, and landscaping improvements.
- Project to install stop controls for all egress traffic from each Project driveway. All driveways will allow full turning movements.

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 but would need to contribute to improvement needs identified at off-site intersections for future near-term cumulative traffic conditions. As such, the Project Applicant's responsibility for the Project's contributions towards deficient off-site intersections is fulfilled through payment into pre-existing fee programs (if applicable) and/or fair share contributions that would be assigned to the future construction of the identified recommended improvements. The Project Applicant would be required to pay requisite fees consistent with the County's requirements (see Section 7 Local and Regional Funding Mechanisms).

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 consists of the development of a 106,931 square foot warehouse building (general warehousing). Access is accommodated off of Patterson Avenue via two driveways. Both driveways will allow for full turning movements (no access restrictions) and will accommodate trucks at both driveways and passenger cars at the northern driveway (Driveway 1). Access to the I-215 Freeway is anticipated to occur via Placentia Avenue to the south, where a new interchange at the I-215 Freeway will be completed by Fall 2022, or via Cajalco Expressway/Ramona Expressway to the north. The Project is anticipated to have an Opening Year of 2024.

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 for the proposed warehouse use. (2) The Project is anticipated to generate a net total of 186 two-way trips per day with 18 AM peak hour trips and 18 PM peak hour trips (actual vehicles). 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 Ambient Growth plus Project (EAP) (2024) Conditions
- Existing plus Ambient Growth plus Project plus Cumulative (EAPC) (2024) Conditions

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. For a detailed discussion on the existing traffic counts, see Section 3.7 Existing Traffic Counts.

1.3.2 EAP (2024) CONDITIONS

The EAP (2024) conditions analysis determines the potential circulation system deficiencies based on a comparison of the EAP traffic conditions to Existing conditions. The roadway network is similar to Existing conditions except for new connections to be constructed by the Project. To account for background traffic growth, an ambient growth factor from Existing (2022) conditions of 4.04% (2 percent per year, compounded over 2 years) is included for EAP (2024) traffic conditions. The assumed ambient growth factor is based on the requirements per the County of Riverside traffic study guidelines. Consistent with County traffic study guidelines, the EAP analysis is intended to identify "Opening Year" deficiencies associated with the development of the proposed Project based on the expected background growth within the study area.

EXHIBIT 1-2: PRELIMINARY SITE PLAN

1.3.3 EAPC (2024) CONDITIONS

The EAPC (2024) traffic conditions analysis determines the potential near-term cumulative circulation system deficiencies. The roadway network is similar to Existing conditions except for new connections to be constructed by the Project. To account for background traffic growth, an ambient growth factor from Existing (2022) conditions of 4.04% (2 percent per year, compounded over 2 years) is included for EAPC (2024) traffic. Conservatively, this TA estimates the area ambient traffic growth and then adds traffic generated by other known or probable related projects. These related projects are at least in part already accounted for in the assumed ambient growth rates; and some of these related projects may not be implemented and operational within the 2024 Opening Year time frame assumed for the Project. The resulting traffic growth utilized in the TA (ambient growth factor plus traffic generated by related projects) would therefore tend to overstate rather than understate background cumulative traffic deficiencies under 2024 conditions.

1.4 STUDY AREA

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

The 4 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 County of Riverside 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 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 used throughout the County for the purposes of estimating a potential area of influence (i.e., study area).

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

#	Intersection	Jurisdiction	CMP?
1	Patterson Av. & Driveway 1	County of Riverside	No
2	Patterson Av. & Driveway 2	County of Riverside	No
3	Harvill Av. & Old Cajalco Rd.	County of Riverside	No
4	Harvill Av. & Rider St.	County of Riverside	No

EXHIBIT 1-3: STUDY AREA

The intent of a Congestion Management Program (CMP) is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. 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. (3) There are no study area intersections identified as a Riverside County CMP intersection.

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 EAP (2024) Traffic Conditions and Section 6 EAPC (2024) Traffic Conditions include the detailed analysis. A summary of LOS results for all analysis scenarios is presented on Table 1-2.

TABLE 1-2: SUMMARY OF LOS

		Existing		EAP		EAPC	
#	Intersection	AM	PM	AM	PM	AM	PM
1	Patterson Av. & Driveway 1	N/A	N/A				
2	Patterson Av. & Driveway 2	N/A	N/A				
3	Harvill Av. & Old Cajalco Rd.						
4	Harvill Av. & Rider St.						

= A - D = E = F

1.5.1 EXISTING (2022) CONDITIONS

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

1.5.2 EAP (2024) CONDITIONS

The study area intersections are anticipated to continue to operate at an acceptable LOS with the addition of Project traffic under EAP (2024) traffic conditions.

1.5.3 EAPC (2024) CONDITIONS

The following study area intersection is anticipated to operate at an unacceptable LOS under EAPC (2024) traffic conditions:

- Harvill Av. & Rider St. (#4) – LOS F AM and PM peak hour

1.6 RECOMMENDATIONS

1.6.1 SITE ADJACENT AND SITE ACCESS RECOMMENDATIONS

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

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

- Project to install a stop control on the eastbound approach (egress Project traffic) to implement a cross-street stop-controlled intersection. Driveway will allow full access and will serve passenger cars and trucks.
- Project northbound left turn stacking at Driveway 1 to be accommodated within the proposed painted median.

Recommendation 2 – Patterson Avenue & Driveway 2 (#2) – The following improvements are necessary to accommodate site access:

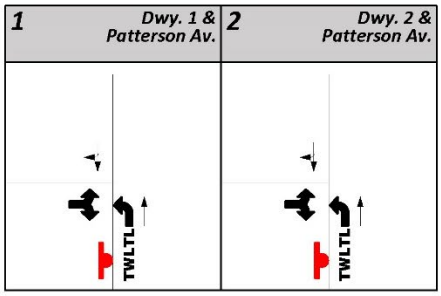
- Project to install a stop control on the eastbound approach (egress Project traffic) to implement a cross-street stop-controlled intersection. Driveway will allow full access and will serve trucks only.

Recommendation 3 – Patterson Avenue is a north-south oriented roadway located along the Project's western boundary. Project to construct Patterson Avenue at its ultimate half-section width as an Industrial Collector (78-foot right-of-way) from the Project's northbound and southern boundaries consistent with the County's standards. Frontage improvements include pavement, curb-and-gutter, sidewalk, and landscaping improvements.

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 County of Riverside sight distance standards at the time of preparation of final grading, landscape, and street improvement plans.

EXHIBIT 1-4: SITE ACCESS RECOMMENDATIONS



= Stop Sign Improvement
= Existing Lane
= Lane Improvement

1.6.2 OFF-SITE RECOMMENDATIONS

The recommended improvements needed to address the deficiencies identified under Existing (2022), EAP (2024), and EAPC (2024) traffic conditions are shown in Table 1-3. Improvements that appear under EAP (2024) that are not also identified for Existing (2022) traffic conditions would be the Project's responsibility to implement/construct in order to maintain acceptable LOS. For those remaining 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 or payment of fees (if applicable) that would be assigned to construction of the identified recommended improvements. The Project Applicant would be required to pay fair share fees and participate in pre-existing fee programs consistent with the County's requirements (see Section 7 Local and Regional Funding Mechanisms).

1.7 QUEUING ANALYSIS

The traffic modeling and signal timing optimization software package SimTraffic has been utilized to assess the queues. 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. These random simulations generated by SimTraffic have been utilized to determine the 95th percentile queue lengths observed for each applicable turn lane. A SimTraffic simulation has been recorded up to 5 times, during the weekday AM and weekday PM peak hours, and has been seeded for 15-minute periods with 60-minute recording intervals. The results of the queuing analysis are shown in Table 1-4 and the worksheets for the weekday AM and PM peak hours are provided in Appendix 1.2 of this report for EAPC (2024) traffic conditions. No site adjacent queues are anticipated with the proposed improvements.

TABLE 1-3: SUMMARY OF IMPROVEMENTS BY ANALYSIS SCENARIO

#	Intersection Location	Jurisdiction	Analysis Scenario EAP	Analysis Scenario EAPC	Improvements in DIF, TUMF, etc.[1]	Project Responsibility[2]	Project Fair Share[3]
4	Harvill Av. & Rider St.	County	- None	- Install a traffic signal	No	Fair Share	1.0%

[1] Improvements included in TUMF Nexus or County DIF programs have been identified as such.

[2] Program improvements constructed by Project may be eligible for fee credit. In lieu fee payment is at discretion of County.

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

[3] Total project fair share is applicable to the improvements which are not already included in the County DIF/TUMF for those intersections wholly or partially within the County.

TABLE 1-4: PEAK HOUR QUEUING ANALYSIS FOR SITE ADJACENT INTERSECTIONS

Intersection	Movement	Available Stacking Distance (Feet)[3]	95th Percentile Queue (Feet) AM Peak	95th Percentile Queue (Feet) PM Peak	Acceptable? [1] AM	Acceptable? [1] PM
Patterson Av. & Driveway 1	EBLTR	100	14	11	Yes	Yes
Patterson Av. & Driveway 2	EBLTR	100	22	38	Yes	Yes

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

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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 County of Riverside'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. (4) The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The County of Riverside requires signalized intersection operations analysis based on the methodology described in the HCM. (4) 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) 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.

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.

A saturation flow rate of 1900 has been utilized for all study area intersections. The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Customary practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g., PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (4)

2.2.2 UNSIGNALIZED INTERSECTIONS

The County of Riverside requires the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (4) 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 California Department of Transportation (Caltrans) and other public agencies to quantitatively justify or determine the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD). (5)

The signal warrant criteria for Existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (5) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions and for all future analysis scenarios for existing unsignalized intersections. Warrant 3 is appropriate to use for this TA because it provides specialized warrant criteria for intersections with rural characteristics. For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection. Rural warrants have been used as posted speed limits on the major roadways with unsignalized intersections are over 40 miles per hour while urban warrants have been used where speeds are 40 miles per hour or below.

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. Similarly, the speed limit has been used as the basis for determining the use of Urban and Rural warrants. Traffic signal warrant analyses were performed for the following study area intersection shown on Table 2-3:

TABLE 2-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

#	Intersection
1	Patterson Av. & Driveway 1
2	Patterson Av. & Driveway 2
3	Harvill Av. & Old Cajalco Rd.
4	Harvill Av. & Rider St.

The Existing conditions traffic signal warrant analysis is presented in the subsequent section, Section 3 Area Conditions of this report. The traffic signal warrant analyses for future conditions are presented in Section 5 EAP (2024) Traffic Conditions and Section 6 EAPC (2024) Traffic Conditions of this report. It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant. A traffic signal warrant analysis has not been conducted for Driveway 4 on Harvill Avenue as the driveway is proposed to restrict left turns.

2.4 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

The definition of an intersection deficiency has been obtained from the County of Riverside General Plan. Riverside County General Plan Policy C 2.1 states that the County will maintain the following County-wide target LOS:

The following minimum target levels of service have been designated for the review of development proposals in the unincorporated areas of Riverside County with respect to transportation impacts on roadways designated in the Riverside County Circulation Plan which are currently County maintained, or are intended to be accepted into the County maintained roadway system:

- *LOS C shall apply to all development proposals in any area of the Riverside County not located within the boundaries of an Area Plan, as well as those areas located within the following Area Plans: REMAP, Eastern Coachella Valley, Desert Center, Palo Verde Valley, and those non-Community Development areas of the Elsinore, Lake Mathews/Woodcrest, Mead Valley and Temescal Canyon Area Plans.*
- *LOS D shall apply to all development proposals located within any of the following Area Plans: Eastvale, Jurupa, Highgrove, Reche Canyon/Badlands, Lakeview/Nuevo, Sun City/Menifee Valley, Harvest Valley/Winchester, Southwest Area, The Pass, San Jacinto Valley, Western Coachella Valley and those Community Development Areas of the Elsinore, Lake Mathews/Woodcrest, Mead Valley and Temescal Canyon Area Plans.*
- *LOS E may be allowed by the Board of Supervisors within designated areas where transit-oriented development and walkable communities are proposed.*

The applicable minimum LOS utilized for the purposes of this analysis is LOS D per the County-wide target LOS for projects located within the Mead Valley Area Plan.

2.5 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 County of Riverside. To determine whether the addition of project-related traffic at a study intersection would result in a deficiency, the following will be utilized:

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

2.6 PROJECT FAIR SHARE CALCULATION METHODOLOGY

Improvements found to be included in the TUMF and/or DIF will be identified as such. For improvements that do not appear to be in either of the pre-existing fee programs, a fair share contribution based on the Project's proportional share may be imposed in order to address the Project's share of deficiencies in lieu of construction. It should be noted that fair share calculations are for informational purposes only and the County Traffic Engineer will determine the appropriate improvements to be implemented by a project (to be identified in the conditions of approval). The Project's fair share contribution is determined based on the following equations, which are the ratio of Project traffic to net new traffic (where net new traffic is the future traffic less existing traffic):

Project Fair Share % = Project (EAPC) Traffic / (EAPC Total Traffic – Existing Traffic)

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3 AREA CONDITIONS

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

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the scoping agreement with County of Riverside staff (Appendix 1.1), the study area includes a total of 6 existing and future intersections as shown previously on Exhibit 1-3, where the Project is anticipated to contribute 50 or more peak hour trips or were added at the County's request during the scoping process. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 COUNTY OF RIVERSIDE GENERAL PLAN CIRCULATION ELEMENT

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

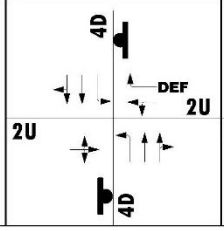
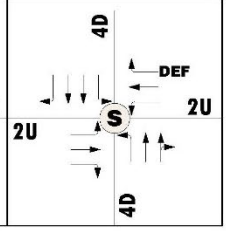
Major Highways are four-lane roadways and may include a painted median. These roadways typically have a 118-foot right-of-way and a 76-foot curb-to-curb measurement. These roadways typically direct traffic through major development areas. The following study area roadway within the County of Riverside is classified as a Major Highway:

- Harvill Avenue

Secondary Highways are four-lane roadways. These roadways typically have a 100-foot right-of-way and a 64-foot curb-to-curb measurement. The following study area roadway within the County of Riverside is classified as a Secondary Highway:

- Rider Street
- Patterson Avenue south of Rider Street

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

1 Dwy. 1 & Patterson Av.	2 Dwy. 2 & Patterson Av.	3 Harvill Av. & Old Cajalco Rd.	4 Harvill Av. & Rider St.
Future Intersection	Future Intersection		

S = All Way Stop
= Stop Sign
4 = Number of Lanes
D = Divided
U = Undivided
DEF = Defacto Right Turn
= Speed Limit (MPH)

EXHIBIT 3-2: COUNTY OF RIVERSIDE GENERAL PLAN CIRCULATION ELEMENT

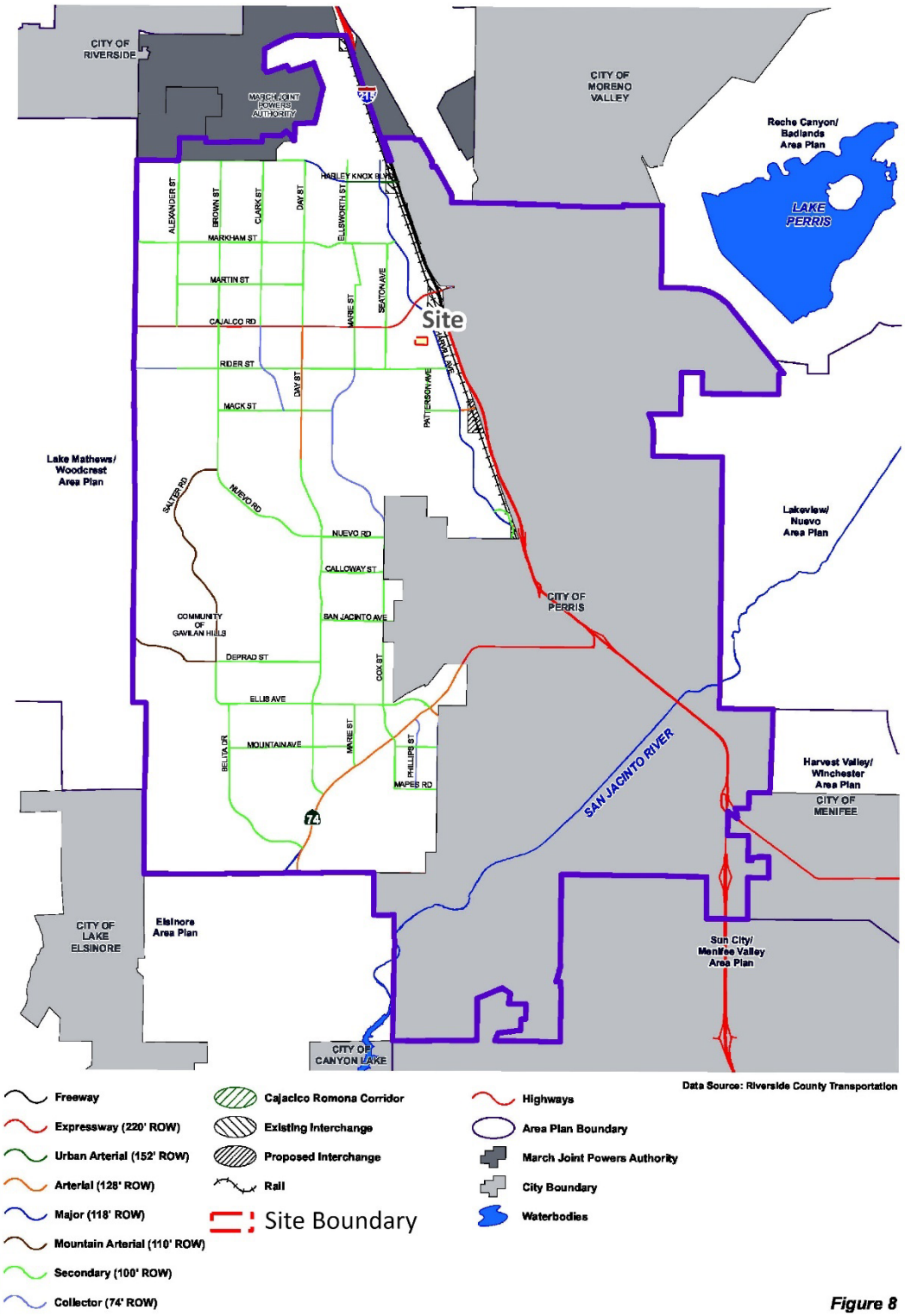
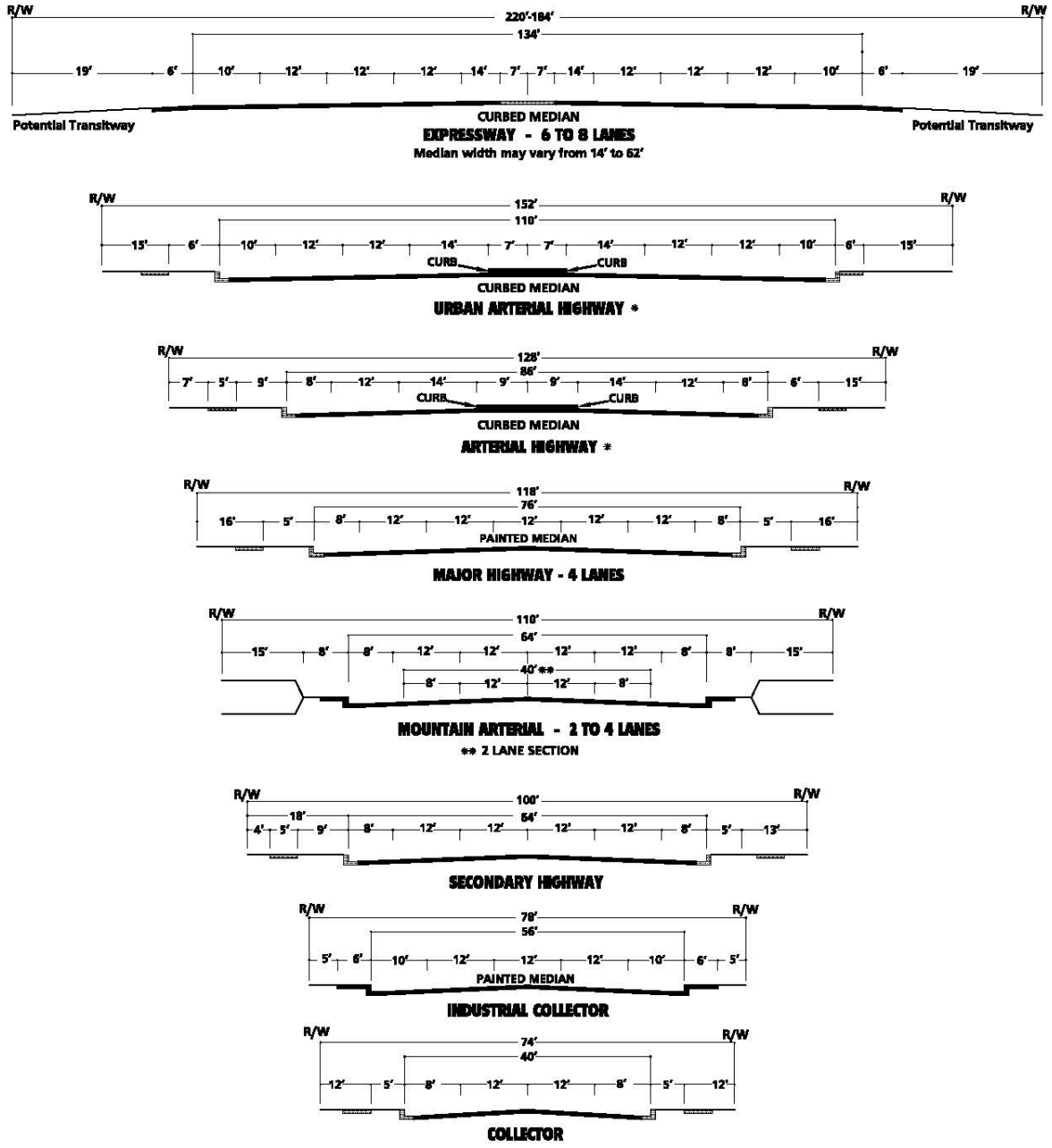


Figure 8

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



3.3 BICYCLE & PEDESTRIAN FACILITIES

The County of Riverside bike networks is shown on Exhibit 3-4. As shown on Exhibit 3-4, there is a planned Regional Trail (Urban/Suburban) trail proposed along Placentia Avenue south of the Project, and Class II (on-street, striped) bike lanes along Ramona Expressway/Cajalco Expressway. Exhibit 3-5 illustrates the existing crosswalks throughout the study area. As shown on Exhibit 3-5, there are limited pedestrian facilities in place in the vicinity of the Project with improvements primarily along Rider Street west of Harvill Avenue, along Old Cajalco Road on the north side of the road, and along Harvill Avenue at Rider Street. Development of the proposed Project would provide new pedestrian facilities (to be constructed by the Project) along its frontages on Patterson Avenue and Harvill Avenue (consistent with the County's roadway standards).

3.4 TRANSIT SERVICE

The study area is currently served by Riverside Transit Agency (RTA) with bus service along the I-215 Freeway and Cajalco Expressway/Ramona Expressway. RTA Route 27 runs along the I-215 Freeway and stops at Perris High School (on Nuevo Road) and runs between the Perris Station Transit Center and the Galleria at Tyler in the City of Riverside. The closest route would be RTA Route 41 which runs along Ramona/Cajalco Expressway and has existing bus stops to the west and east of Harvill Avenue, which is located approximately ½ mile north or the Project. There are currently no transit routes or stops along the Harvill Avenue corridor near the proposed Project. Transit service is reviewed and updated by RTA periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

3.5 TRUCK ROUTES

The County of Riverside's General Plan does not provide designated truck routes. Trucks are prohibited on certain County roadways through the Municipal Code through weight restrictions. Truck routes for the proposed Project have been determined based on discussions with County staff. These truck routes serve both the proposed Project and future cumulative development projects throughout the study area. Sensitive land uses have also been taken into consideration as part of determining the best routes for future trucks.

EXHIBIT 3-4: COUNTY OF RIVERSIDE GENERAL PLAN BIKE NETWORK

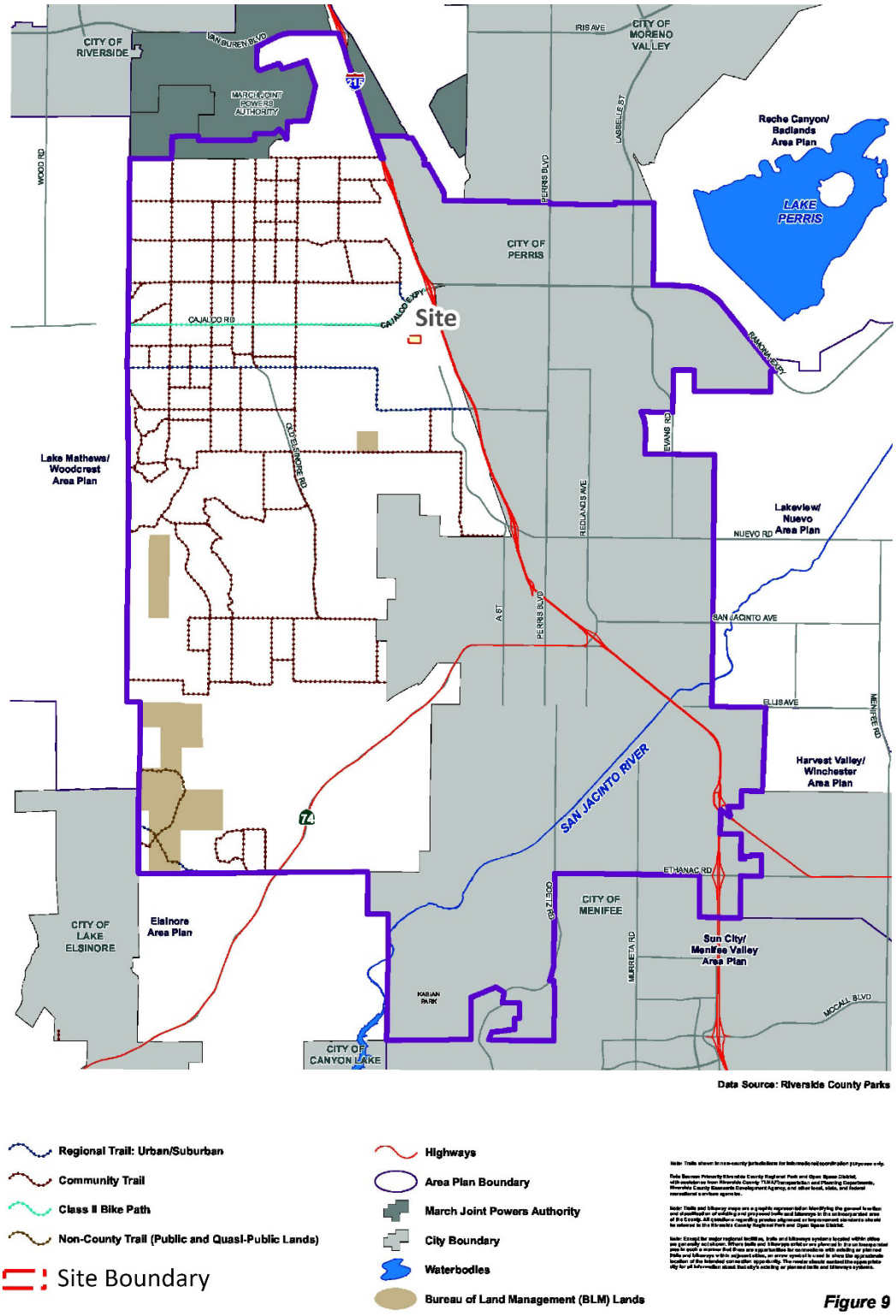


Figure 9

EXHIBIT 3-5: EXISTING PEDESTRIAN FACILITIES

3.6 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 and May 2022 when local schools were in session and operating on normal bell schedules. 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)

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.

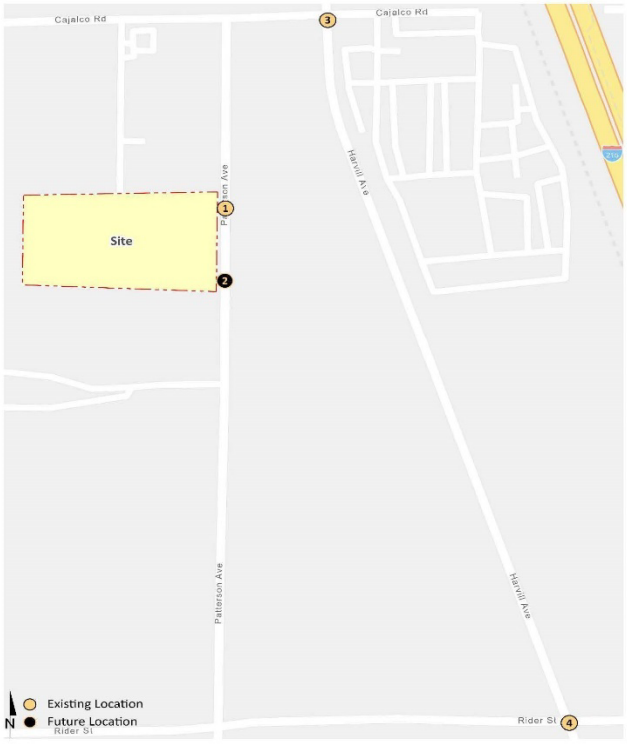
Existing weekday ADT volumes on arterial highways throughout the study area are shown on Exhibit 3-6. Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 14.6 = 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 6.8 percent. As such, the above equation utilizing a factor of 14.6 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 6.8 percent (i.e., 1/0.068 = 14.6) and was assumed to sufficiently estimate ADT volumes for planning-level analyses. This factor is consistent with that used for other traffic studies within the study area. Existing weekday AM and weekday PM peak hour intersection volumes are shown on Exhibit 3-6.

Volumes reported on the exhibits are expressed in actual vehicles. However, consistent with the County's guidelines, the peak hour intersection operations analysis utilizes passenger car equivalent (PCE) volumes. PCEs allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in the County's Guidelines. PCE volumes can be found in Appendix 3.1.

EXHIBIT 3-6: EXISTING (2022) TRAFFIC VOLUMES



1 Patterson Av. & Driveway 1

Nominal

1(2) ↓

0(2) →

Nominal

2 Patterson Av. & Driveway 2

Nominal

1(2) ↓

0(2) →

Nominal

3 Harvill Av. & Old Cajalco Rd.

12,200

36(22) ↲ 201(416) ↓ 8(4) ↳

20(54) ↳

3(13) ↲

↰ 2(16)

↰ 3(5)

↰ 5(4) → 697(323) ↱ 7(2)

550

1,350

11,150

4 Harvill Av. & Rider St.

8,700

16(31) ↲ 182(430) ↓ 13(1) ↳

43(27) ↳

1(1) →

29(42) ↲

↱ 13(4)

↰ 2(3)

↰ 23(22) → 272(261) ↱ 4(3)

200

1,800

11,100

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

Average Daily Trips

3.7 INTERSECTION OPERATIONS ANALYSIS

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

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

#	Intersection	Traffic Control[2]	Delay[1] (secs.)		Level of Service	
			AM	PM	AM	PM
1	Patterson Av. & Driveway 1		Future Intersection			
2	Patterson Av. & Driveway 2		Future Intersection			
3	Harvill Av. & Old Cajalco Rd.	CSS	16.7	14.0	C	B
4	Harvill Av. & Rider St.[3]	AWS	9.5	12.2	A	B

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

2 CSS = Cross-street Stop; AWS = All Way Stop

3 Intersection includes a SB right turn lane that is not coded due to limitations of the HCM for AWS intersections.

3.8 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. There are no unsignalized study area intersections that currently warrant a traffic signal for Existing traffic conditions. Existing conditions traffic signal warrant analysis worksheets are provided in Appendix 3.3.

4 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network. The Project consists of the development of a 106,931 square foot warehouse building (general warehousing). Access is accommodated off of Patterson Avenue via two driveways. Regional access to the Project site is available from the I-215 Freeway via the existing Ramona Expressway and future Placentia Avenue interchanges.

4.1 PROJECT TRIP GENERATION

4.1.1 PROPOSED 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) was used to calculate the trip generation for the proposed warehousing use (ITE Land Use Code 150). (2) The following trip generation rates and vehicle mix were utilized for calculating the trip generation for the proposed Project:

- Warehousing – ITE Land Use Code 150 has been used to derive site specific trip generation estimates for 106,931 square feet of the proposed Project. A warehouse is primarily devoted to the storage of materials but may also include office and maintenance areas. The vehicle mix has also been obtained from the ITE's latest Trip Generation Manual. The truck percentages were further broken down by axle type per the following South Coast Air Quality Management District (SCAQMD) recommended truck mix: 2-Axle = 16.7%; 3-Axle = 20.7%; 4+-Axle = 62.6%.

PCE factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). PCEs allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and LOS analyses. The PCE factors are consistent with the recommended PCE factors In the County's Guidelines. Trip generation rates are summarized on Table 4-1 for actual vehicles and PCE.

TABLE 4-1: TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
Warehousing[3]	TSF	150	0.131	0.039	0.170	0.050	0.130	0.180	1.710
Passenger Cars (AM=88.2%, PM=83.3%, Daily=64.9%)			0.120	0.030	0.150	0.034	0.116	0.150	1.110
2-Axle Trucks (AM=1.97%, PM=2.79%, Daily=5.86%)			0.002	0.001	0.003	0.003	0.002	0.005	0.100
3-Axle Trucks (AM=2.44%, PM=3.46%, Daily=7.27%)			0.002	0.002	0.004	0.003	0.003	0.006	0.124
4+-Axle Trucks (AM=7.39%, PM=10.45%, Daily=21.97%)			0.007	0.006	0.013	0.010	0.009	0.019	0.376
Passenger Car Equivalent (PCE) Trip Generation									
Warehousing[3]	TSF	150	0.131	0.039	0.170	0.050	0.130	0.180	1.710
Passenger Cars			0.120	0.030	0.150	0.034	0.116	0.150	1.110
2-Axle Trucks (PCE = 1.5)			0.003	0.002	0.005	0.005	0.003	0.008	0.150
3-Axle Trucks (PCE = 2.0)			0.004	0.004	0.008	0.006	0.006	0.012	0.248
4+-Axle Trucks (PCE = 3.0)			0.021	0.017	0.038	0.030	0.026	0.056	1.127

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

[2] TSF = thousand square feet

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

Per the County's Guidelines, peak hour intersection operations analyses are to utilize the PCE trip generation. The trip generation summary illustrating daily and peak hour trip generation estimates for the Project in actual vehicles are shown on Table 4-2. The proposed Project is anticipated to generate 186 two-way trip-ends per day with 18 AM peak hour trips and 18 PM peak hour trips (see Table 4-2, in actual vehicles). PCE based trip generation for the Project are summarized on Table 4-3.

TABLE 4-2: PROJECT TRIP GENERATION SUMMARY (ACTUAL VEHICLES)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
Warehousing	106.931	TSF							
Passenger Cars:			13	3	16	4	12	16	120
2-axle Trucks:			0	0	0	0	0	0	12
3-axle Trucks:			0	0	0	0	0	0	14
4+-axle Trucks:			1	1	2	1	1	2	40
Total Truck Trips (Actual Vehicles):			1	1	2	1	1	2	66
Total Trips (Actual Vehicles)[2]			**14**	**4**	**18**	**5**	**13**	**18**	**186**

[1] TSF = thousand square feet

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

TABLE 4-3: PROJECT TRIP GENERATION SUMMARY (PCE)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Passenger Car Equivalent (PCE):									
Warehousing	106.931	TSF							
Passenger Cars:			13	3	16	4	12	16	120
2-axle Trucks:			0	0	0	0	0	0	16
3-axle Trucks:			0	0	0	1	1	2	28
4+-axle Trucks:			2	2	4	3	3	6	120
Total Truck Trips (PCE):			2	2	4	4	4	8	164
Total Trips (PCE)[2]			**15**	**5**	**20**	**8**	**16**	**24**	**284**

[1] TSF = thousand square feet

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

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. In addition, truck routes for neighboring agencies have been taken into consideration in the development of the trip distribution patterns for heavy trucks. Exhibits 4-1 and 4-2 show the Project truck and passenger car trip distribution patterns, respectively. Note that the Project Truck distribution shows two alternatives that have been evaluated in this TA.

4.3 MODAL SPLIT

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

4.4 PROJECT TRIP ASSIGNMENT

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

EXHIBIT 4-1: PROJECT (TRUCK) TRIP DISTRIBUTION

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

EXHIBIT 4-3: PROJECT ONLY TRAFFIC VOLUMES

1 Patterson Av. & Driveway 1	2 Patterson Av. & Driveway 2
100 8(2) ↓ 2(7) → Nominal 100	100 8(2) ↲ 2(7) ⮡ 2(5) ⮣ 6(2) ↰ 150 100
3 Harvill Av. & Old Cajalco Rd.	**4 Harvill Av. & Rider St.**
100 8(2) ↲ 2(7) ⮡ 100	2(6) ⮣ 6(2) ↰ 100 100

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

Average Daily Trips

4.5 BACKGROUND TRAFFIC

Future year traffic forecasts have been based upon background (ambient) growth at 2% per year, compounded annually, for 2024 conditions. The total ambient growth is 4.04% for 2024 traffic conditions (compounded growth of 2 percent per year over 2 years or $1.02^{2\ years}$). 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) growth forecasts for the County of Riverside identifies projected growth in population of 370,500 in 2016 to 525,600 in 2045, or a 41.9 percent increase over the 29-year period. (6) The change in population equates to roughly a 1.21 percent growth rate, compounded annually. Similarly, growth over the same 29-year period in households is projected to increase by 59.2 percent, or 1.62 percent annual growth rate. Finally, growth in employment over the same 29-year period is projected to increase by 83.4 percent, or a 2.11 percent annual growth rate. This results in an average of 1.65 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.

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. 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 EAPC forecasts. In other words, this list of cumulative development projects has been reviewed to determine which projects would likely contribute measurable traffic through the study area intersections (e.g., those cumulative projects in close proximity to the proposed Project). For the purposes of this analysis, the cumulative projects that were determined to affect one or more of the study area intersections are shown on Exhibit 4-4, listed in Table 4-4, 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 4-4 and listed in Table 4-4. Cumulative Only ADT and peak hour intersection turning movement volumes are shown on Exhibit 4-5.

4.7 NEAR-TERM TRAFFIC CONDITIONS

The "buildup" approach combines existing traffic counts with a background ambient growth factor to forecast EAP (2024) and EAPC (2024) traffic conditions. An ambient growth factor accounts for background (area-wide) traffic increases that occur over time up to the year 2024 from the year 2022. Traffic volumes generated by the Project are then added to assess the near-term traffic conditions. The 2024 roadway network is similar to the Existing conditions roadway network, with the exception of future driveways proposed to be developed by the Project. The near-term traffic analysis includes the following traffic conditions, with the various traffic components:

- Existing Plus Ambient Growth Plus Project (2024)
    - Existing 2022 counts
    - Ambient growth traffic (4.04%)
    - Project traffic
- Existing Plus Ambient Growth Plus Project Plus Cumulative (2024)
    - Existing 2022 counts
    - Ambient growth traffic (4.04%)
    - Cumulative Development traffic
    - Project traffic

EXHIBIT 4-4: CUMULATIVE DEVELOPMENT LOCATION MAP

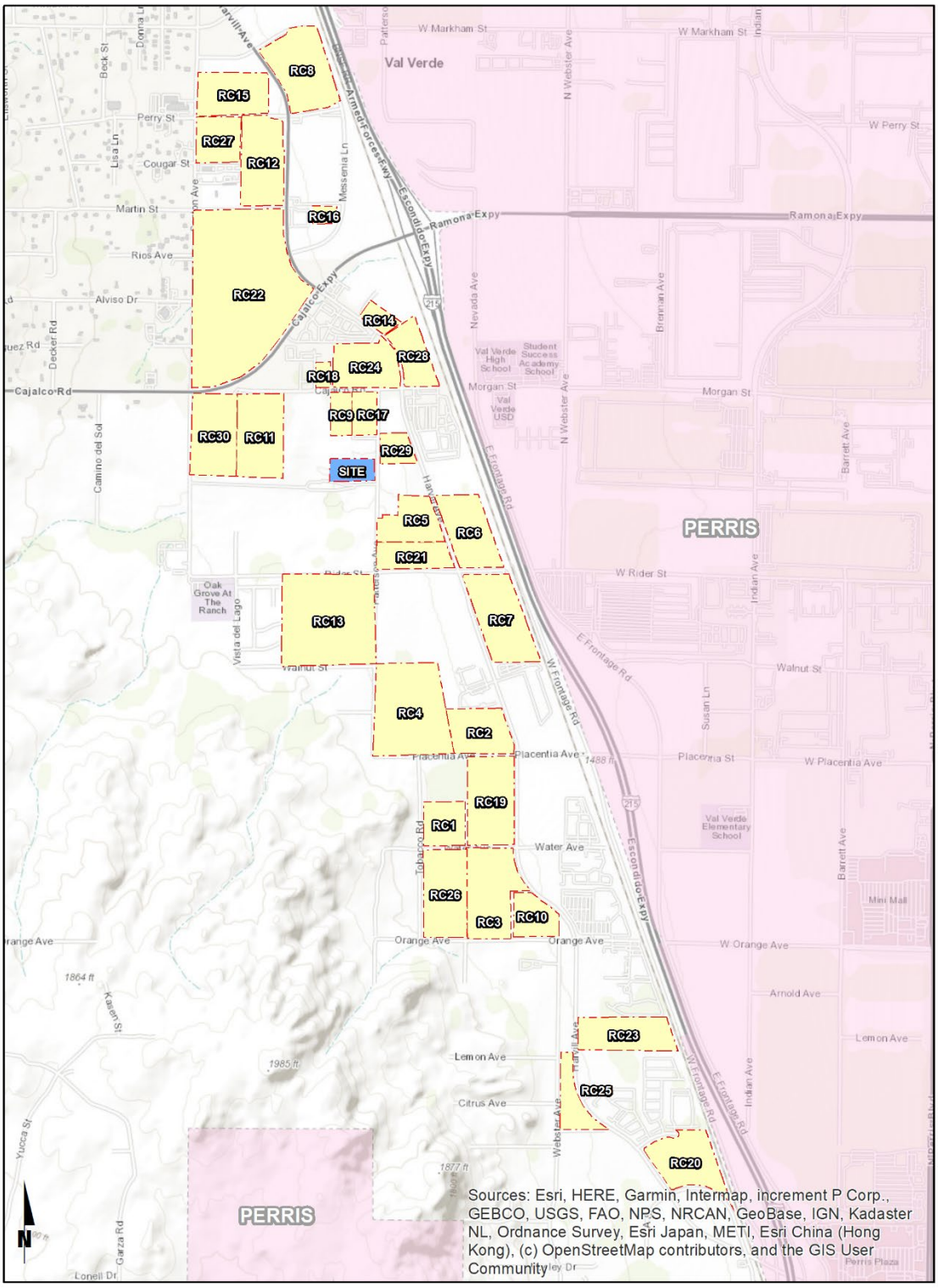
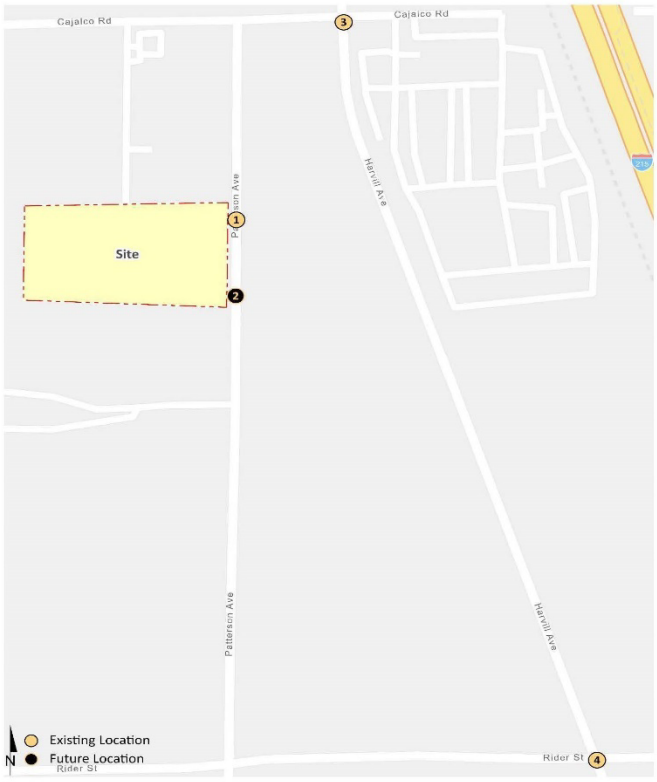


EXHIBIT 4-5: CUMULATIVE ONLY TRAFFIC VOLUMES



1 Patterson Av. & Driveway 1

Nominal

2(0) ↳
0(2) ↰
0(2) ↱

Nominal

2 Patterson Av. & Driveway 2

Nominal

0(2) ↓
0(1) ↰
2(0) ↑
1(1) ↱

Nominal

3 Harvill Av. & Old Cajalco Rd.

10,700

16(8) ↲
668(378) ↓
38(6) ↳
4(16) ↳
7(20) ↲
5(32) ↱
5(24) ↰
21(9) ↰
269(634) ↑
27(4) ↱

550

10,350

1,550

4 Harvill Av. & Rider St.

10,300

23(13) ↲
652(410) ↓
8(30) ↳
1(6) ↲
7(5) ↰
312(614) ↑

750

9,950

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

Average Daily Trips

TABLE 4-7: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

No.	Project Name	Address/Location	Land Use[1]	Quantity	Units[2]
RC1	Thrifty Oil Warehouse	NEC of Tobacco Rd. & Water Av.	Warehousing	194.479	TSF
RC2	Placentia Truck Drop Lot	NWC of Harvill Av. & Placentia Av.	Truck Trailer Storage	8.06	AC
RC3	Harvill & Water Logistics	SWC of Harvill Av. & Water St.	High-Cube Fulfillment Center Warehouse	304.376	TSF
			High-Cube Cold Storage Warehouse	130.447	TSF
RC4	Barker Logistics	NWC of Patterson Av. & Placentia Av.	High-Cube Fulfillment Center Warehouse	699.630	TSF
RC5	Dedeaux Harvill Truck Terminal	North of Rider St., west of Harvill Av.	Truck Terminal	55.700	TSF
RC6	Harvill & Rider Warehouse	NEC of Harvill Av. & Rider St.	General Light Industrial	50.249	TSF
			High-Cube Transload Short-Term Warehouse	284.746	TSF
RC7	WPC Perris	SEC of Harvill Av. & Rider St.	High-Cube Fulfillment Center Warehouse	384.448	TSF
			High-Cube Cold Storage Warehouse	96.112	TSF
RC8	Majestic Freeway Busines Center (Building 11)	NEC of Harvill Av. & Perry St.	High-Cube Fulfillment Center Warehouse	391.045	TSF
RC9	PPT190029	South of Old Cajalco Rd., west of Patterson Av.	Warehousing	36.000	TSF
RC10	PPT210021	NWC of Harvill Av. & Orange Av.	Trailer Maintenance Facility/Storage	16.200	TSF
RC11	PPT210133	SEC of Seaton Av. & Cajalco Exwy.	Warehousing	365.046	TSF
RC12	Majestic Freeway Busines Center (Building 13)	SWC of Harvill Av. & Perry St.	High-Cube Fulfillment Center Warehouse	322.997	TSF
RC13	Rider & Patterson Business Center	SWC of Patterson Av. & Rider St.	High-Cube Fulfillment Center Warehouse	591.203	TSF
			Single Family Detached Residential	2	DU
RC14	CUP03599	North of Cajalco Rd., east of Harvill Av.	Hotel	103	RM
RC15	Majestic Freeway Busines Center (Buildings 14A,14B)	SWC of Harvill Av. & Commerce Center Dr.	Warehousing	354.583	TSF
RC16	PP16763	NEC of Harvill Av. & Messenia Ln.	Warehousing	19.500	TSF
RC17	PP16823	South of Old Cajalco St., west of Harvill Av.	Manufacturing	22.000	TSF
RC18	PP16932	North of Old Cajalco St., east of Cajalco Exwy.	Manufacturing	12.000	TSF
RC19	PP21207	SWC of Harvill Av. & Placentia Av.	Warehousing	311.412	TSF
RC20	PP23170	NEC of Harvill Av. & A St.	Warehousing	286.829	TSF
RC21	PP23342	NWC of Harvill Av. & Rider St.	Warehousing	180.551	TSF
RC22	Majestic Freeway Busines Center (Buildings 1,3,4)	NWC of Harvill Av. & Cajalco Exwy.	High-Cube Fulfillment Center Warehouse	1,195.740	TSF
RC23	PPT190005	NEC of Harvill Av. & Lemon St.	Warehousing	333.553	TSF
RC24	PPT190006	NWC of Harvill Av. & Cajalco Rd.	Warehousing	289.556	TSF
RC25	PPT190028	NWC of Harvill Av. & Citrus Av.	Warehousing	197.856	TSF
RC26	TR27997	NEC of Patterson Av. & Orange Av.	Multifamily Housing	120	DU
RC27	Seaton Commerce Center	SEC of Seaton Av. & Perry St.	High-Cube Fulfillment Center Warehouse	210.800	TSF
RC28	Harvill & Cajalco Warehouse	NEC of Harvill Av. & Old Cajalco Rd.	General Light Industrial & Truck Yard	99.770	TSF
RC29	Patterson & Harvill Warehouse	South of Old Cajalco Rd., b/w Patterson/Harvill	Warehousing & Cold Storage	100.190	TSF
RC30	Seaton & Cajalco High Cube Warehouse	SEC of Seaton Av. & Cajalco Rd.	Warehousing & Cold Storage	350.481	TSF

[1] TSF = Thousand Square Feet; DU = Dwelling Units; RM = Rooms; TPY = Tons per Year

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5 EAP (2024) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for EAP (2024) conditions and the resulting intersection operations and traffic signal warrant analyses.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for EAP (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 EAP conditions only (e.g., intersection and roadway improvements at the Project's frontage and driveways).
- The I-215 Freeway at Placentia Avenue interchange which is anticipated to be completed and open in Fall of 2022 has been assumed to be completed with improvements in place for EAP (2024) traffic conditions.

5.2 EAP (2024) TRAFFIC VOLUME FORECASTS

This scenario includes Existing (2022) traffic volumes plus an ambient growth factor of 4.04% and the addition of Project traffic. The weekday ADT volumes and peak hour volumes which can be expected for EAP (2024) traffic conditions are shown on Exhibit 5-1.

5.3 INTERSECTION OPERATIONS ANALYSIS

EAP (2024) 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 EAP traffic conditions, which indicate that all of the study area intersections are anticipated to continue to operate at an acceptable LOS under EAP traffic conditions. The intersection operations analysis worksheets for EAP traffic conditions are included in Appendix 5.1 of this TA.

EXHIBIT 5-1: EAP (2024) TRAFFIC VOLUMES

1 Patterson Av. & Driveway 1

150

← 8(4)

→ 2(9)

Nominal 150

2 Patterson Av. & Driveway 2

150

← 7(2) ← 1(2)

2(7) ↳

1(5) ↲

↰ 5(2) → 0(2)

150 150

3 Harvill Av. & Old Cajalco Rd.

12,800

← 44(25) ↓ 209(433) ↳ 8(4)

23(63) ↳

3(14) ↲

↱ 2(17)

↰ 3(5)

↰ 5(4) → 725(336) ↱ 7(2)

550

11,600

1,500

4 Harvill Av. & Rider St.

9,050

↲ 17(32) ↓ 189(447) ↳ 14(1)

45(28) ↳

1(1) →

31(50) ↲

↱ 14(4)

↰ 2(3)

↰ 30(25) → 283(272) ↱ 4(3)

200

11,650

1,950

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

Average Daily Trips

TABLE 5-1: INTERSECTION ANALYSIS FOR EAP (2024) CONDITIONS

#	Intersection	Traffic Control[2]	Existing (2022) Delay[1] (secs.) AM	Existing (2022) Delay[1] (secs.) PM	Existing (2022) Level of Service AM	Existing (2022) Level of Service PM	EAP (2024) Delay[1] (secs.) AM	EAP (2024) Delay[1] (secs.) PM	EAP (2024) Level of Service AM	EAP (2024) Level of Service PM
1	Patterson Av. & Driveway 1	**CSS**	Future Intersection				8.9	8.7	A	A
2	Patterson Av. & Driveway 2	**CSS**	Future Intersection				8.6	8.7	A	A
3	Harvill Av. & Old Cajalco Rd.	CSS	16.7	14.0	C	B	17.3	13.8	C	B
4	Harvill Av. & Rider St.[3]	AWS	9.5	12.2	A	B	9.6	12.7	A	B

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

2 CSS = Cross-street Stop; AWS = All Way Stop

3 Intersection includes a SB right turn lane that is not coded due to limitations of the HCM for AWS intersections.

5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis for EAP (2024) traffic conditions are based on the peak hour volumes or planning level ADT volume-based traffic signal warrants. No study area intersections are anticipated to meet either peak hour volume or ADT volume-based warrants with the addition of Project traffic (see Appendix 5.2).

5.5 PROJECT DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

The study area intersections are anticipated to operate at an acceptable LOS with the addition of Project traffic. As such, no additional improvements aside from those that are needed to facilitate site access have been recommended.

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6 EAPC (2024) TRAFFIC CONDITIONS

This section discusses the traffic forecasts for EAPC (2024) conditions and the resulting intersection operations and traffic signal warrant analyses.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for EAPC (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 EAPC (2024) conditions only (e.g., intersection and roadway improvements at the Project's frontage and driveways).
- Driveways and those facilities assumed to be constructed by cumulative developments to provide site access are also assumed to be in place for EAPC (2024) conditions only (e.g., intersection and roadway improvements along the cumulative development's frontages).
- The I-215 Freeway at Placentia Avenue interchange which is anticipated to be completed and open in Fall of 2022 has been assumed to be completed with improvements in place for EAPC (2024) traffic conditions.

6.2 EAPC (2024) TRAFFIC VOLUME FORECASTS

This scenario includes Existing (2022) traffic volumes plus an ambient growth factor of 4.04%, traffic from pending and approved cumulative development projects, and the addition of Project traffic. The weekday ADT volumes and peak hour volumes which can be expected for EAPC (2024) traffic conditions are shown on Exhibit 6-1.

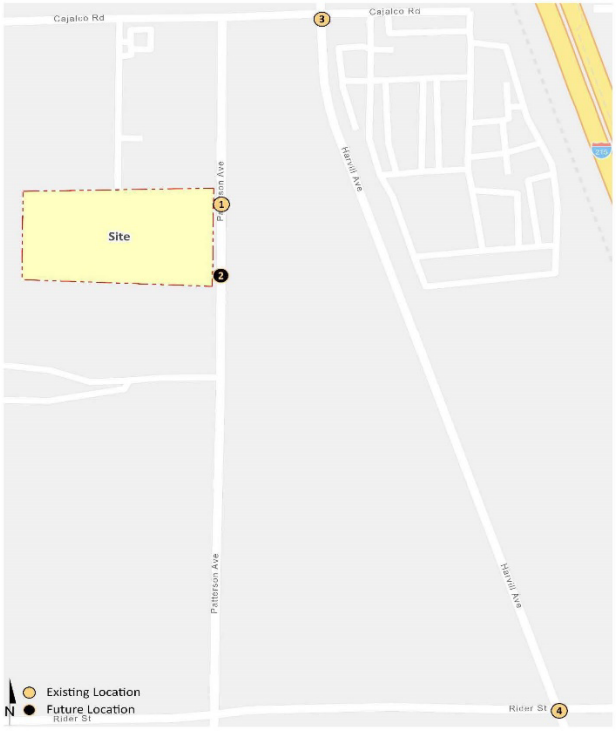
6.3 INTERSECTION OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under EAPC (2024) conditions with roadway and intersection geometrics consistent with Section 6.1 Roadway Improvements. As shown on Table 6-1, the study area intersections are anticipated to operate at an acceptable LOS under EAPC (2024) traffic conditions with the exception of the following intersection:

- Harvill Av. & Rider St. (#4) – LOS F AM and PM peak hours

The intersection operations analysis worksheets for EAPC (2024) traffic conditions are included in Appendix 6.1 of this TA.

EXHIBIT 6-1: EAPC (2024) TRAFFIC VOLUMES



1 Patterson Av. & Driveway 1

200 — *Nominal*

8(4) ↓ 2(0) ↳ | ↰ 0(2) | ↰ 0(2) | ↑ 2(9) ↱ 2(0)

Nominal — *200*

2 Patterson Av. & Driveway 2

200 — *Nominal*

↲ 7(2) ↓ 1(4) | ↰ 0(1) | 2(7) ↳ | ↰ 5(2) ↑ 2(2) ↱ 1(1) | 1(5) ↲

150 — *200*

3 Harvill Av. & Old Cajalco Rd.

23,500 — *1,150*

↲ 60(33) ↓ 877(811) ↳ 46(10) | ↰ 7(49) | ↰ 8(29) | 27(79) ↳ ↰ 26(13) ↑ 994(970) ↱ 34(6) | 10(34) ↲

3,050 — *21,900*

4 Harvill Av. & Rider St.

19,400 — *200*

↲ 40(45) ↓ 841(857) ↳ 16(1) | ↰ 14(4) | ↰ 2(3) | 53(58) ↳ ↰ 37(30) ↑ 595(886) ↱ 4(3) | 1(1) ↓ | 32(56) ↲

2,700 — *21,600*

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

Average Daily Trips

TABLE 6-1: INTERSECTION ANALYSIS FOR EAPC (2024) CONDITIONS

#	Intersection	Traffic Control[2]	EAPC (2024) Delay[1] (secs.) AM	EAPC (2024) Delay[1] (secs.) PM	EAPC (2024) Level of Service AM	EAPC (2024) Level of Service PM
1	Patterson Av. & Driveway 1	**CSS**	8.9	8.7	A	A
2	Patterson Av. & Driveway 2	**CSS**	8.7	8.7	A	A
3	Harvill Av. & Old Cajalco Rd.	CSS	32.0	31.8	D	D
4	Harvill Av. & Rider St.[3]	AWS	**52.1**	**131.9**	**F**	**F**

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

2 CSS = Cross-street Stop; AWS = All Way Stop

3 Intersection includes a SB right turn lane that is not coded due to limitations of the HCM for AWS intersections.

6.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis for EAPC (2024) traffic conditions are based on the peak hour volumes or planning level ADT volume-based traffic signal warrants. The intersection of Harvill Avenue at Rider Street is anticipated to meet a peak hour volume-based warrant for EAPC (2024) traffic conditions (see Appendix 6.2).

6.5 NEAR-TERM DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

This section provides a summary of Project deficiencies and recommended improvements. Based on the County of Riverside deficiency criteria discussed in Section 2.5 Deficiency Criteria, roadway intersections were found to be deficient. Improvements necessary to improve project-related traffic deficiencies are shown in Table 6-2. Table 6-2 indicates the physical improvements needed to address LOS deficiencies at each of the study area intersections under EAPC (2024) traffic conditions. The improvements have been identified to improve the EAPC (2024) deficiencies back to acceptable levels. Intersection analysis worksheets for EAPC (2024) traffic conditions, with improvements, are provided in Appendix 6.3.

TABLE 6-2: INTERSECTION ANALYSIS FOR EAPC (2024) CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	Level of Service AM	PM
4	Harvill Av. & Rider St.																	
	- Without Improvements	AWS	1	2	0	1	2	1	1	1	1	1	1	d	**52.1**	**131.9**	**F**	**F**
	- With Improvements	**TS**	1	2	0	1	2	1	1	1	1	1	1	d	10.5	11.1	B	B

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

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

L = Left; T = Through; R = Right; **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] AWS = All-Way Stop; TS = Traffic Signal; **TS** = Improvement

7 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements within the County of Riverside are funded through a combination of improvements constructed by the Project, development impact fee programs. Fee programs applicable to the Project are described below.

7.1 RIVERSIDE COUNTY TRANSPORTATION UNIFORM MITIGATION FEE (TUMF)

The TUMF program is administered by the WRCOG based upon a regional Nexus Study most recently updated in 2016 to address major changes in right of way acquisition and improvement cost factors. (7) This regional program was put into place to ensure that development pays its fair share, and that funding is in place for construction of facilities needed to maintain the requisite level of service and critical to mobility in the region. TUMF is a truly regional mitigation fee program and is imposed and implemented in every jurisdiction in Western Riverside County.

7.2 RIVERSIDE COUNTY DEVELOPMENT IMPACT FEE (DIF) PROGRAM

The Project is located within the County's Mead Valley Area Plan and therefore will be subject to County of Riverside DIF in an effort by the County to address development throughout its unincorporated area. The DIF program consists of two separate transportation components: the Roads, Bridges and Major Improvements component and the Traffic Signals component. Eligible facilities for funding by the County DIF program are identified on the County's Public Needs List, which currently extends through the year 2020. (8) A comprehensive review of the DIF program is now planned in order to update the nexus study. This will result in development of a revised "needs list" extending the program time horizon from 2010 to 2030.

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

7.3 MEASURE A

Measure A, Riverside County's half-cent sales tax for transportation, was adopted by voters in 1988 and extended in 2002. It will continue to fund transportation improvements through 2038. Measure A funds a wide variety of transportation projects and services throughout the County. Riverside County Transportation Commission (RCTC) is responsible for administering the program. Measure A dollars are spent in accordance with a voter-approved expenditure plan that was adopted as part of the 1988 election.

7.4 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. When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. Detailed fair share calculations, for each peak hour, have been provided in Table 7-1 for the applicable deficient study area intersections. 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.

Although the intersection of Harvill Avenue at Old Cajalco Road is anticipated to operate at an acceptable LOS under EAPC traffic conditions (see Table 6-1), fair share calculations have been provided as the intersection meets peak hour volume-based warrants for a traffic signal under EAPC traffic conditions.

TABLE 7-1: PROJECT FAIR SHARE CALCULATIONS

#	Intersection		Existing	Project Only	EAPC	Net New Traffic	Project % of New Traffic
3	Harvill Av. & Old Cajalco Rd.						
		AM:	1,107	11	2,254	1,147	1.0%
		PM:	944	13	2,104	1,160	**1.1%**
4	Harvill Av. & Rider St.						
		AM:	642	8	1,714	1,072	0.7%
		PM:	857	11	1,986	1,129	**1.0%**

BOLD = Denotes highest fair share percentage.

8 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. **VRPA Technologies, Inc. for Riverside County Transportation Commission.** Riverside County Long Range Transportation Study. County of Riverside : VRPA Technologies, Inc., December 2019.
4. **Transportation Research Board.** Highway Capacity Manual (HCM). 6th Edition. s.l. : National Academy of Sciences, 2016.
5. **California Department of Transportation.** California Manual on Uniform Traffic Control Devices (CA MUTCD). [book auth.] California Department of Transportation. California Manual on Uniform Traffic Control Devices (CA MUTCD). 2014, Updated March 30, 2021 (Revision 6).
6. **Southern California Association of Governments (SCAG).** 2020 Regional Transportation Plan / Sustainable Communities Strategy. Adopted September 2020.
7. **Western Riverside Council of Governments.** TUMF Nexus Study, 2016 Program Update. July 2017.
8. **Willdan Financial Services.** County of Riverside Development Impact Fee Study Update. County of Riverside : s.n., 2013.

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APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT

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EXHIBIT B

SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

This letter acknowledges the Riverside County Transportation Department requirements for traffic impact analysis of the following project. The analysis must follow the Riverside County Transportation Department Traffic Study Guidelines dated December 2020.

Case No. PPT220024
Related Cases-
SP No.
EIR No.
GPA No.
CZ No.
Project Name: Patterson & Cajalco Warehouse
Project Address: west of Patterson Avenue between Old Cajalco Road & Rider Street
Project Description: 86,374 SF of warehousing use and 21,594 SF of cold storage (total of 107,968 SF)

	Consultant	Developer Representative
Name:	Urban Crossroads Inc. - Charlene So	Bridge Industrial - Robert (Bob) Close
Address:	1133 Camelback St. #8329	2000 Alameda De Las Pulgas, Suite 160
	Newport Beach, CA 92658	San Mateo, CA 94403
Telephone:	(949) 861-0177	954-882-8793
Email:	cso@urbanxroads.com	bob.close@bridgeig.com

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

Current GP Land Use: LI — Proposed Land Use: LI
Current Zoning: M-SC — Proposed Zoning: M-SC

	Current Trip Generation In	Out	Total	Proposed Trip Generation In	Out	Total	
AM Trips				**14**	**5**	**19**	(PCE)
PM Trips				**8**	**16**	**24**	(PCE)

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

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

B. Trip Geographic Distribution:

N **varies** % S **varies** % E **varies** % W **varies** %

C. Background Traffic

Project Build-out Year: 2024 — Annual Ambient Growth Rate: 2 %
Phase Year(s) N/A

Other area Projects to be analyzed: To be provided by the County
Model/Forecast Methodology:

URBAN CROSSROADS

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

1. Patterson Av. & Driveway 1
2. Patterson Av. & Driveway 2
3. Harvill Av. & Old Cajalco Rd.
4. Harvill Av. & Rider St.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.
20.

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

1.
2.

F. Other Jurisdictional Impacts

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

If so, name of City jurisdiction: Caltrans (I-215 Freeway), City of Perris

G. Site Plan (please attach reduced copy)

H. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (To be filled out by Transportation Department)
(NOTE: If the traffic study states that "a traffic signal is warranted" (or "a traffic signal appears to be warranted", or similar statement) at an existing unsignalized intersection under existing conditions, 8-hour approach traffic volume information must be submitted in addition to the peak hourly turning movement counts for that intersection.

I. Existing Conditions
Traffic count data must be new or recent. Provide traffic count dates if using other than new counts.
Date of counts: February and May 2022

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

Recommended by:

Charlene So — 7/18/2022

Consultant's Representative — Date

Approved Scoping Agreement:

Eva Covarrubias — 08/03/2022

Riverside County Transportation Department — Date

Scoping Agreement Revised on

URBAN CROSSROADS

July 18, 2022

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

PATTERSON & CAJALCO WAREHOUSE (PPT220024) TRAFFIC ANALYSIS SCOPING AGREEMENT

Mr. Kevin Tsang,

The firm of Urban Crossroads, Inc. is pleased to submit this scoping letter regarding the traffic analysis for Patterson & Cajalco Warehouse development (**Project**), which is located on the west side of Patterson Avenue and mid-point between Old Cajalco Road and Rider Street in unincorporated County of Riverside. This letter describes the proposed Project trip generation, trip distribution, and analysis methodology, which have been used to establish the draft proposed Project study area and analysis locations.

PROJECT DESCRIPTION

The Project is anticipated to have an Opening Year of 2024. The Project consists of the development of a 107,968 square foot warehouse building. For the purposes of this analysis, the Project will evaluate 20% of the building square footage assuming high-cube (cold storage) warehouse use (21,594 square feet) and 80% of the building square footage assuming general warehousing (86,374 square feet). Access is accommodated off of Patterson Avenue via two driveways. Access to the I-215 Freeway is anticipated to occur via Placentia Avenue to the south, where a new interchange at the I-215 Freeway will be completed by Summer 2022, or via Cajalco Expressway/Ramona Expressway to the north.

EXHIBIT 1: PRELIMINARY SITE PLAN

TRIP GENERATION

The trip generation rates used for this analysis are based upon information collected by the Institute of Transportation Engineers (ITE) as provided in their Trip Generation Manual (11th Edition, 2021) for the proposed warehousing use (ITE Land Use Code 150) and high-cube cold storage warehouse use (ITE Land Use Code 157) (see Table 1). The following summarizes the proposed land use and vehicle mix:

- Warehousing – ITE Land Use Code 150 has been used to derive site specific trip generation estimates for 86,374 square feet of the proposed Project. A warehouse is primarily devoted to the storage of materials but may also include office and maintenance areas. The vehicle mix has also been obtained from the ITE's latest Trip Generation Manual. The truck percentages were further broken down by axle type per the following South Coast Air Quality Management District (SCAQMD) recommended truck mix: 2-Axle = 16.7%; 3-Axle = 20.7%; 4+-Axle = 62.6%.
- ITE land use code 157 (High-Cube Cold Storage Warehouse) has been used to derive site specific trip generation estimates for up to 21,594 square feet of the Project. High-cube cold storage warehouses include warehouses characterized by the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. High-cube cold storage warehouses are facilities typified by temperature-controlled environments for frozen food or other perishable products. The High-Cube

Cold Storage Warehouse vehicle mix (passenger cars versus trucks) has been obtained from the ITE's Trip Generation Manual. The truck percentages were further broken down by axle type per the following SCAQMD recommended truck mix: 2-Axle = 34.7%; 3-Axle = 11.0%; 4+-Axle = 54.3%.

The trip generation summary illustrating daily, and peak hour trip generation estimates for the proposed Project in actual and passenger car equivalent (PCE) vehicles are shown on Table 2. As shown in Table 2, the proposed Project is anticipated to generate a total of 198 two-way trips per day with 16 AM peak hour trips and 17 PM peak hour trips (in actual vehicles). In comparison, the proposed Project is anticipated to generate a total of 298 PCE two-way trips per day with 19 PCE AM peak hour trips and 24 PCE PM peak hour trips (see Table 3).

TABLE 1: TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
Warehousing[3]	TSF	150	0.131	0.039	0.170	0.050	0.130	0.180	1.710
Passenger Cars (AM=88.2%, PM=83.3%, Daily=64.9%)			0.120	0.030	0.150	0.034	0.116	0.150	1.110
2-Axle Trucks (AM=1.97%, PM=2.79%, Daily=5.86%)			0.002	0.001	0.003	0.003	0.002	0.005	0.100
3-Axle Trucks (AM=2.44%, PM=3.46%, Daily=7.27%)			0.002	0.002	0.004	0.003	0.003	0.006	0.124
4+-Axle Trucks (AM=7.39%, PM=10.45%, Daily=21.97%)			0.007	0.006	0.013	0.010	0.009	0.019	0.376
High-Cube Cold Storage Warehouse[3]	TSF	157	0.085	0.025	0.110	0.034	0.086	0.120	2.120
Passenger Cars (AM-72.7%, PM-75.0%, Daily-64.6%)			0.076	0.004	0.080	0.019	0.071	0.090	1.370
2-Axle Trucks (AM-9.5%, PM-8.7%, Daily-12.3%)			0.003	0.007	0.010	0.005	0.005	0.010	0.260
3-Axle Trucks (AM-3.0%, PM-2.8%, Daily-3.9%)			0.001	0.002	0.003	0.002	0.001	0.003	0.083
4+-Axle Trucks (AM-14.8%, PM-13.6%, Daily-19.2%)			0.005	0.011	0.016	0.008	0.008	0.016	0.407
Passenger Car Equivalent (PCE) Trip Generation									
Warehousing[3]	TSF	150	0.131	0.039	0.170	0.050	0.130	0.180	1.710
Passenger Cars			0.120	0.030	0.150	0.034	0.116	0.150	1.110
2-Axle Trucks (PCE = 1.5)			0.003	0.002	0.005	0.005	0.003	0.008	0.150
3-Axle Trucks (PCE = 2.0)			0.004	0.004	0.008	0.006	0.006	0.012	0.248
4+-Axle Trucks (PCE = 3.0)			0.021	0.017	0.038	0.030	0.026	0.056	1.127
High-Cube Cold Storage Warehouse[3]	TSF	157	0.085	0.025	0.110	0.034	0.086	0.120	2.120
Passenger Cars			0.076	0.004	0.080	0.019	0.071	0.090	1.370
2-Axle Trucks (PCE = 1.5)			0.005	0.011	0.016	0.008	0.008	0.016	0.390
3-Axle Trucks (PCE = 2.0)			0.002	0.005	0.007	0.004	0.003	0.007	0.165
4+-Axle Trucks (PCE = 3.0)			0.015	0.034	0.049	0.024	0.025	0.049	1.222

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

[2] TSF = thousand square feet

[3] Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.
Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks.

TABLE 2: PROPOSED PROJECT TRIP GENERATION SUMMARY (ACTUAL VEHICLES)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
Warehousing	86.374	TSF							
Passenger Cars:			10	3	13	3	10	13	96
2-axle Trucks:			0	0	0	0	0	0	10
3-axle Trucks:			0	0	0	0	0	0	12
4+-axle Trucks:			1	0	1	1	1	2	32
Total Truck Trips (Actual Vehicles):			1	0	1	1	1	2	54
Total Trips (Actual Vehicles)[2]			11	3	14	4	11	15	150
High-Cube Cold Storage	21.594	TSF							
Passenger Cars:			2	0	2	0	2	2	30
2-axle Trucks:			0	0	0	0	0	0	6
3-axle Trucks:			0	0	0	0	0	0	2
4+-axle Trucks:			0	0	0	0	0	0	10
Total Truck Trips (Actual Vehicles):			0	0	0	0	0	0	18
Total Trips (Actual Vehicles)[2]			2	0	2	0	2	2	48
Passenger Cars			12	3	15	3	12	15	126
Trucks			1	0	1	1	1	2	72
Total Trips (Actual Vehicles)[2]			**13**	**3**	**16**	**4**	**13**	**17**	**198**

[1] TSF = thousand square feet

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

TABLE 3: PROPOSED PROJECT TRIP GENERATION SUMMARY (PCE)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Passenger Car Equivalent (PCE):									
Warehousing	86.374	TSF							
Passenger Cars:			10	3	13	3	10	13	96
2-axle Trucks:			0	0	0	0	0	0	14
3-axle Trucks:			0	0	0	1	1	2	22
4+-axle Trucks:			2	1	3	3	2	5	98
Total Truck Trips (PCE):			2	1	3	4	3	7	134
Total Trips (PCE)[2]			12	4	16	7	13	20	230
High-Cube Cold Storage	21.594	TSF							
Passenger Cars:			2	0	2	0	2	2	30
2-axle Trucks:			0	0	0	0	0	0	8
3-axle Trucks:			0	0	0	0	0	0	4
4+-axle Trucks:			0	1	1	1	1	2	26
Total Truck Trips (PCE):			0	1	1	1	1	2	38
Total Trips (PCE)[2]			2	1	3	1	3	4	68
Passenger Cars			12	3	15	3	12	15	126
Trucks			2	2	4	5	4	9	172
Total Trips (PCE)[2]			**14**	**5**	**19**	**8**	**16**	**24**	**298**

[1] TSF = thousand square feet

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

TRIP DISTRIBUTION

The Project trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. Project passenger car and truck distribution patterns are based on existing travel patterns determined from existing traffic counts at the study area intersections. Exhibits 2 and 3 show the Project truck and passenger car trip distribution patterns, respectively.

EXHIBIT 2: PROJECT (TRUCK) TRIP DISTRIBUTION

EXHIBIT 3: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION

ANALYSIS SCENARIOS

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

- Existing (2022) Conditions
- Existing plus Ambient Growth plus Project (EAP) (2024) Conditions
- Existing plus Ambient Growth plus Project plus Cumulative (EAPC) (2024) Conditions

All study area intersections will be evaluated using the Highway Capacity Manual (HCM) 6th Edition analysis methodology. The study area that is proposed to be evaluated is shown on Exhibit 4.

EXHIBIT 4: STUDY AREA

CUMULATIVE PROJECTS

It is requested that the County of Riverside provide current cumulative projects within the study area for inclusion in the Traffic Analysis. A preliminary map and table of cumulative projects is provided on Exhibit 5 and Table 4.

EXHIBIT 5: CUMULATIVE DEVELOPMENT LOCATION MAP

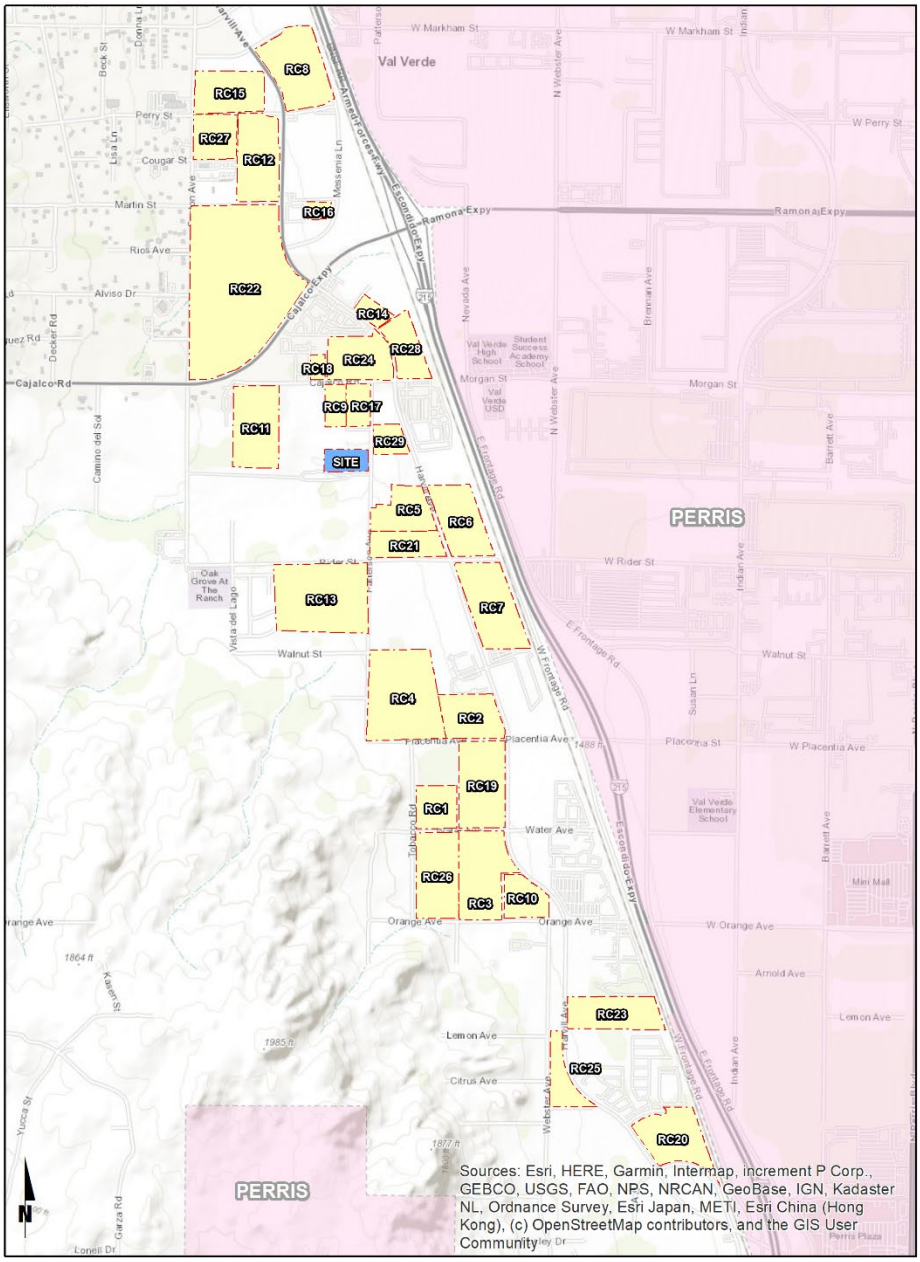

TABLE 4: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

No.	Project Name	Address/Location	Land Use[1]	Quantity	Units[2]
RC1	Thrifty Oil Warehouse	NEC of Tobacco Rd. & Water Av.	Warehousing	194.479	TSF
RC2	Placentia Truck Drop Lot	NWC of Harvill Av. & Placentia Av.	Truck Trailer Storage	8.06	AC
RC3	Harvill & Water Logistics	SWC of Harvill Av. & Water St.	High-Cube Fulfillment Center Warehouse	304.376	TSF
			High-Cube Cold Storage Warehouse	130.447	TSF
RC4	Barker Logistics	NWC of Patterson Av. & Placentia Av.	High-Cube Fulfillment Center Warehouse	699.630	TSF
RC5	Dedeaux Harvill Truck Terminal	North of Rider St., west of Harvill Av.	Truck Terminal	55.700	TSF
RC6	Harvill & Rider Warehouse	NEC of Harvill Av. & Rider St.	General Light Industrial	50.249	TSF
			High-Cube Transload Short-Term Warehouse	284.746	TSF
RC7	WPC Perris	SEC of Harvill Av. & Rider St.	High-Cube Fulfillment Center Warehouse	384.448	TSF
			High-Cube Cold Storage Warehouse	96.112	TSF
RC8	Majestic Freeway Busines Center (Building 11)	NEC of Harvill Av. & Perry St.	High-Cube Fulfillment Center Warehouse	391.045	TSF
RC9	PPT190029	South of Old Cajalco Rd., west of Patterson Av.	Warehousing	36.000	TSF
RC10	PPT210021	NWC of Harvill Av. & Orange Av.	Trailer Maintenance Facility/Storage	16.200	TSF
RC11	PPT210133	SEC of Seaton Av. & Cajalco Exwy.	Warehousing	365.046	TSF
RC12	Majestic Freeway Busines Center (Building 13)	SWC of Harvill Av. & Perry St.	High-Cube Fulfillment Center Warehouse	322.997	TSF
RC13	Rider & Patterson Business Center	SWC of Patterson Av. & Rider St.	High-Cube Fulfillment Center Warehouse	591.203	TSF
			Single Family Detached Residential	2	DU
RC14	CUP03599	North of Cajalco Rd., east of Harvill Av.	Hotel	103	RM
RC15	Majestic Freeway Busines Center (Buildings 14A,14B)	SWC of Harvill Av. & Commerce Center Dr.	Warehousing	354.583	TSF
RC16	PP16763	NEC of Harvill Av. & Messenia Ln.	Warehousing	19.500	TSF
RC17	PP16823	South of Old Cajalco St., west of Harvill Av.	Manufacturing	22.000	TSF
RC18	PP16932	North of Old Cajalco St., east of Cajalco Exwy.	Manufacturing	12.000	TSF
RC19	PP21207	SWC of Harvill Av. & Placentia Av.	Warehousing	311.412	TSF
RC20	PP23170	NEC of Harvill Av. & A St.	Warehousing	286.829	TSF
RC21	PP23342	NWC of Harvill Av. & Rider St.	Warehousing	180.551	TSF
RC22	Majestic Freeway Busines Center (Buildings 1,3,4)	NWC of Harvill Av. & Cajalco Exwy.	High-Cube Fulfillment Center Warehouse	1,195.740	TSF
RC23	PPT190005	NEC of Harvill Av. & Lemon St.	Warehousing	333.553	TSF
RC24	PPT190006	NWC of Harvill Av. & Cajalco Rd.	Warehousing	289.556	TSF
RC25	PPT190028	NWC of Harvill Av. & Citrus Av.	Warehousing	197.856	TSF
RC26	TR27997	NEC of Patterson Av. & Orange Av.	Multifamily Housing	120	DU
RC27	Seaton Commerce Center	SEC of Seaton Av. & Perry St.	High-Cube Fulfillment Center Warehouse	210.800	TSF
RC28	Harvill & Cajalco Warehouse	NEC of Harvill Av. & Old Cajalco Rd.	General Light Industrial & Truck Yard	99.770	TSF
RC29	Patterson & Harvill Warehouse	South of Old Cajalco Rd., b/w Patterson/Harvill	Warehousing & Cold Storage	100.190	TSF

[1] TSF = Thousand Square Feet; DU = Dwelling Units; RM = Rooms; TPY = Tons per Year

TRAFFIC COUNTS

Traffic counts were conducted for the study area intersections for the purposes of determining the Project trip distribution patterns. Traffic counts are included in Attachment A. These traffic counts will be used for the purposes of the analysis.

SPECIAL ISSUES

The following special issues will also be addressed:

- VMT analysis will be evaluated in a separate document.
- Conduct traffic signal warrant analysis for all existing and future unsignalized study area intersections.
- Prepare truck turns at the applicable Project driveway on Patterson Avenue.

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

Respectfully submitted,

URBAN CROSSROADS, INC.

Charlene So

Charlene So, PE
Principal

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APPENDIX 3.1: TRAFFIC COUNTS

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Volume Development
AM Peak Hour

1: Patterson Av. & Driveway 1

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2022 PCE:	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
EAP 2024 PCE:	0	2	0	0	9	1	1	0	0	0	0	0	13
EAPC 2024 PCE:	0	3	2	2	10	1	1	0	0	0	0	0	19

2: Patterson Av. & Driveway 2

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2022 PCE:	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
EAP 2024 PCE:	6	0	0	0	2	7	2	0	2	0	0	0	19
EAPC 2024 PCE:	6	2	1	1	2	7	2	0	2	1	0	1	25

3: Harvill Av. & Old Cajalco Rd.

PHF: 0.966 **7:00** Count Date: 5/10/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2022 PCE:	**7**	**750**	**7**	**9**	**238**	**47**	**35**	**0**	**5**	**7**	**0**	**3**	**1,107**
EAP 2024 PCE:	7	780	7	9	247	56	39	0	5	7	0	3	1,163
EAPC 2024 PCE:	30	1,056	36	48	926	74	46	0	13	14	0	8	2,254

4: Harvill Av. & Rider St.

PHF: 0.947 **7:00** Count Date: 2/8/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2022 PCE:	**27**	**285**	**4**	**17**	**197**	**21**	**45**	**1**	**30**	**2**	**0**	**15**	**642**
EAP 2024 PCE:	34	296	4	18	204	21	47	1	33	2	0	16	675
EAPC 2024 PCE:	47	614	4	20	866	48	60	1	37	2	0	16	1,714

Volume Development
PM Peak Hour

1: Patterson Av. & Driveway 1

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2022 PCE:	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
EAP 2024 PCE:	1	9	0	0	4	2	2	0	1	0	0	0	19
EAPC 2024 PCE:	1	10	0	0	5	2	2	0	1	2	0	2	25

2: Patterson Av. & Driveway 2

PHF: 0.920 Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2022 PCE:	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
EAP 2024 PCE:	3	3	0	0	3	2	7	0	7	0	0	0	25
EAPC 2024 PCE:	3	3	1	1	5	2	7	0	7	2	0	1	32

3: Harvill Av. & Old Cajalco Rd.

PHF: 0.946 **4:00** Count Date: 5/10/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2022 PCE:	**6**	**352**	**6**	**6**	**447**	**31**	**63**	**0**	**13**	**5**	**0**	**16**	**944**
EAP 2024 PCE:	6	366	6	6	465	36	74	0	14	5	0	17	995
EAPC 2024 PCE:	15	1,053	12	13	860	44	91	0	34	31	0	49	2,202

4: Harvill Av. & Rider St.

PHF: 0.859 **4:00** Count Date: 2/8/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2022 PCE:	**22**	**270**	**3**	**1**	**445**	**38**	**29**	**1**	**42**	**3**	**0**	**4**	**857**
EAP 2024 PCE:	27	280	3	1	462	39	30	1	51	3	0	4	902
EAPC 2024 PCE:	37	944	3	1	888	56	65	1	60	3	0	4	2,063

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 10, 22

LOCATION: Perris
NORTH & SOUTH: Harvill
EAST & WEST: Cajalco

PROJECT #: SC3419
LOCATION #: 1
CONTROL: STOP E/W

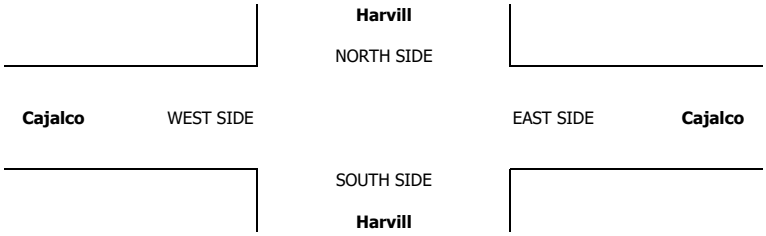
NOTES:

AM PM MD OTHER OTHER

▲ N
◄ W E ►
S ▼

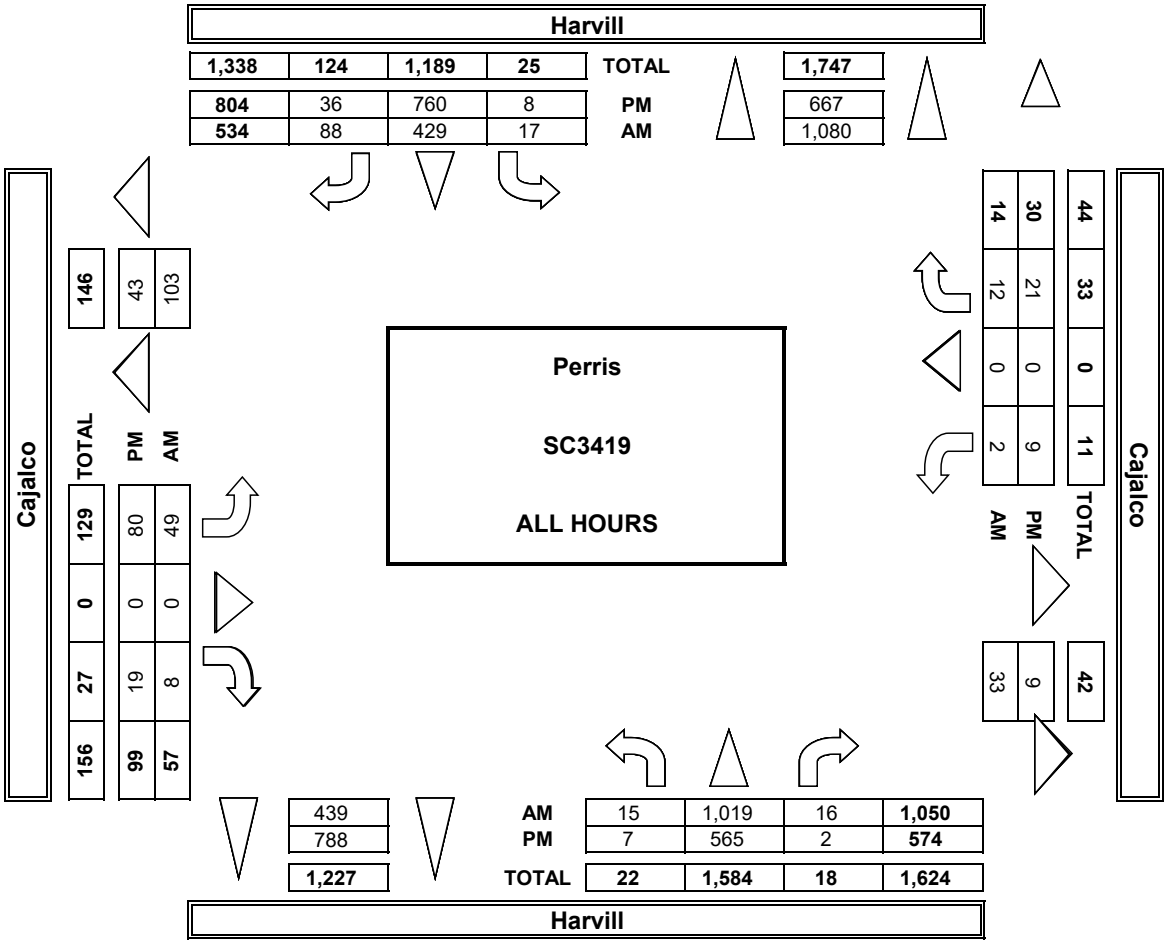
Add U-Turns to Left Turns

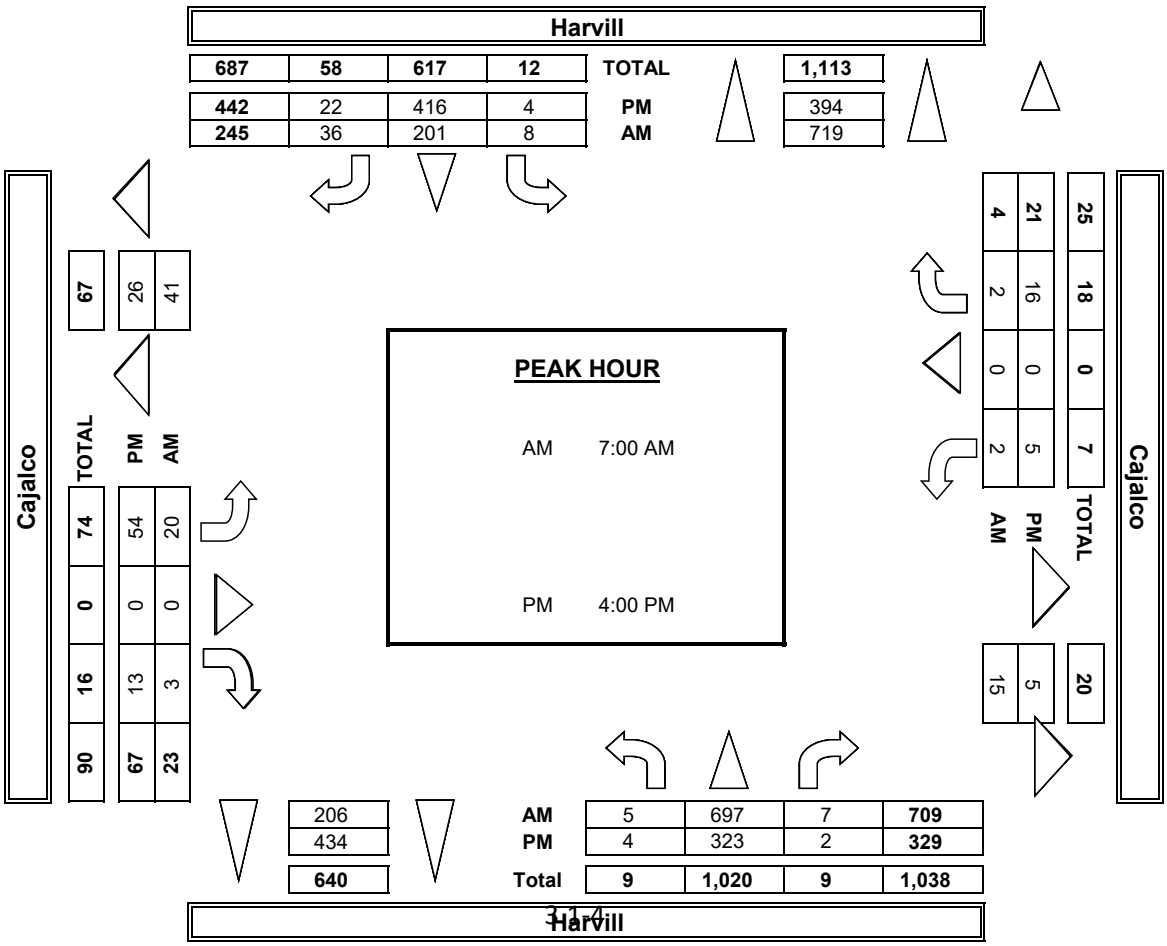
		NORTHBOUND Harvill			SOUTHBOUND Harvill			EASTBOUND Cajalco			WESTBOUND Cajalco				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	1	175	1	1	39	12	5	0	1	1	0	1	237	0	0	0	0	0
	7:15 AM	0	195	1	1	43	8	5	0	0	1	0	0	254	0	0	0	0	0
	7:30 AM	2	171	0	4	58	7	6	0	1	0	0	0	249	0	0	0	0	0
	7:45 AM	2	156	5	2	61	9	4	0	1	0	0	1	241	0	0	0	0	0
	8:00 AM	3	125	3	2	80	9	7	0	0	0	0	3	232	0	0	0	0	0
	8:15 AM	4	90	2	1	52	12	9	0	2	0	0	1	173	0	0	0	0	0
	8:30 AM	1	59	3	4	59	17	3	0	2	0	0	3	151	0	0	0	0	0
	8:45 AM	2	48	1	2	37	14	10	0	1	0	0	3	118	0	0	0	0	0
	VOLUMES	15	1,019	16	17	429	88	49	0	8	2	0	12	1,655	0	0	0	0	0
	APPROACH %	1%	97%	2%	3%	80%	16%	86%	0%	14%	14%	0%	86%						
	APP/DEPART	1,050	/	1,080	534	/	439	57	/	33	14	/	103	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	5	697	7	8	201	36	20	0	3	2	0	2	981					
	APPROACH %	1%	98%	1%	3%	82%	15%	87%	0%	13%	50%	0%	50%						
	PEAK HR FACTOR		0.904			0.851			0.821			0.500		0.966					
	APP/DEPART	709	/	719	245	/	206	23	/	15	4	/	41	0					
PM	4:00 PM	0	89	0	0	78	5	10	0	3	2	0	7	194	0	0	0	0	0
	4:15 PM	1	84	2	0	116	6	11	0	3	1	0	3	227	0	0	0	0	0
	4:30 PM	3	72	0	3	102	7	28	0	4	1	0	5	225	0	1	0	0	1
	4:45 PM	0	78	0	1	120	4	5	0	3	1	0	1	213	0	0	0	0	0
	5:00 PM	0	54	0	1	97	4	18	0	2	1	0	2	179	0	0	0	0	0
	5:15 PM	1	71	0	0	90	5	3	0	1	0	0	0	171	0	0	0	0	0
	5:30 PM	0	71	0	0	87	3	1	0	1	3	0	2	168	0	0	0	0	0
	5:45 PM	2	46	0	3	70	2	4	0	2	0	0	1	130	0	0	0	0	0
	VOLUMES	7	565	2	8	760	36	80	0	19	9	0	21	1,507	0	1	0	0	1
	APPROACH %	1%	98%	0%	1%	95%	4%	81%	0%	19%	30%	0%	70%						
	APP/DEPART	574	/	667	804	/	788	99	/	9	30	/	43	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	4	323	2	4	416	22	54	0	13	5	0	16	859					
	APPROACH %	1%	98%	1%	1%	94%	5%	81%	0%	19%	24%	0%	76%						
	PEAK HR FACTOR		0.924			0.884			0.523			0.583		0.946					
	APP/DEPART	329	/	394	442	/	434	67	/	5	21	/	26	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Perris	PROJECT #:	SC3419
5/10/22	NORTH & SOUTH:	Harvill	LOCATION #:	1
TUESDAY	EAST & WEST:	Cajalco	CONTROL:	STOP E/W

CLASS 2:	NOTES:
2-AXLE	
WORK	
VEHICLES/	
TRUCKS	

AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

	NORTHBOUND Harvill			SOUTHBOUND Harvill			EASTBOUND Cajalco			WESTBOUND Cajalco				U-TURNS				
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM																		
7:00 AM	0	3	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0
7:15 AM	0	6	0	0	0	0	1	0	0	0	0	0	7	0	0	0	0	0
7:30 AM	0	6	0	0	2	0	0	0	0	0	0	0	8	0	0	0	0	0
7:45 AM	0	5	0	0	2	1	1	0	0	0	0	0	9	0	0	0	0	0
8:00 AM	0	3	0	0	3	2	1	0	0	0	0	0	9	0	0	0	0	0
8:15 AM	0	5	0	0	1	3	2	0	0	0	0	0	11	0	0	0	0	0
8:30 AM	0	4	0	1	2	1	0	0	0	0	0	1	9	0	0	0	0	0
8:45 AM	0	2	0	0	3	0	0	0	0	0	0	1	6	0	0	0	0	0
VOLUMES	0	34	0	1	14	7	5	0	0	0	0	2	63	0	0	0	0	0
APPROACH %	0%	100%	0%	5%	64%	32%	100%	0%	0%	0%	0%	100%						
APP/DEPART	34	/	41	22	/	14	5	/	1	2	/	7	0					
BEGIN PEAK HR		7:00 AM																
VOLUMES	0	20	0	0	5	1	2	0	0	0	0	0	28					
APPROACH %	0%	100%	0%	0%	83%	17%	100%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.833			0.500			0.500			0.000		0.778					
APP/DEPART	20	/	22	6	/	5	2	/	0	0	/	1	0					
PM																		
4:00 PM	0	3	0	0	4	0	0	0	0	0	0	0	7	0	0	0	0	0
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
4:30 PM	0	1	0	0	2	0	1	0	0	0	0	0	4	0	0	0	0	0
4:45 PM	0	1	0	0	6	1	0	0	0	0	0	0	8	0	0	0	0	0
5:00 PM	0	0	0	0	3	0	0	0	1	0	0	0	4	0	0	0	0	0
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
5:45 PM	0	1	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0
VOLUMES	0	9	0	0	19	1	1	0	1	0	0	0	31	0	0	0	0	0
APPROACH %	0%	100%	0%	0%	95%	5%	50%	0%	50%	0%	0%	0%						
APP/DEPART	9	/	10	20	/	20	2	/	0	0	/	1	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	0	6	0	0	13	1	1	0	0	0	0	0	21					
APPROACH %	0%	100%	0%	0%	93%	7%	100%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.500			0.500			0.250			0.000		0.656					
APP/DEPART	6	/	7	14	/	13	1	/	0	0	/	1	0					

Harvill

NORTH SIDE

Cajalco WEST SIDE EAST SIDE **Cajalco**

SOUTH SIDE

Harvill

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Perris	PROJECT #:	SC3419
5/10/22	NORTH & SOUTH:	Harvill	LOCATION #:	1
TUESDAY	EAST & WEST:	Cajalco	CONTROL:	STOP E/W

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND Harvill			SOUTHBOUND Harvill			EASTBOUND Cajalco			WESTBOUND Cajalco				U-TURNS				
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM																		
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
7:30 AM	0	2	0	1	3	0	0	0	0	0	0	0	6	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0
8:00 AM	0	2	0	0	1	0	1	0	0	0	0	0	4	0	0	0	0	0
8:15 AM	0	1	0	0	0	1	0	0	0	0	0	1	3	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
VOLUMES	0	8	0	1	7	1	1	0	0	0	0	2	20	0	0	0	0	0
APPROACH %	0%	100%	0%	11%	78%	11%	100%	0%	0%	0%	0%	100%						
APP/DEPART	8	/	11	9	/	7	1	/	1	2	/	1	0					
BEGIN PEAK HR		7:00 AM																
VOLUMES	0	5	0	1	4	0	0	0	0	0	0	1	11					
APPROACH %	0%	100%	0%	20%	80%	0%	0%	0%	0%	0%	0%	100%						
PEAK HR FACTOR		0.625			0.313			0.000			0.250		0.458					
APP/DEPART	5	/	6	5	/	4	0	/	1	1	/	0	0					
PM																		
4:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0
4:15 PM	0	1	0	0	2	0	3	0	0	0	0	0	6	0	0	0	0	0
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
4:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0
VOLUMES	0	5	0	0	7	0	5	0	0	0	0	0	17	0	0	0	0	0
APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	0%	0%	0%						
APP/DEPART	5	/	10	7	/	7	5	/	0	0	/	0	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	0	4	0	0	4	0	4	0	0	0	0	0	12					
APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		1.000			0.500			0.333			0.000		0.500					
APP/DEPART	4	/	8	4	/	4	4	/	0	0	/	0	0					

Harvill

NORTH SIDE

Cajalco WEST SIDE EAST SIDE **Cajalco**

SOUTH SIDE

Harvill

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

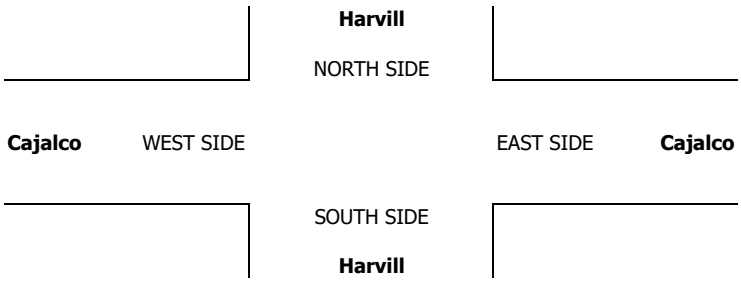
DATE:	LOCATION:	Perris	PROJECT #:	SC3419
5/10/22	NORTH & SOUTH:	Harvill	LOCATION #:	1
TUESDAY	EAST & WEST:	Cajalco	CONTROL:	STOP E/W

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

	NORTHBOUND Harvill			SOUTHBOUND Harvill			EASTBOUND Cajalco			WESTBOUND Cajalco				U-TURNS				
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM																		
7:00 AM	0	4	0	0	4	2	2	0	1	1	0	0	14	0	0	0	0	0
7:15 AM	0	4	0	0	3	1	2	0	0	1	0	0	11	0	0	0	0	0
7:30 AM	0	4	0	0	5	2	2	0	0	0	0	0	13	0	0	0	0	0
7:45 AM	1	7	0	0	3	0	1	0	0	0	0	0	12	0	0	0	0	0
8:00 AM	0	2	0	1	2	1	3	0	0	0	0	0	9	0	0	0	0	0
8:15 AM	0	4	0	0	1	2	2	0	0	0	0	0	9	0	0	0	0	0
8:30 AM	0	3	0	0	0	4	0	0	0	0	0	0	7	0	0	0	0	0
8:45 AM	0	4	0	0	3	1	5	0	0	0	0	0	13	0	0	0	0	0
VOLUMES	1	32	0	1	21	13	17	0	1	2	0	0	88	0	0	0	0	0
APPROACH %	3%	97%	0%	3%	60%	37%	94%	0%	6%	100%	0%	0%						
APP/DEPART	33	/	49	35	/	24	18	/	1	2	/	14	0					
BEGIN PEAK HR		7:00 AM																
VOLUMES	1	19	0	0	15	5	7	0	1	2	0	0	50					
APPROACH %	5%	95%	0%	0%	75%	25%	88%	0%	13%	100%	0%	0%						
PEAK HR FACTOR		0.625			0.714			0.667			0.500		0.893					
APP/DEPART	20	/	26	20	/	18	8	/	0	2	/	6	0					
PM																		
4:00 PM	0	5	0	0	4	1	0	0	0	0	0	0	10	0	0	0	0	0
4:15 PM	0	5	2	0	2	0	1	0	0	0	0	0	10	0	0	0	0	0
4:30 PM	1	0	0	1	2	1	1	0	0	0	0	0	6	0	0	0	0	0
4:45 PM	0	1	0	0	2	2	0	0	0	0	0	0	5	0	0	0	0	0
5:00 PM	0	2	0	0	0	1	1	0	0	0	0	0	4	0	0	0	0	0
5:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0
5:30 PM	0	2	0	0	2	1	0	0	0	0	0	0	5	0	0	0	0	0
5:45 PM	0	0	0	2	2	0	0	0	0	0	0	0	4	0	0	0	0	0
VOLUMES	1	16	2	3	14	7	3	0	0	0	0	0	46	0	0	0	0	0
APPROACH %	5%	84%	11%	13%	58%	29%	100%	0%	0%	0%	0%	0%						
APP/DEPART	19	/	19	24	/	14	3	/	5	0	/	8	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	1	11	2	1	10	4	2	0	0	0	0	0	31					
APPROACH %	7%	79%	14%	7%	67%	27%	100%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.500			0.750			0.500			0.000		0.775					
APP/DEPART	14	/	13	15	/	10	2	/	3	0	/	5	0					



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

County of Riverside
N/S: Harvill Avenue
E/W: Rider Street
Weather: Clear

File Name : 03_CRV_Harvill_Rider AM
Site Code : 05122133
Start Date : 2/8/2022
Page No : 1

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

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	30	3	36	0	0	8	8	8	151	1	160	11	0	3	14	218
07:15 AM	2	43	5	50	2	0	1	3	6	154	2	162	15	0	7	22	237
07:30 AM	2	59	2	63	0	0	1	1	6	136	0	142	11	0	15	26	232
07:45 AM	6	50	6	62	0	0	3	3	3	131	1	135	6	1	4	11	211
Total	13	182	16	211	2	0	13	15	23	572	4	599	43	1	29	73	898
08:00 AM	2	50	6	58	0	0	1	1	6	110	3	119	4	1	3	8	186
08:15 AM	3	59	5	67	1	0	0	1	6	49	0	55	2	0	11	13	136
08:30 AM	1	51	6	58	0	0	2	2	4	57	1	62	5	0	0	5	127
08:45 AM	2	51	3	56	1	0	1	2	6	53	0	59	4	0	2	6	123
Total	8	211	20	239	2	0	4	6	22	269	4	295	15	1	16	32	572
Grand Total	21	393	36	450	4	0	17	21	45	841	8	894	58	2	45	105	1470
Apprch %	4.7	87.3	8		19	0	81		5	94.1	0.9		55.2	1.9	42.9		
Total %	1.4	26.7	2.4	30.6	0.3	0	1.2	1.4	3.1	57.2	0.5	60.8	3.9	0.1	3.1	7.1	
Passenger Vehicles	17	352	33	402	2	0	15	17	40	817	8	865	54	2	42	98	1382
% Passenger Vehicles	81	89.6	91.7	89.3	50	0	88.2	81	88.9	97.1	100	96.8	93.1	100	93.3	93.3	94
Large 2 Axle Vehicles	0	27	1	28	0	0	0	0	4	18	0	22	0	0	3	3	53
% Large 2 Axle Vehicles	0	6.9	2.8	6.2	0	0	0	0	8.9	2.1	0	2.5	0	0	6.7	2.9	3.6
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	2	0	2	1	0	0	1	4
% 3 Axle Vehicles	0	0.3	0	0.2	0	0	0	0	0	0.2	0	0.2	1.7	0	0	1	0.3
4+ Axle Trucks	4	13	2	19	2	0	2	4	1	4	0	5	3	0	0	3	31
% 4+ Axle Trucks	19	3.3	5.6	4.2	50	0	11.8	19	2.2	0.5	0	0.6	5.2	0	0	2.9	2.1

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	3	30	3	36	0	0	**8**	**8**	**8**	151	1	160	11	0	3	14	218
07:15 AM	2	43	5	50	**2**	0	1	3	6	**154**	**2**	**162**	**15**	0	7	22	**237**
07:30 AM	2	**59**	2	**63**	0	0	1	1	6	136	0	142	11	0	**15**	**26**	232
07:45 AM	**6**	50	**6**	62	0	0	3	3	3	131	1	135	6	**1**	4	11	211
Total Volume	13	182	16	211	2	0	13	15	23	572	4	599	43	1	29	73	898
% App. Total	6.2	86.3	7.6		13.3	0	86.7		3.8	95.5	0.7		58.9	1.4	39.7		
PHF	.542	.771	.667	.837	.250	.000	.406	.469	.719	.929	.500	.924	.717	.250	.483	.702	.947

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County of Riverside
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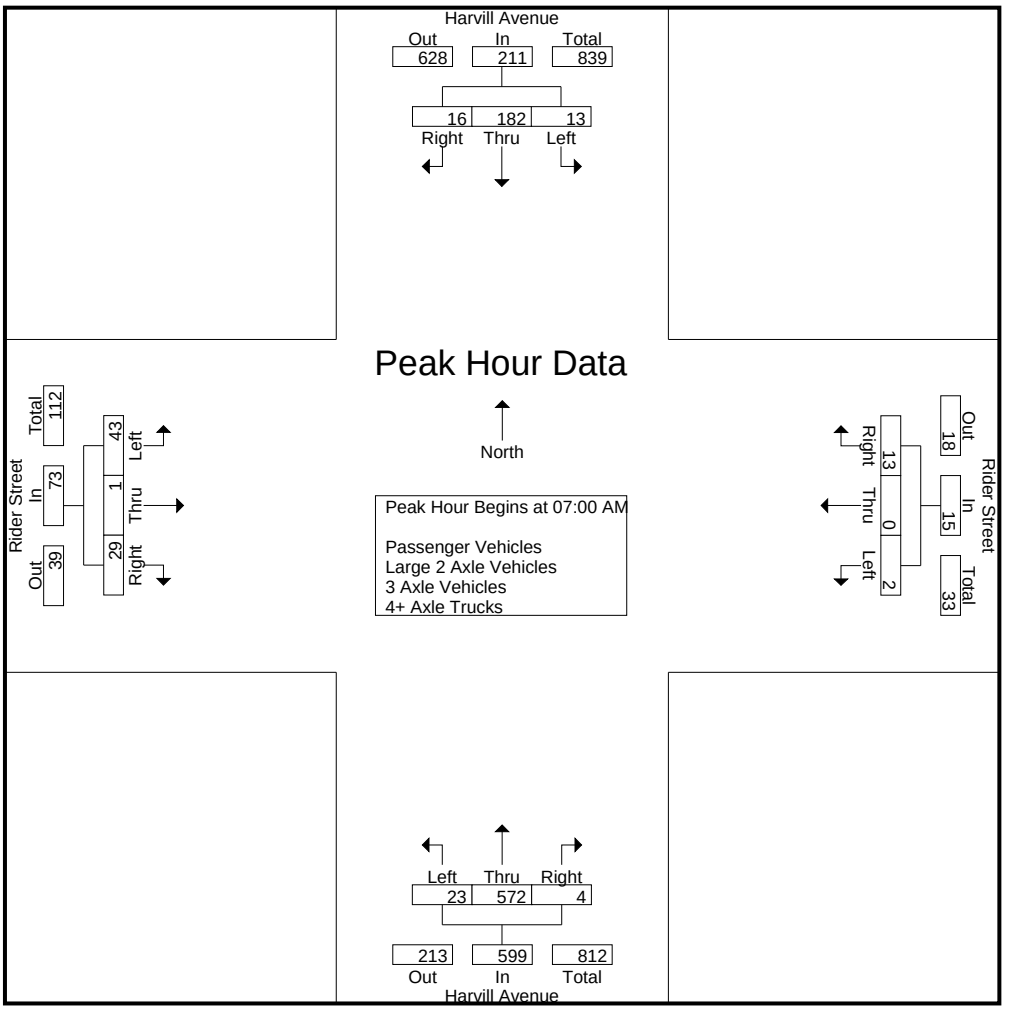
Weather: Clear

File Name : 03_CRV_Harvill_Rider AM
Site Code : 05122133
Start Date : 2/8/2022
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:

	07:30 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	2	**59**	2	63	0	0	**8**	**8**	**8**	151	1	160	11	0	3	14
+15 mins.	**6**	50	**6**	62	**2**	0	1	3	6	**154**	**2**	**162**	**15**	0	7	22
+30 mins.	2	50	6	58	0	0	1	1	6	136	0	142	11	0	**15**	**26**
+45 mins.	3	59	5	**67**	0	0	3	3	3	131	1	135	6	**1**	4	11
Total Volume	13	218	19	250	2	0	13	15	23	572	4	599	43	1	29	73
% App. Total	5.2	87.2	7.6		13.3	0	86.7		3.8	95.5	0.7		58.9	1.4	39.7	
PHF	.542	.924	.792	.933	.250	.000	.406	.469	.719	.929	.500	.924	.717	.250	.483	.702

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File Name : 03_CRV_Harvill_Rider AM
Site Code : 05122133
Start Date : 2/8/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	3	0	3	0	0	0	0	1	4	0	5	0	0	0	0	8
07:15 AM	0	4	0	4	0	0	0	0	1	3	0	4	0	0	0	0	8
07:30 AM	0	0	1	1	0	0	0	0	1	2	0	3	0	0	1	1	5
07:45 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total	0	9	1	10	0	0	0	0	3	11	0	14	0	0	1	1	25
08:00 AM	0	0	0	0	0	0	0	0	1	2	0	3	0	0	0	0	3
08:15 AM	0	5	0	5	0	0	0	0	0	1	0	1	0	0	2	2	8
08:30 AM	0	7	0	7	0	0	0	0	0	2	0	2	0	0	0	0	9
08:45 AM	0	6	0	6	0	0	0	0	0	2	0	2	0	0	0	0	8
Total	0	18	0	18	0	0	0	0	1	7	0	8	0	0	2	2	28
Grand Total	0	27	1	28	0	0	0	0	4	18	0	22	0	0	3	3	53
Apprch %	0	96.4	3.6		0	0	0		18.2	81.8	0		0	0	100		
Total %	0	50.9	1.9	52.8	0	0	0	0	7.5	34	0	41.5	0	0	5.7	5.7	

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	3	0	3	0	0	0	0	**1**	**4**	0	**5**	0	0	0	0	**8**
07:15 AM	0	**4**	0	**4**	0	0	0	0	1	3	0	4	0	0	0	0	8
07:30 AM	0	0	**1**	1	0	0	0	0	1	2	0	3	0	0	**1**	**1**	5
07:45 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total Volume	0	9	1	10	0	0	0	0	3	11	0	14	0	0	1	1	25
% App. Total	0	90	10		0	0	0		21.4	78.6	0		0	0	100		
PHF	.000	.563	.250	.625	.000	.000	.000	.000	.750	.688	.000	.700	.000	.000	.250	.250	.781

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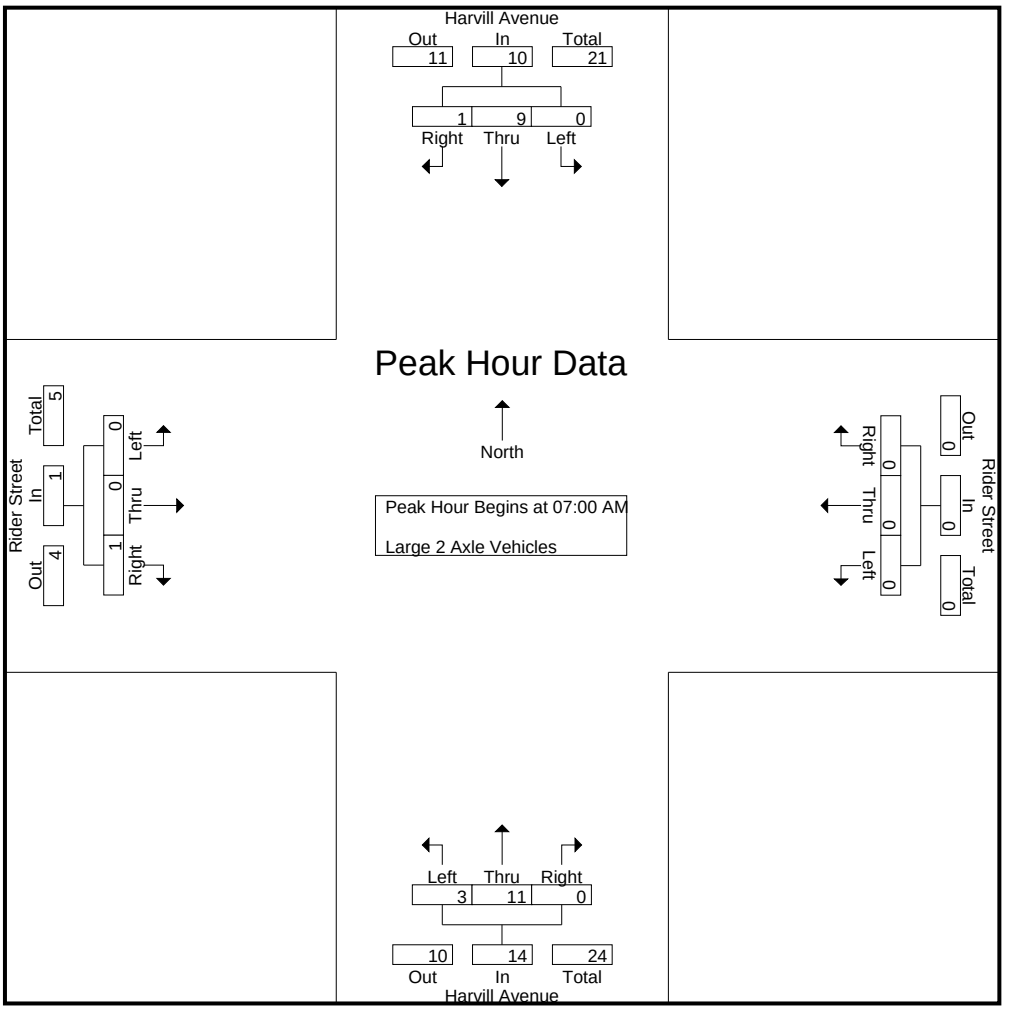

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	3	0	3	0	0	0	0	**1**	**4**	0	**5**	0	0	0	0
+15 mins.	0	**4**	0	**4**	0	0	0	0	1	3	0	4	0	0	0	0
+30 mins.	0	0	**1**	1	0	0	0	0	1	2	0	3	0	0	**1**	**1**
+45 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0
Total Volume	0	9	1	10	0	0	0	0	3	11	0	14	0	0	1	1
% App. Total	0	90	10		0	0	0		21.4	78.6	0		0	0	100	
PHF	.000	.563	.250	.625	.000	.000	.000	.000	.750	.688	.000	.700	.000	.000	.250	.250

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Site Code : 05122133
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Groups Printed- 3 Axle Vehicles

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

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

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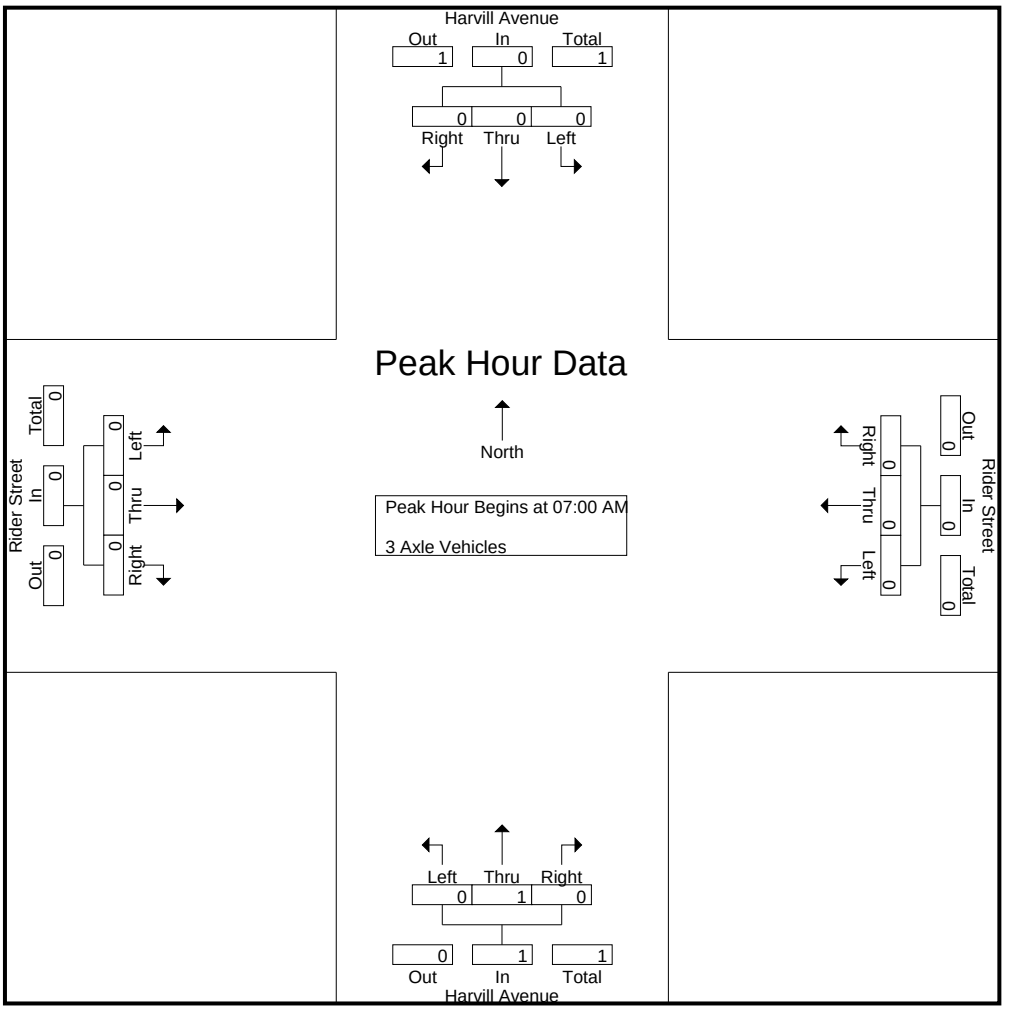

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

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

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County of Riverside
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File Name : 03_CRV_Harvill_Rider AM
Site Code : 05122133
Start Date : 2/8/2022
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Groups Printed- 4+ Axle Trucks

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	0	2	0	0	0	0	1	2	0	3	0	0	0	0	5
07:15 AM	1	2	1	4	0	0	0	0	0	0	0	0	1	0	0	1	5
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	1	1	1	3	0	0	1	1	0	0	0	0	0	0	0	0	4
Total	2	5	2	9	0	0	1	1	1	3	0	4	1	0	0	1	15
08:00 AM	0	1	0	1	0	0	1	1	0	0	0	0	1	0	0	1	3
08:15 AM	2	3	0	5	1	0	0	1	0	1	0	1	0	0	0	0	7
08:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:45 AM	0	2	0	2	1	0	0	1	0	0	0	0	1	0	0	1	4
Total	2	8	0	10	2	0	1	3	0	1	0	1	2	0	0	2	16
Grand Total	4	13	2	19	2	0	2	4	1	4	0	5	3	0	0	3	31
Apprch %	21.1	68.4	10.5		50	0	50		20	80	0		100	0	0		
Total %	12.9	41.9	6.5	61.3	6.5	0	6.5	12.9	3.2	12.9	0	16.1	9.7	0	0	9.7	

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	**2**	0	2	0	0	0	0	**1**	**2**	0	**3**	0	0	0	0	**5**
07:15 AM	**1**	2	**1**	**4**	0	0	0	0	0	0	0	0	**1**	0	0	**1**	5
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	1	1	1	3	0	0	**1**	**1**	0	0	0	0	0	0	0	0	4
Total Volume	2	5	2	9	0	0	1	1	1	3	0	4	1	0	0	1	15
% App. Total	22.2	55.6	22.2		0	0	100		25	75	0		100	0	0		
PHF	.500	.625	.500	.563	.000	.000	.250	.250	.250	.375	.000	.333	.250	.000	.000	.250	.750

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County of Riverside
N/S: Harvill Avenue
E/W: Rider Street
Weather: Clear

File Name : 03_CRV_Harvill_Rider AM
Site Code : 05122133
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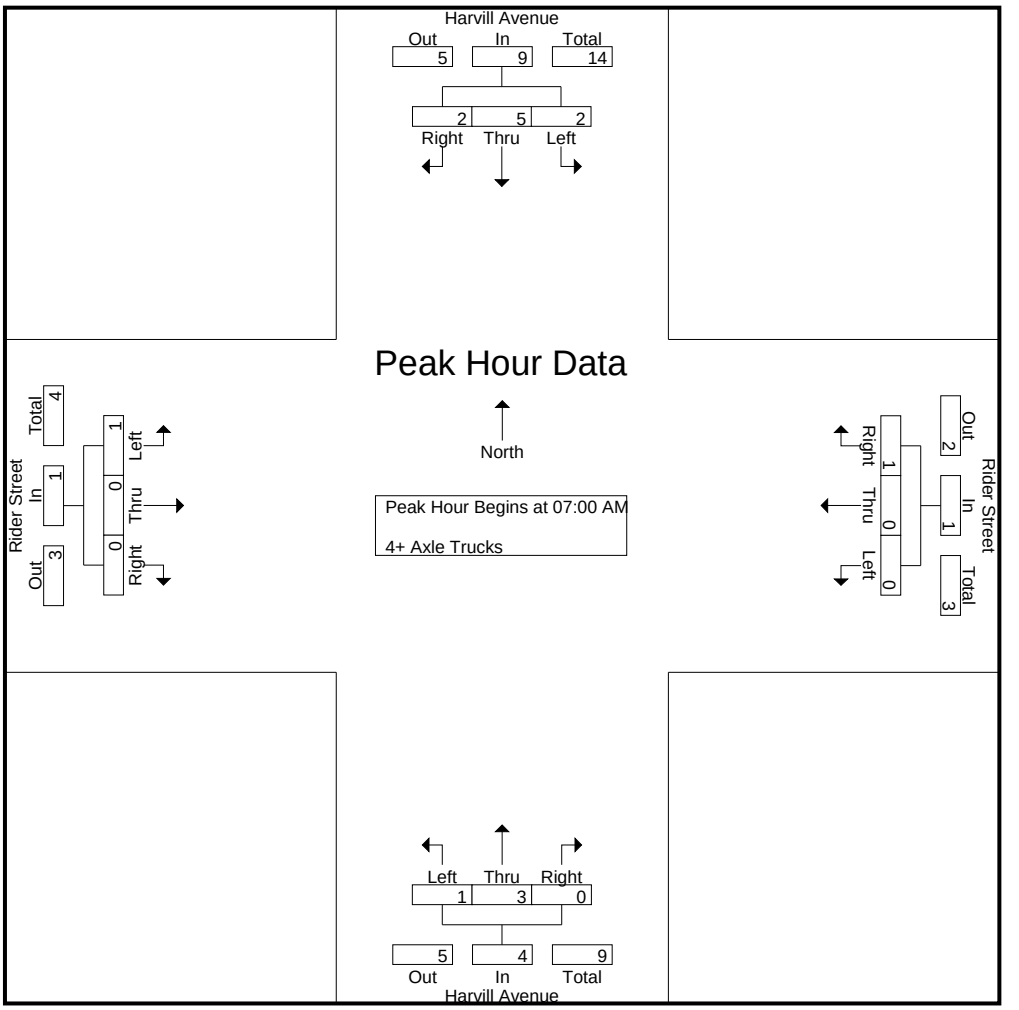

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	**2**	0	2	0	0	0	0	**1**	**2**	0	**3**	0	0	0	0
+15 mins.	**1**	2	**1**	**4**	0	0	0	0	0	0	0	0	**1**	0	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	1	1	1	3	0	0	**1**	**1**	0	0	0	0	0	0	0	0
Total Volume	2	5	2	9	0	0	1	1	1	3	0	4	1	0	0	1
% App. Total	22.2	55.6	22.2		0	0	100		25	75	0		100	0	0	
PHF	.500	.625	.500	.563	.000	.000	.250	.250	.250	.375	.000	.333	.250	.000	.000	.250

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

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	119	12	131	1	0	3	4	6	78	1	85	4	1	15	20	240
04:15 PM	1	96	8	105	0	0	1	1	5	65	1	71	10	0	11	21	198
04:30 PM	0	115	8	123	2	0	0	2	7	57	1	65	9	0	8	17	207
04:45 PM	0	100	3	103	0	0	0	0	4	61	0	65	4	0	8	12	180
Total	1	430	31	462	3	0	4	7	22	261	3	286	27	1	42	70	825
05:00 PM	0	81	10	91	0	0	0	0	2	64	0	66	5	0	9	14	171
05:15 PM	0	78	2	80	1	0	0	1	7	61	0	68	4	0	11	15	164
05:30 PM	1	80	4	85	4	0	0	4	2	59	0	61	1	0	3	4	154
05:45 PM	0	70	10	80	0	0	1	1	4	66	1	71	4	0	6	10	162
Total	1	309	26	336	5	0	1	6	15	250	1	266	14	0	29	43	651
Grand Total	2	739	57	798	8	0	5	13	37	511	4	552	41	1	71	113	1476
Apprch %	0.3	92.6	7.1		61.5	0	38.5		6.7	92.6	0.7		36.3	0.9	62.8		
Total %	0.1	50.1	3.9	54.1	0.5	0	0.3	0.9	2.5	34.6	0.3	37.4	2.8	0.1	4.8	7.7	
Passenger Vehicles	2	711	51	764	8	0	5	13	36	498	4	538	40	1	71	112	1427
% Passenger Vehicles	100	96.2	89.5	95.7	100	0	100	100	97.3	97.5	100	97.5	97.6	100	100	99.1	96.7
Large 2 Axle Vehicles	0	17	1	18	0	0	0	0	1	5	0	6	0	0	0	0	24
% Large 2 Axle Vehicles	0	2.3	1.8	2.3	0	0	0	0	2.7	1	0	1.1	0	0	0	0	1.6
3 Axle Vehicles	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
% 3 Axle Vehicles	0	0.3	0	0.3	0	0	0	0	0	0.6	0	0.5	0	0	0	0	0.3
4+ Axle Trucks	0	9	5	14	0	0	0	0	0	5	0	5	1	0	0	1	20
% 4+ Axle Trucks	0	1.2	8.8	1.8	0	0	0	0	0	1	0	0.9	2.4	0	0	0.9	1.4

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**119**	**12**	**131**	1	0	**3**	**4**	6	**78**	**1**	**85**	4	**1**	**15**	20	**240**
04:15 PM	**1**	96	8	105	0	0	1	1	5	65	1	71	**10**	0	11	**21**	198
04:30 PM	0	115	8	123	**2**	0	0	2	**7**	57	1	65	9	0	8	17	207
04:45 PM	0	100	3	103	0	0	0	0	4	61	0	65	4	0	8	12	180
Total Volume	1	430	31	462	3	0	4	7	22	261	3	286	27	1	42	70	825
% App. Total	0.2	93.1	6.7		42.9	0	57.1		7.7	91.3	1		38.6	1.4	60		
PHF	.250	.903	.646	.882	.375	.000	.333	.438	.786	.837	.750	.841	.675	.250	.700	.833	.859

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Site Code : 05122133
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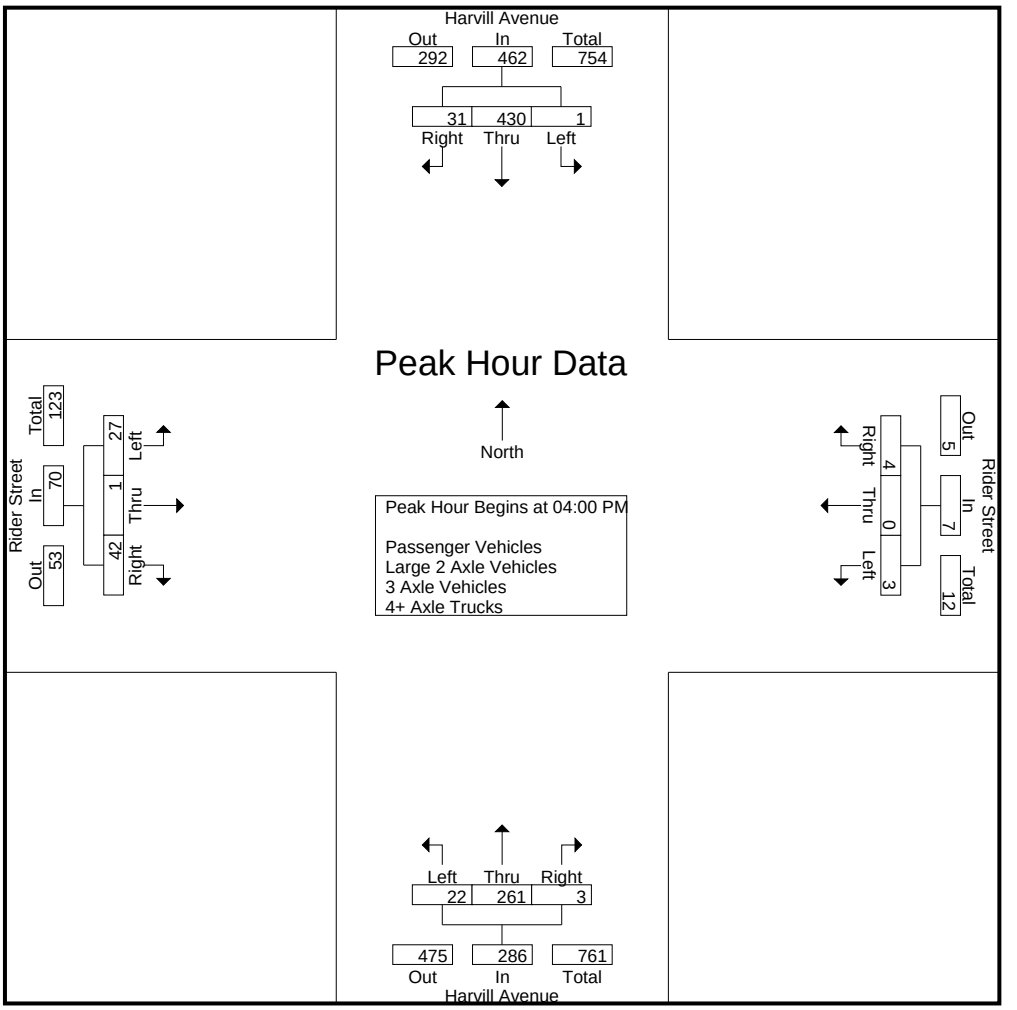

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**119**	**12**	**131**	1	0	**3**	**4**	6	**78**	**1**	**85**	4	**1**	**15**	20
+15 mins.	**1**	96	8	105	0	0	1	1	5	65	1	71	**10**	0	11	**21**
+30 mins.	0	115	8	123	**2**	0	0	2	**7**	57	1	65	9	0	8	17
+45 mins.	0	100	3	103	0	0	0	0	4	61	0	65	4	0	8	12
Total Volume	1	430	31	462	3	0	4	7	22	261	3	286	27	1	42	70
% App. Total	0.2	93.1	6.7		42.9	0	57.1		7.7	91.3	1		38.6	1.4	60	
PHF	.250	.903	.646	.882	.375	.000	.333	.438	.786	.837	.750	.841	.675	.250	.700	.833

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Groups Printed- Large 2 Axle Vehicles

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	4	1	5	0	0	0	0	0	0	0	0	0	0	0	0	5
04:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	7	1	8	0	0	0	0	0	1	0	1	0	0	0	0	9
05:00 PM	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
05:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:30 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:45 PM	0	1	0	1	0	0	0	0	1	2	0	3	0	0	0	0	4
Total	0	10	0	10	0	0	0	0	1	4	0	5	0	0	0	0	15
Grand Total	0	17	1	18	0	0	0	0	1	5	0	6	0	0	0	0	24
Apprch %	0	94.4	5.6		0	0	0		16.7	83.3	0		0	0	0		
Total %	0	70.8	4.2	75	0	0	0	0	4.2	20.8	0	25	0	0	0	0	

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**4**	**1**	**5**	0	0	0	0	0	0	0	0	0	0	0	0	**5**
04:15 PM	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	7	1	8	0	0	0	0	0	1	0	1	0	0	0	0	9
% App. Total	0	87.5	12.5		0	0	0		0	100	0		0	0	0		
PHF	.000	.438	.250	.400	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.450

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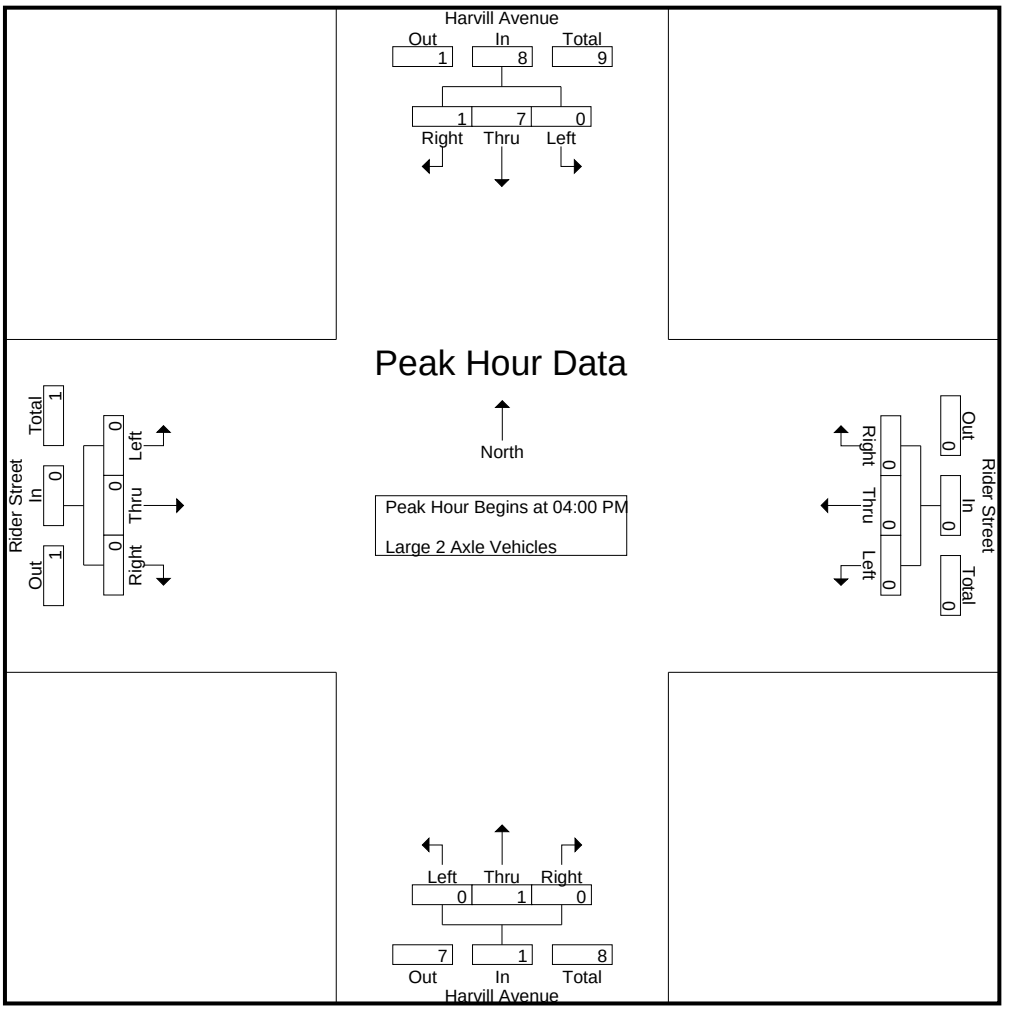

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**4**	**1**	**5**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	7	1	8	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	87.5	12.5		0	0	0		0	100	0		0	0	0	
PHF	.000	.438	.250	.400	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

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Groups Printed- 3 Axle Vehicles

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	2	0	2	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
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Grand Total	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	40	0	40	0	0	0	0	0	60	0	60	0	0	0	0	

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

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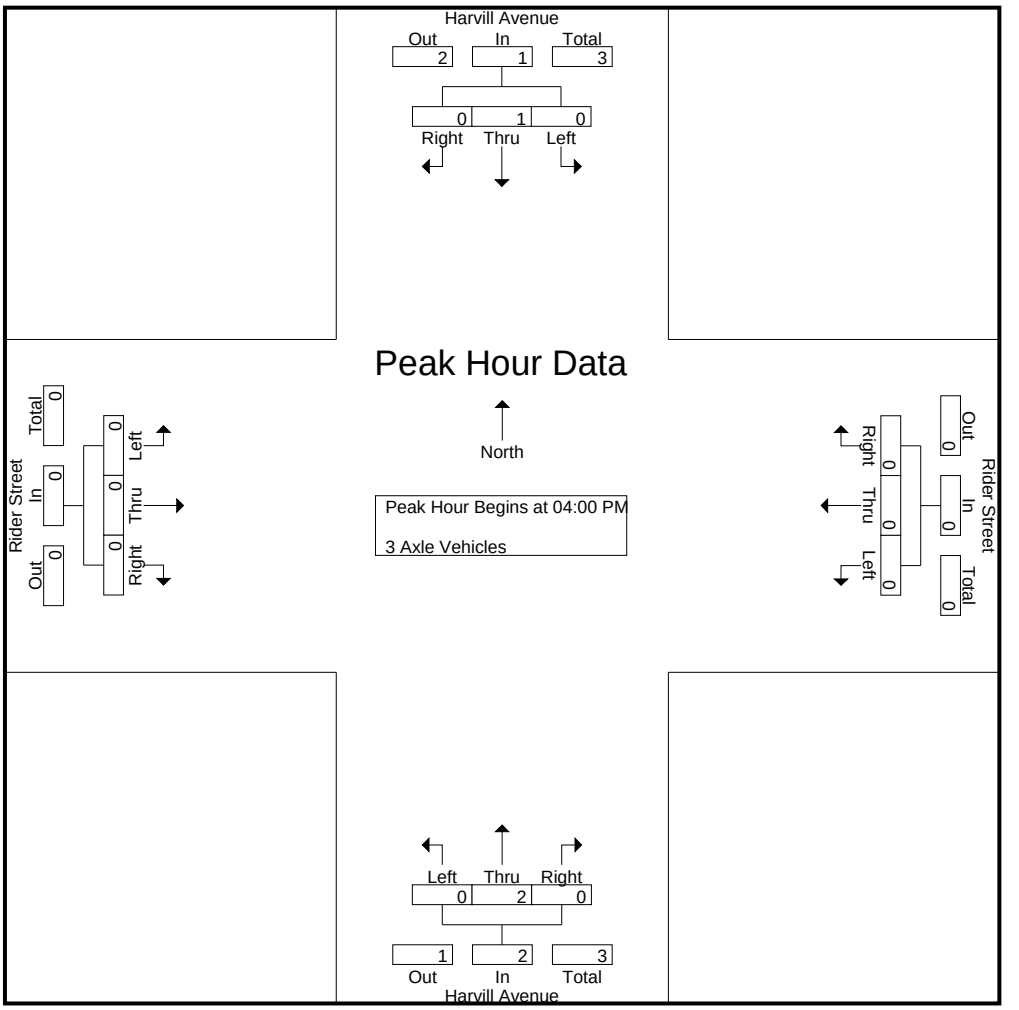

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	**1**	0	**1**	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	1	0	1	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000

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Groups Printed- 4+ Axle Trucks

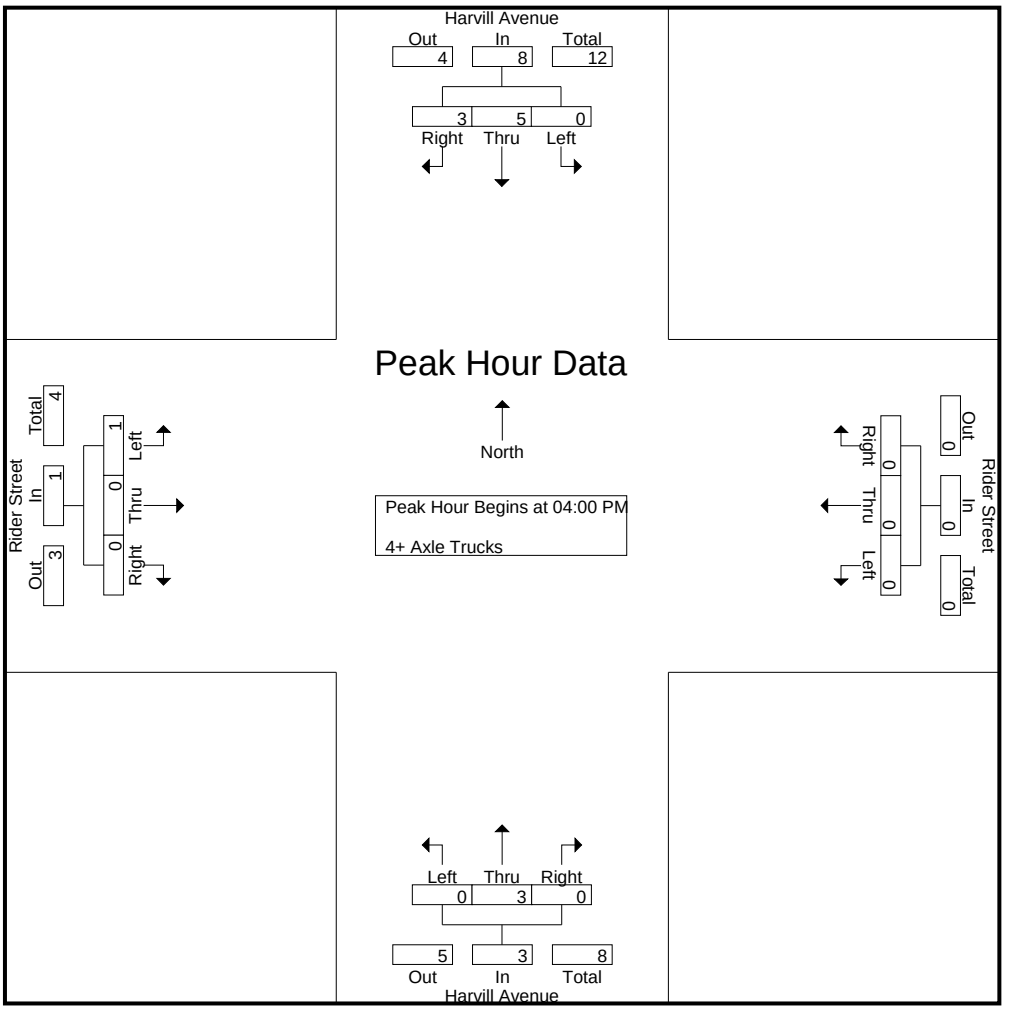
	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:15 PM	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	2	0	2	0	0	0	0	0	2	0	2	1	0	0	1	5
Total	0	5	3	8	0	0	0	0	0	3	0	3	1	0	0	1	12
05:00 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:15 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:45 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	4	2	6	0	0	0	0	0	2	0	2	0	0	0	0	8
Grand Total	0	9	5	14	0	0	0	0	0	5	0	5	1	0	0	1	20
Apprch %	0	64.3	35.7		0	0	0		0	100	0		100	0	0		
Total %	0	45	25	70	0	0	0	0	0	25	0	25	5	0	0	5	

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**2**	**1**	**3**	0	0	0	0	0	0	0	0	0	0	0	0	3
04:15 PM	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	2	0	2	0	0	0	0	0	**2**	0	**2**	**1**	0	0	**1**	**5**
Total Volume	0	5	3	8	0	0	0	0	0	3	0	3	1	0	0	1	12
% App. Total	0	62.5	37.5		0	0	0		0	100	0		100	0	0		
PHF	.000	.625	.750	.667	.000	.000	.000	.000	.000	.375	.000	.375	.250	.000	.000	.250	.600

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

County of Riverside
N/S: Harvill Avenue
E/W: Rider Street
Weather: Clear

File Name : 03_CRV_Harvill_Rider PM
Site Code : 05122133
Start Date : 2/8/2022
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	**2**	**1**	**3**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	**2**	0	**2**	**1**	0	0	**1**
Total Volume	0	5	3	8	0	0	0	0	0	3	0	3	1	0	0	1
% App. Total	0	62.5	37.5		0	0	0		0	100	0		100	0	0	
PHF	.000	.625	.750	.667	.000	.000	.000	.000	.000	.375	.000	.375	.250	.000	.000	.250

Location: County of Riverside
N/S: Harvill Avenue
E/W: Rider Street

Date: 2/8/2022
Day: Tuesday

PEDESTRIANS

	North Leg Harvill Avenue	East Leg Rider Street	South Leg Harvill Avenue	West Leg Rider Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	1	1
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	1	1

	North Leg Harvill Avenue	East Leg Rider Street	South Leg Harvill Avenue	West Leg Rider Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	0	1
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	1	0	1
5:45 PM	0	1	0	0	1
TOTAL VOLUMES:	0	2	1	0	3

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

Location: County of Riverside
N/S: Harvill Avenue
E/W: Rider Street

Date: 2/8/2022
Day: Tuesday

BICYCLES

	Southbound Harvill Avenue			Westbound Rider Street			Northbound Harvill Avenue			Eastbound Rider 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	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 Harvill Avenue			Westbound Rider Street			Northbound Harvill Avenue			Eastbound Rider 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	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	2
TOTAL VOLUMES:	0	1	0	0	0	0	1	1	0	0	0	0	3

A816

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tuesday, May 10, 2022
JOB #: SC3419

CITY: Perris
LOCATION: TMC1 Harvill and Cajalco

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
0:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8
3:45	0	9	0	0	0	0	0	0	0	0	0	0	0	9
4:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
4:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7
4:30	0	24	2	0	0	0	0	0	0	0	0	0	0	26
4:45	0	24	1	0	0	0	0	0	0	0	0	0	0	25
5:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
5:15	0	3	0	0	0	2	0	0	0	0	0	0	0	5
5:30	0	1	0	0	1	0	0	0	0	0	0	0	0	2
5:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
6:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
6:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
6:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
6:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
7:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
7:15	0	1	0	0	0	0	0	0	1	0	0	0	0	2
7:30	0	3	0	0	0	1	0	0	0	0	0	0	0	4
7:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
8:00	0	4	0	0	0	0	0	0	1	0	0	0	0	5
8:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
8:30	0	3	2	0	2	0	0	0	0	0	0	0	0	7
8:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
9:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
9:15	0	2	0	0	0	1	0	0	1	0	0	0	0	4
9:30	0	0	0	0	1	0	0	0	1	0	0	0	0	2
9:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
10:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
10:15	0	1	0	0	0	0	0	0	1	0	0	0	0	2
10:30	0	3	1	0	0	0	0	0	0	0	0	0	0	4
10:45	0	1	0	0	0	0	0	0	1	0	0	0	0	2
11:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
11:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
11:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
11:45	0	3	0	0	1	0	0	0	1	0	0	0	0	5
TOTAL	0	158	9	0	5	4	0	0	8	0	0	0	0	184

AM PEAK HOUR	4:00 AM
AM PEAK VOLUME	66

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	1	0	0	0	0	0	0	2	0	0	0	0	3
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
12:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
13:00	0	3	0	0	1	0	0	0	1	0	0	0	0	5
13:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
13:30	0	3	0	0	0	1	0	0	0	0	0	0	0	4
13:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
14:00	1	2	0	0	0	0	0	0	0	0	0	0	0	3
14:15	0	4	0	0	1	0	0	0	0	0	0	0	0	5
14:30	0	11	0	0	0	0	0	0	0	0	0	0	0	11
14:45	0	21	1	0	0	0	0	0	0	0	0	0	0	22
15:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	2	0	0	0	0	2
16:30	0	1	0	0	0	0	0	0	1	0	0	0	0	2
16:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
17:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	1	0	0	0	0	0	0	2	0	0	0	0	3
18:00	0	0	0	0	0	0	0	0	2	0	0	0	0	2
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	1	1	0	0	0	0	0	0	0	0	0	0	0	2
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	1	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2	65	1	0	2	2	0	0	11	0	0	0	0	83

PM PEAK HOUR	2:00 PM
PM PEAK VOLUME	41

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	2	223	10	0	7	6	0	0	19	0	0	0	0	267
% OF TOTAL	0.7%	83.5%	3.7%	0.0%	2.6%	2.2%	0.0%	0.0%	7.1%	0.0%	0.0%	0.0%	0.0%	100.0%
Class	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	
TOTAL: ALL	3	445	24	0	11	13	0	0	39	0	0	0	0	535
% OF TOTAL	1.1%	166.7%	9.0%	0.0%	4.1%	4.9%	0.0%	0.0%	14.6%	0.0%	0.0%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tuesday, May 10, 2022
JOB #: SC3419

CITY: Perris
LOCATION: TMC1 Harvill and Cajalco

AM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
0:30	0	23	0	0	0	0	0	0	0	0	0	0	0	23
0:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6
1:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:30	0	1	0	0	0	0	0	0	1	0	0	0	0	2
4:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00	0	0	0	0	0	0	0	0	1	0	0	0	0	1
5:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	0	0	0	0	0	0	0	0	3	0	0	0	0	3
5:45	0	0	0	0	0	0	0	0	1	0	0	0	0	1
6:00	0	0	0	0	1	0	0	0	1	0	0	0	0	2
6:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:30	0	1	0	0	0	0	0	0	1	0	0	0	0	2
6:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
7:15	0	0	0	0	0	0	0	0	1	0	0	0	0	1
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
8:15	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30	0	2	0	0	1	0	0	0	0	0	0	0	0	3
8:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
9:00	0	6	3	0	0	0	0	0	0	0	0	0	0	9
9:15	0	3	1	0	0	0	0	0	0	0	0	0	0	4
9:30	0	0	0	0	0	1	0	0	0	0	0	0	0	1
9:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
10:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
10:15	0	0	0	0	0	0	0	0	1	0	0	0	0	1
10:30	0	1	0	0	0	0	0	0	2	0	0	0	0	3
10:45	0	3	1	0	0	0	0	0	0	0	0	0	0	4
11:00	0	1	0	0	0	0	0	0	2	0	0	0	0	3
11:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
11:30	0	3	0	0	0	0	0	0	1	0	0	0	0	4
11:45	0	3	1	0	1	0	0	0	0	0	0	0	0	5
TOTAL	1	71	9	0	3	3	0	0	16	0	0	0	0	103

AM PEAK HOUR	12:15 AM
AM PEAK VOLUME	33

PM	WESTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
12:15	0	2	0	0	0	2	0	0	0	0	0	0	0	4
12:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
12:45	0	2	0	0	0	0	0	0	1	0	0	0	0	3
13:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
13:15	0	1	0	0	0	1	0	0	0	0	0	0	0	2
13:30	0	20	2	0	0	0	0	0	0	0	0	0	0	22
13:45	0	2	0	0	0	0	0	0	1	0	0	0	0	3
14:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
14:15	0	9	0	0	0	0	0	0	0	0	0	0	0	9
14:30	0	50	2	0	0	0	0	0	1	0	0	0	0	53
14:45	0	8	0	0	1	0	0	0	0	0	0	0	0	9
15:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
15:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
15:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
15:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
16:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
16:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
16:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6
16:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
17:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
17:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
18:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
18:45	0	1	0	0	0	0	0	0	1	0	0	0	0	2
19:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
19:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	1	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	151	5	0	1	4	0	0	4	0	0	0	0	165

PM PEAK HOUR	2:15 PM
PM PEAK VOLUME	74

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	1	222	14	0	4	7	0	0	20	0	0	0	0	268
% OF TOTAL	0.4%	82.8%	5.2%	0.0%	1.5%	2.6%	0.0%	0.0%	7.5%	0.0%	0.0%	0.0%	0.0%	100.0%

Class	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**

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County of Riverside
Harvill Avenue
N/ Rider Street
24 Hour Directional Classification Count

CRV001
Site Code: 051-22113

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
02/08/22	0	14	1	0	0	0	0	0	2	0	0	0	0	17
01:00	0	7	0	0	0	0	0	0	2	0	0	0	0	9
02:00	0	8	0	0	0	0	0	0	1	0	0	0	0	9
03:00	0	47	3	0	0	0	0	0	0	0	0	0	0	50
04:00	0	98	1	0	0	0	0	0	5	0	0	0	0	104
05:00	1	189	14	2	2	2	0	1	5	0	0	0	0	216
06:00	1	303	58	**6**	3	2	0	1	4	0	0	0	0	378
07:00	1	**499**	**117**	1	7	1	0	2	3	0	0	0	0	**631**
08:00	0	223	48	0	7	**4**	0	0	4	0	0	0	0	286
09:00	0	149	39	1	**10**	3	**1**	1	**9**	0	0	0	0	213
10:00	**3**	131	50	1	9	3	0	**3**	7	0	0	0	0	207
11:00	0	146	44	2	10	1	0	2	8	0	0	0	0	213
12 PM	**2**	170	42	0	5	4	0	1	**8**	0	0	0	0	232
13:00	0	190	49	**7**	5	**10**	0	1	7	0	0	0	0	269
14:00	1	203	46	0	**6**	2	0	**2**	0	0	**1**	0	0	261
15:00	1	**323**	**88**	0	5	2	0	2	1	0	0	0	0	**422**
16:00	1	238	53	0	0	1	**1**	0	3	0	0	0	**1**	298
17:00	0	224	41	0	3	1	0	0	2	0	0	0	0	271
18:00	0	168	22	0	1	0	0	0	1	0	0	0	0	192
19:00	0	115	7	0	0	0	0	0	0	0	0	0	0	122
20:00	0	86	3	0	0	0	0	0	1	0	0	0	0	90
21:00	0	61	11	0	1	0	0	2	2	0	0	0	0	77
22:00	0	41	3	0	0	0	0	0	1	0	0	0	0	45
23:00	0	30	1	0	0	0	0	0	0	0	0	0	0	31
Total	11	3663	741	20	74	36	2	18	76	0	1	0	1	4643
Percent	0.2%	78.9%	16.0%	0.4%	1.6%	0.8%	0.0%	0.4%	1.6%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	07:00	07:00	06:00	09:00	08:00	09:00	10:00	09:00					07:00
Vol.	3	499	117	6	10	4	1	3	9					631
PM Peak	12:00	15:00	15:00	13:00	14:00	13:00	16:00	14:00	12:00		14:00		16:00	15:00
Vol.	2	323	88	7	6	10	1	2	8		1		1	422
Grand Total	11	3663	741	20	74	36	2	18	76	0	1	0	1	4643
Percent	0.2%	78.9%	16.0%	0.4%	1.6%	0.8%	0.0%	0.4%	1.6%	0.0%	0.0%	0.0%	0.0%	

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County of Riverside
Harvill Avenue
N/ Rider Street
24 Hour Directional Classification Count

CRV001
Site Code: 051-22113

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
02/08/22	0	20	0	0	0	0	0	0	1	0	0	0	0	21
01:00	0	13	0	0	0	0	0	0	2	0	0	0	0	15
02:00	0	11	1	0	0	0	0	0	4	0	0	0	0	16
03:00	0	16	1	0	0	0	0	0	2	0	0	0	0	19
04:00	1	35	1	0	1	0	0	0	1	0	0	0	0	39
05:00	0	103	16	0	3	0	0	0	5	0	0	0	0	127
06:00	0	124	31	0	7	0	0	0	4	0	0	0	0	166
07:00	0	153	41	0	7	0	0	0	8	0	0	0	0	209
08:00	0	**162**	**49**	**5**	**12**	1	0	2	9	0	0	0	0	**240**
09:00	**2**	136	40	2	7	1	0	0	2	0	0	0	0	190
10:00	1	118	37	0	8	1	0	2	**10**	0	0	0	0	177
11:00	1	149	41	2	12	**3**	0	**6**	9	0	0	0	0	223
12 PM	**2**	152	35	0	8	2	0	3	**6**	0	0	0	0	208
13:00	0	179	50	0	9	2	0	2	6	0	1	0	0	249
14:00	0	209	67	0	2	**4**	0	1	5	0	0	0	0	288
15:00	1	**372**	93	2	**12**	2	0	**6**	5	**1**	**2**	0	0	**496**
16:00	0	334	**103**	0	11	1	0	2	6	0	0	0	0	457
17:00	0	244	75	**3**	6	1	0	1	5	0	0	0	0	335
18:00	1	189	23	1	2	0	0	0	2	0	0	0	0	218
19:00	1	124	7	0	2	0	0	0	1	0	0	0	0	135
20:00	0	70	9	0	0	0	0	0	0	0	0	0	0	79
21:00	0	58	15	0	0	2	0	0	0	0	0	0	0	75
22:00	0	44	3	0	0	2	0	0	1	0	0	0	0	50
23:00	0	37	2	0	0	1	0	0	3	0	0	0	0	43
Total	10	3052	740	15	109	23	0	25	97	1	3	0	0	4075
Percent	0.2%	74.9%	18.2%	0.4%	2.7%	0.6%	0.0%	0.6%	2.4%	0.0%	0.1%	0.0%	0.0%	
AM Peak	09:00	08:00	08:00	08:00	08:00	11:00		11:00	10:00					08:00
Vol.	2	162	49	5	12	3		6	10					240
PM Peak	12:00	15:00	16:00	17:00	15:00	14:00		15:00	12:00	15:00	15:00			15:00
Vol.	2	372	103	3	12	4		6	6	1	2			496
Grand Total	10	3052	740	15	109	23	0	25	97	1	3	0	0	4075
Percent	0.2%	74.9%	18.2%	0.4%	2.7%	0.6%	0.0%	0.6%	2.4%	0.0%	0.1%	0.0%	0.0%	

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CRV001
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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
02/08/22	0	34	1	0	0	0	0	0	3	0	0	0	0	38
01:00	0	20	0	0	0	0	0	0	4	0	0	0	0	24
02:00	0	19	1	0	0	0	0	0	5	0	0	0	0	25
03:00	0	63	4	0	0	0	0	0	2	0	0	0	0	69
04:00	1	133	2	0	1	0	0	0	6	0	0	0	0	143
05:00	1	292	30	2	5	2	0	1	10	0	0	0	0	343
06:00	1	427	89	**6**	10	2	0	1	8	0	0	0	0	544
07:00	1	**652**	**158**	1	14	1	0	2	11	0	0	0	0	**840**
08:00	0	385	97	5	19	**5**	0	2	13	0	0	0	0	526
09:00	2	285	79	3	17	4	**1**	1	11	0	0	0	0	403
10:00	**4**	249	87	1	17	4	0	5	**17**	0	0	0	0	384
11:00	1	295	85	4	**22**	4	0	**8**	17	0	0	0	0	436
12 PM	**4**	322	77	0	13	6	0	4	**14**	0	0	0	0	440
13:00	0	369	99	**7**	14	**12**	0	3	13	0	1	0	0	518
14:00	1	412	113	0	8	6	0	3	5	0	1	0	0	549
15:00	2	**695**	**181**	2	**17**	4	0	**8**	6	**1**	**2**	0	0	**918**
16:00	1	572	156	0	11	2	**1**	2	9	0	0	0	**1**	755
17:00	0	468	116	3	9	2	0	1	7	0	0	0	0	606
18:00	1	357	45	1	3	0	0	0	3	0	0	0	0	410
19:00	1	239	14	0	2	0	0	0	1	0	0	0	0	257
20:00	0	156	12	0	0	0	0	0	1	0	0	0	0	169
21:00	0	119	26	0	1	2	0	2	2	0	0	0	0	152
22:00	0	85	6	0	0	2	0	0	2	0	0	0	0	95
23:00	0	67	3	0	0	1	0	0	3	0	0	0	0	74
Total	21	6715	1481	35	183	59	2	43	173	1	4	0	1	8718
Percent	0.2%	77.0%	17.0%	0.4%	2.1%	0.7%	0.0%	0.5%	2.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	07:00	07:00	06:00	11:00	08:00	09:00	11:00	10:00					07:00
Vol.	4	652	158	6	22	5	1	8	17					840
PM Peak	12:00	15:00	15:00	13:00	15:00	13:00	16:00	15:00	12:00	15:00	15:00		16:00	15:00
Vol.	4	695	181	7	17	12	1	8	14	1	2		1	918
Grand Total	21	6715	1481	35	183	59	2	43	173	1	4	0	1	8718
Percent	0.2%	77.0%	17.0%	0.4%	2.1%	0.7%	0.0%	0.5%	2.0%	0.0%	0.0%	0.0%	0.0%	

APPENDIX 1.2: SITE ADJACENT QUEUES

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Intersection: 1: Patterson Av. & Driveway 1

Movement	EB
Directions Served	LTR
Maximum Queue (ft)	30
Average Queue (ft)	2
95th Queue (ft)	14
Link Distance (ft)	293
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Patterson Av. & Driveway 2

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (ft)	23	22
Average Queue (ft)	5	2
95th Queue (ft)	22	13
Link Distance (ft)	210	175
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 1: Patterson Av. & Driveway 1

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (ft)	30	23
Average Queue (ft)	1	4
95th Queue (ft)	11	22
Link Distance (ft)	293	175
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Patterson Av. & Driveway 2

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (ft)	31	30
Average Queue (ft)	13	4
95th Queue (ft)	38	20
Link Distance (ft)	210	175
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

APPENDIX 3.1: TRAFFIC COUNTS

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INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, May 10, 22

LOCATION: Perris
NORTH & SOUTH: Harvill
EAST & WEST: Cajalco

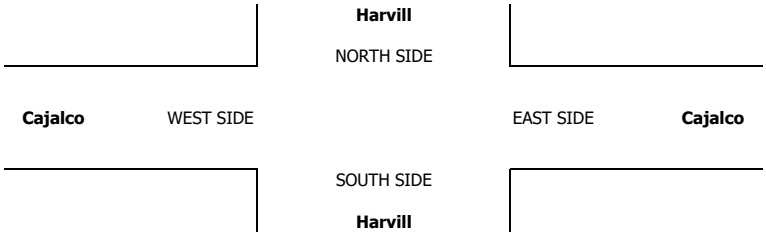
PROJECT #: SC3419
LOCATION #: 1
CONTROL: STOP E/W

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

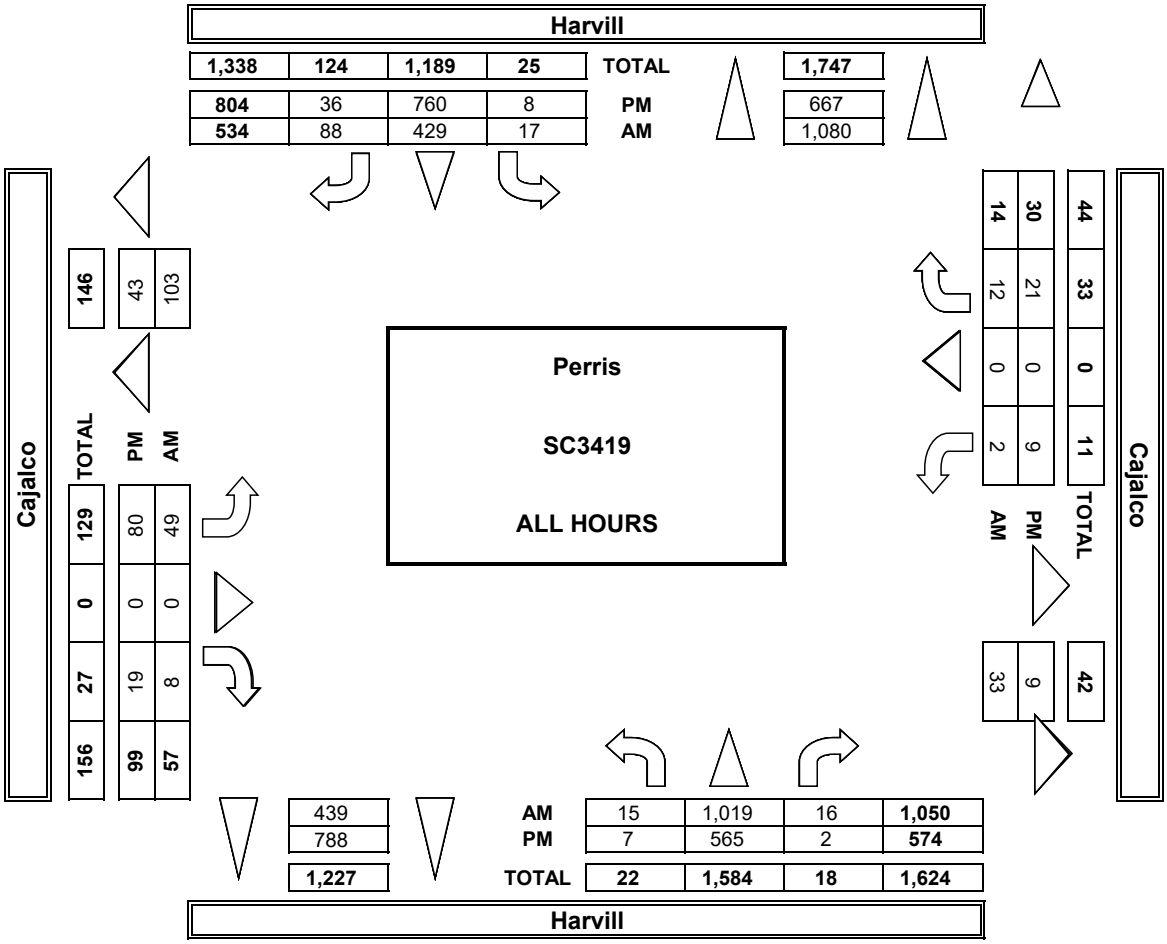
Add U-Turns to Left Turns

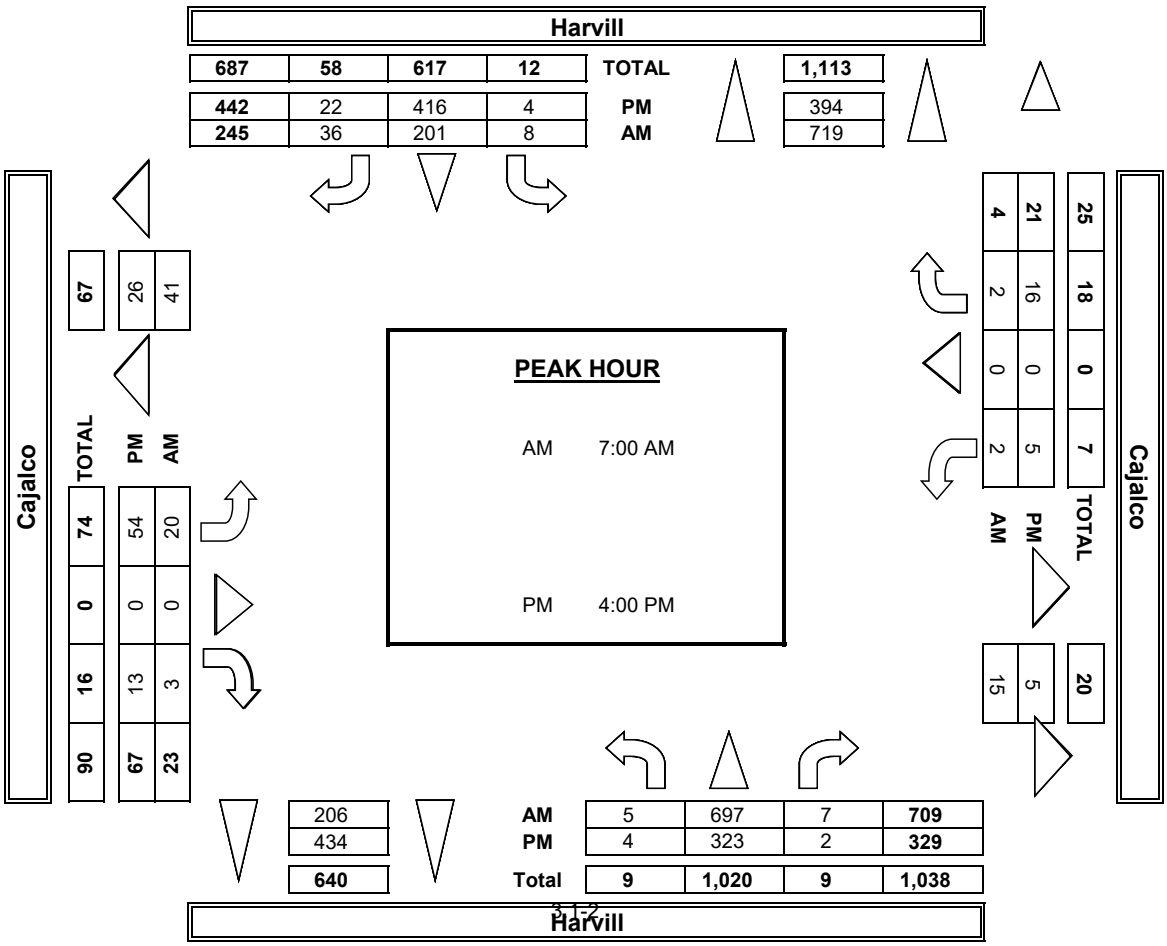
		NORTHBOUND Harvill			SOUTHBOUND Harvill			EASTBOUND Cajalco			WESTBOUND Cajalco				U-TURNS				
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	1	175	1	1	39	12	5	0	1	1	0	1	237	0	0	0	0	0
	7:15 AM	0	195	1	1	43	8	5	0	0	1	0	0	254	0	0	0	0	0
	7:30 AM	2	171	0	4	58	7	6	0	1	0	0	0	249	0	0	0	0	0
	7:45 AM	2	156	5	2	61	9	4	0	1	0	0	1	241	0	0	0	0	0
	8:00 AM	3	125	3	2	80	9	7	0	0	0	0	3	232	0	0	0	0	0
	8:15 AM	4	90	2	1	52	12	9	0	2	0	0	1	173	0	0	0	0	0
	8:30 AM	1	59	3	4	59	17	3	0	2	0	0	3	151	0	0	0	0	0
	8:45 AM	2	48	1	2	37	14	10	0	1	0	0	3	118	0	0	0	0	0
	VOLUMES	15	1,019	16	17	429	88	49	0	8	2	0	12	1,655	0	0	0	0	0
	APPROACH %	1%	97%	2%	3%	80%	16%	86%	0%	14%	14%	0%	86%						
	APP/DEPART	1,050	/	1,080	534	/	439	57	/	33	14	/	103	0					
	BEGIN PEAK HR		7:00 AM																
	VOLUMES	5	697	7	8	201	36	20	0	3	2	0	2	981					
	APPROACH %	1%	98%	1%	3%	82%	15%	87%	0%	13%	50%	0%	50%						
	PEAK HR FACTOR		0.904			0.851			0.821			0.500		0.966					
	APP/DEPART	709	/	719	245	/	206	23	/	15	4	/	41	0					
PM	4:00 PM	0	89	0	0	78	5	10	0	3	2	0	7	194	0	0	0	0	0
	4:15 PM	1	84	2	0	116	6	11	0	3	1	0	3	227	0	0	0	0	0
	4:30 PM	3	72	0	3	102	7	28	0	4	1	0	5	225	0	1	0	0	1
	4:45 PM	0	78	0	1	120	4	5	0	3	1	0	1	213	0	0	0	0	0
	5:00 PM	0	54	0	1	97	4	18	0	2	1	0	2	179	0	0	0	0	0
	5:15 PM	1	71	0	0	90	5	3	0	1	0	0	0	171	0	0	0	0	0
	5:30 PM	0	71	0	0	87	3	1	0	1	3	0	2	168	0	0	0	0	0
	5:45 PM	2	46	0	3	70	2	4	0	2	0	0	1	130	0	0	0	0	0
	VOLUMES	7	565	2	8	760	36	80	0	19	9	0	21	1,507	0	1	0	0	1
	APPROACH %	1%	98%	0%	1%	95%	4%	81%	0%	19%	30%	0%	70%						
	APP/DEPART	574	/	667	804	/	788	99	/	9	30	/	43	0					
	BEGIN PEAK HR		4:00 PM																
	VOLUMES	4	323	2	4	416	22	54	0	13	5	0	16	859					
	APPROACH %	1%	98%	1%	1%	94%	5%	81%	0%	19%	24%	0%	76%						
	PEAK HR FACTOR		0.924			0.884			0.523			0.583		0.946					
	APP/DEPART	329	/	394	442	/	434	67	/	5	21	/	26	0					



AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Perris	PROJECT #:	SC3419
5/10/22	NORTH & SOUTH:	Harvill	LOCATION #:	1
TUESDAY	EAST & WEST:	Cajalco	CONTROL:	STOP E/W

CLASS 2:	NOTES:
2-AXLE	
WORK	
VEHICLES/	
TRUCKS	

AM
PM
MD
OTHER
OTHER

▲ N
◄ W E ►
S ▼

	NORTHBOUND Harvill			SOUTHBOUND Harvill			EASTBOUND Cajalco			WESTBOUND Cajalco				U-TURNS				
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM																		
7:00 AM	0	3	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0
7:15 AM	0	6	0	0	0	0	1	0	0	0	0	0	7	0	0	0	0	0
7:30 AM	0	6	0	0	2	0	0	0	0	0	0	0	8	0	0	0	0	0
7:45 AM	0	5	0	0	2	1	1	0	0	0	0	0	9	0	0	0	0	0
8:00 AM	0	3	0	0	3	2	1	0	0	0	0	0	9	0	0	0	0	0
8:15 AM	0	5	0	0	1	3	2	0	0	0	0	0	11	0	0	0	0	0
8:30 AM	0	4	0	1	2	1	0	0	0	0	0	1	9	0	0	0	0	0
8:45 AM	0	2	0	0	3	0	0	0	0	0	0	1	6	0	0	0	0	0
VOLUMES	0	34	0	1	14	7	5	0	0	0	0	2	63	0	0	0	0	0
APPROACH %	0%	100%	0%	5%	64%	32%	100%	0%	0%	0%	0%	100%						
APP/DEPART	34	/	41	22	/	14	5	/	1	2	/	7	0					
BEGIN PEAK HR		7:00 AM																
VOLUMES	0	20	0	0	5	1	2	0	0	0	0	0	28					
APPROACH %	0%	100%	0%	0%	83%	17%	100%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.833			0.500			0.500			0.000		0.778					
APP/DEPART	20	/	22	6	/	5	2	/	0	0	/	1	0					
PM																		
4:00 PM	0	3	0	0	4	0	0	0	0	0	0	0	7	0	0	0	0	0
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
4:30 PM	0	1	0	0	2	0	1	0	0	0	0	0	4	0	0	0	0	0
4:45 PM	0	1	0	0	6	1	0	0	0	0	0	0	8	0	0	0	0	0
5:00 PM	0	0	0	0	3	0	0	0	1	0	0	0	4	0	0	0	0	0
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
5:45 PM	0	1	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0
VOLUMES	0	9	0	0	19	1	1	0	1	0	0	0	31	0	0	0	0	0
APPROACH %	0%	100%	0%	0%	95%	5%	50%	0%	50%	0%	0%	0%						
APP/DEPART	9	/	10	20	/	20	2	/	0	0	/	1	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	0	6	0	0	13	1	1	0	0	0	0	0	21					
APPROACH %	0%	100%	0%	0%	93%	7%	100%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.500			0.500			0.250			0.000		0.656					
APP/DEPART	6	/	7	14	/	13	1	/	0	0	/	1	0					

Harvill

NORTH SIDE

Cajalco WEST SIDE EAST SIDE **Cajalco**

SOUTH SIDE

Harvill

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Perris	PROJECT #:	SC3419
5/10/22	NORTH & SOUTH:	Harvill	LOCATION #:	1
TUESDAY	EAST & WEST:	Cajalco	CONTROL:	STOP E/W

CLASS 3: 3-AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

	NORTHBOUND Harvill			SOUTHBOUND Harvill			EASTBOUND Cajalco			WESTBOUND Cajalco				U-TURNS				
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM																		
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
7:30 AM	0	2	0	1	3	0	0	0	0	0	0	0	6	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0
8:00 AM	0	2	0	0	1	0	1	0	0	0	0	0	4	0	0	0	0	0
8:15 AM	0	1	0	0	0	1	0	0	0	0	0	1	3	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
VOLUMES	0	8	0	1	7	1	1	0	0	0	0	2	20	0	0	0	0	0
APPROACH %	0%	100%	0%	11%	78%	11%	100%	0%	0%	0%	0%	100%						
APP/DEPART	8	/	11	9	/	7	1	/	1	2	/	1	0					
BEGIN PEAK HR		7:00 AM																
VOLUMES	0	5	0	1	4	0	0	0	0	0	0	1	11					
APPROACH %	0%	100%	0%	20%	80%	0%	0%	0%	0%	0%	0%	100%						
PEAK HR FACTOR		0.625			0.313			0.000			0.250		0.458					
APP/DEPART	5	/	6	5	/	4	0	/	1	1	/	0	0					
PM																		
4:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0
4:15 PM	0	1	0	0	2	0	3	0	0	0	0	0	6	0	0	0	0	0
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
4:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0
VOLUMES	0	5	0	0	7	0	5	0	0	0	0	0	17	0	0	0	0	0
APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	0%	0%	0%						
APP/DEPART	5	/	10	7	/	7	5	/	0	0	/	0	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	0	4	0	0	4	0	4	0	0	0	0	0	12					
APPROACH %	0%	100%	0%	0%	100%	0%	100%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		1.000			0.500			0.333			0.000		0.500					
APP/DEPART	4	/	8	4	/	4	4	/	0	0	/	0	0					

Harvill

NORTH SIDE

Cajalco WEST SIDE EAST SIDE **Cajalco**

SOUTH SIDE

Harvill

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

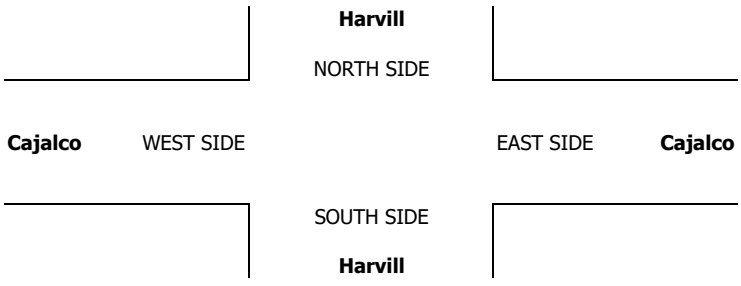
DATE:				
5/10/22	LOCATION:	Perris	PROJECT #:	SC3419
TUESDAY	NORTH & SOUTH:	Harvill	LOCATION #:	1
	EAST & WEST:	Cajalco	CONTROL:	STOP E/W

CLASS 4: 4 OR MORE AXLE TRUCKS

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

	NORTHBOUND Harvill			SOUTHBOUND Harvill			EASTBOUND Cajalco			WESTBOUND Cajalco				U-TURNS				
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB	SB	EB	WB	TTL
AM																		
7:00 AM	0	4	0	0	4	2	2	0	1	1	0	0	14	0	0	0	0	0
7:15 AM	0	4	0	0	3	1	2	0	0	1	0	0	11	0	0	0	0	0
7:30 AM	0	4	0	0	5	2	2	0	0	0	0	0	13	0	0	0	0	0
7:45 AM	1	7	0	0	3	0	1	0	0	0	0	0	12	0	0	0	0	0
8:00 AM	0	2	0	1	2	1	3	0	0	0	0	0	9	0	0	0	0	0
8:15 AM	0	4	0	0	1	2	2	0	0	0	0	0	9	0	0	0	0	0
8:30 AM	0	3	0	0	0	4	0	0	0	0	0	0	7	0	0	0	0	0
8:45 AM	0	4	0	0	3	1	5	0	0	0	0	0	13	0	0	0	0	0
VOLUMES	1	32	0	1	21	13	17	0	1	2	0	0	88	0	0	0	0	0
APPROACH %	3%	97%	0%	3%	60%	37%	94%	0%	6%	100%	0%	0%						
APP/DEPART	33	/	49	35	/	24	18	/	1	2	/	14	0					
BEGIN PEAK HR		7:00 AM																
VOLUMES	1	19	0	0	15	5	7	0	1	2	0	0	50					
APPROACH %	5%	95%	0%	0%	75%	25%	88%	0%	13%	100%	0%	0%						
PEAK HR FACTOR		0.625			0.714			0.667			0.500		0.893					
APP/DEPART	20	/	26	20	/	18	8	/	0	2	/	6	0					
PM																		
4:00 PM	0	5	0	0	4	1	0	0	0	0	0	0	10	0	0	0	0	0
4:15 PM	0	5	2	0	2	0	1	0	0	0	0	0	10	0	0	0	0	0
4:30 PM	1	0	0	1	2	1	1	0	0	0	0	0	6	0	0	0	0	0
4:45 PM	0	1	0	0	2	2	0	0	0	0	0	0	5	0	0	0	0	0
5:00 PM	0	2	0	0	0	1	1	0	0	0	0	0	4	0	0	0	0	0
5:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0
5:30 PM	0	2	0	0	2	1	0	0	0	0	0	0	5	0	0	0	0	0
5:45 PM	0	0	0	2	2	0	0	0	0	0	0	0	4	0	0	0	0	0
VOLUMES	1	16	2	3	14	7	3	0	0	0	0	0	46	0	0	0	0	0
APPROACH %	5%	84%	11%	13%	58%	29%	100%	0%	0%	0%	0%	0%						
APP/DEPART	19	/	19	24	/	14	3	/	5	0	/	8	0					
BEGIN PEAK HR		4:00 PM																
VOLUMES	1	11	2	1	10	4	2	0	0	0	0	0	31					
APPROACH %	7%	79%	14%	7%	67%	27%	100%	0%	0%	0%	0%	0%						
PEAK HR FACTOR		0.500			0.750			0.500			0.000		0.775					
APP/DEPART	14	/	13	15	/	10	2	/	3	0	/	5	0					



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

County of Riverside
N/S: Harvill Avenue
E/W: Rider Street
Weather: Clear

File Name : 03_CRV_Harvill_Rider AM
Site Code : 05122133
Start Date : 2/8/2022
Page No : 1

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

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	30	3	36	0	0	8	8	8	151	1	160	11	0	3	14	218
07:15 AM	2	43	5	50	2	0	1	3	6	154	2	162	15	0	7	22	237
07:30 AM	2	59	2	63	0	0	1	1	6	136	0	142	11	0	15	26	232
07:45 AM	6	50	6	62	0	0	3	3	3	131	1	135	6	1	4	11	211
Total	13	182	16	211	2	0	13	15	23	572	4	599	43	1	29	73	898
08:00 AM	2	50	6	58	0	0	1	1	6	110	3	119	4	1	3	8	186
08:15 AM	3	59	5	67	1	0	0	1	6	49	0	55	2	0	11	13	136
08:30 AM	1	51	6	58	0	0	2	2	4	57	1	62	5	0	0	5	127
08:45 AM	2	51	3	56	1	0	1	2	6	53	0	59	4	0	2	6	123
Total	8	211	20	239	2	0	4	6	22	269	4	295	15	1	16	32	572
Grand Total	21	393	36	450	4	0	17	21	45	841	8	894	58	2	45	105	1470
Apprch %	4.7	87.3	8		19	0	81		5	94.1	0.9		55.2	1.9	42.9		
Total %	1.4	26.7	2.4	30.6	0.3	0	1.2	1.4	3.1	57.2	0.5	60.8	3.9	0.1	3.1	7.1	
Passenger Vehicles	17	352	33	402	2	0	15	17	40	817	8	865	54	2	42	98	1382
% Passenger Vehicles	81	89.6	91.7	89.3	50	0	88.2	81	88.9	97.1	100	96.8	93.1	100	93.3	93.3	94
Large 2 Axle Vehicles	0	27	1	28	0	0	0	0	4	18	0	22	0	0	3	3	53
% Large 2 Axle Vehicles	0	6.9	2.8	6.2	0	0	0	0	8.9	2.1	0	2.5	0	0	6.7	2.9	3.6
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	2	0	2	1	0	0	1	4
% 3 Axle Vehicles	0	0.3	0	0.2	0	0	0	0	0	0.2	0	0.2	1.7	0	0	1	0.3
4+ Axle Trucks	4	13	2	19	2	0	2	4	1	4	0	5	3	0	0	3	31
% 4+ Axle Trucks	19	3.3	5.6	4.2	50	0	11.8	19	2.2	0.5	0	0.6	5.2	0	0	2.9	2.1

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	3	30	3	36	0	0	**8**	**8**	**8**	151	1	160	11	0	3	14	218
07:15 AM	2	43	5	50	**2**	0	1	3	6	**154**	**2**	**162**	**15**	0	7	22	**237**
07:30 AM	2	**59**	2	**63**	0	0	1	1	6	136	0	142	11	0	**15**	**26**	232
07:45 AM	**6**	50	**6**	62	0	0	3	3	3	131	1	135	6	**1**	4	11	211
Total Volume	13	182	16	211	2	0	13	15	23	572	4	599	43	1	29	73	898
% App. Total	6.2	86.3	7.6		13.3	0	86.7		3.8	95.5	0.7		58.9	1.4	39.7		
PHF	.542	.771	.667	.837	.250	.000	.406	.469	.719	.929	.500	.924	.717	.250	.483	.702	.947

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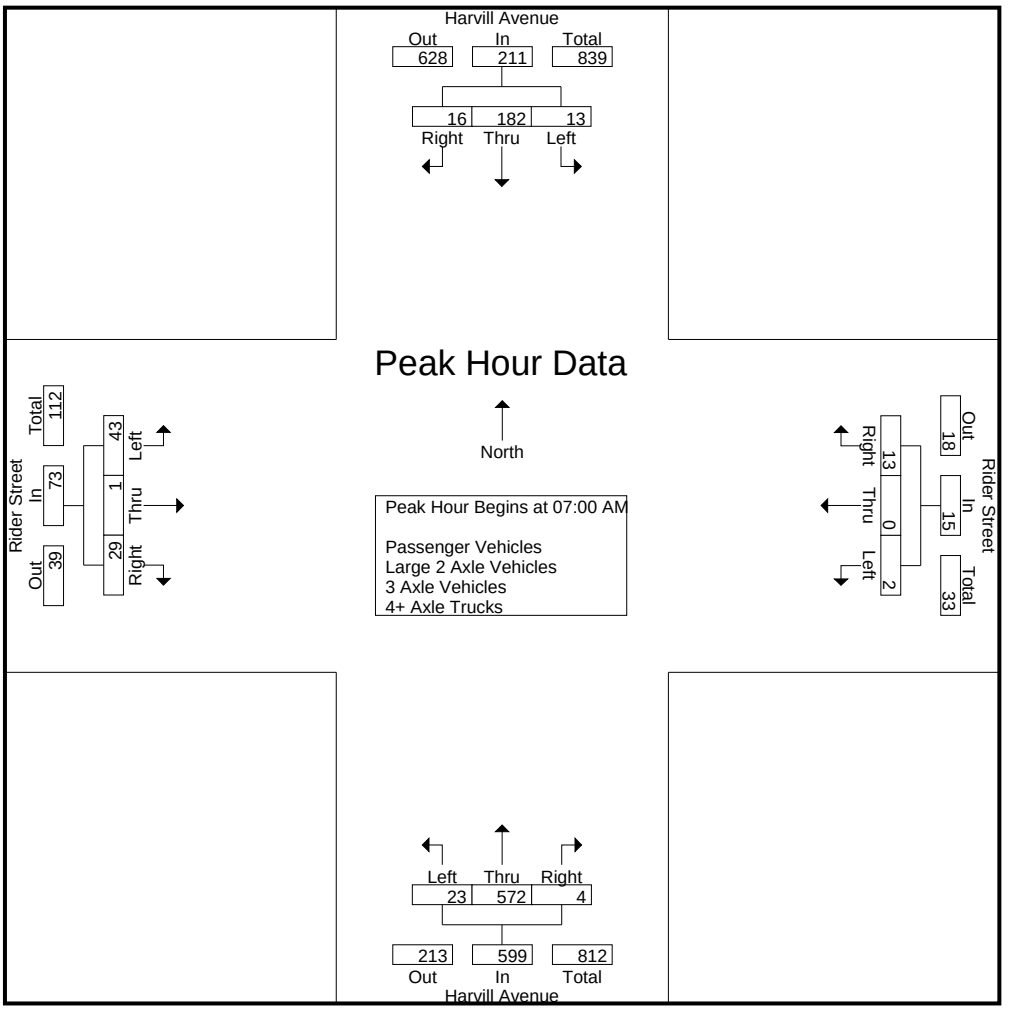
County of Riverside
N/S: Harvill Avenue
E/W: Rider Street
Weather: Clear

File Name : 03_CRV_Harvill_Rider AM
Site Code : 05122133
Start Date : 2/8/2022
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:

	07:30 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	2	**59**	2	63	0	0	**8**	**8**	**8**	151	1	160	11	0	3	14
+15 mins.	**6**	50	**6**	62	**2**	0	1	3	6	**154**	**2**	**162**	**15**	0	7	22
+30 mins.	2	50	6	58	0	0	1	1	6	136	0	142	11	0	**15**	**26**
+45 mins.	3	59	5	**67**	0	0	3	3	3	131	1	135	6	**1**	4	11
Total Volume	13	218	19	250	2	0	13	15	23	572	4	599	43	1	29	73
% App. Total	5.2	87.2	7.6		13.3	0	86.7		3.8	95.5	0.7		58.9	1.4	39.7	
PHF	.542	.924	.792	.933	.250	.000	.406	.469	.719	.929	.500	.924	.717	.250	.483	.702

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County of Riverside
N/S: Harvill Avenue
E/W: Rider Street
Weather: Clear

File Name : 03_CRV_Harvill_Rider AM
Site Code : 05122133
Start Date : 2/8/2022
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	3	0	3	0	0	0	0	1	4	0	5	0	0	0	0	8
07:15 AM	0	4	0	4	0	0	0	0	1	3	0	4	0	0	0	0	8
07:30 AM	0	0	1	1	0	0	0	0	1	2	0	3	0	0	1	1	5
07:45 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total	0	9	1	10	0	0	0	0	3	11	0	14	0	0	1	1	25
08:00 AM	0	0	0	0	0	0	0	0	1	2	0	3	0	0	0	0	3
08:15 AM	0	5	0	5	0	0	0	0	0	1	0	1	0	0	2	2	8
08:30 AM	0	7	0	7	0	0	0	0	0	2	0	2	0	0	0	0	9
08:45 AM	0	6	0	6	0	0	0	0	0	2	0	2	0	0	0	0	8
Total	0	18	0	18	0	0	0	0	1	7	0	8	0	0	2	2	28
Grand Total	0	27	1	28	0	0	0	0	4	18	0	22	0	0	3	3	53
Apprch %	0	96.4	3.6		0	0	0		18.2	81.8	0		0	0	100		
Total %	0	50.9	1.9	52.8	0	0	0	0	7.5	34	0	41.5	0	0	5.7	5.7	

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	3	0	3	0	0	0	0	**1**	**4**	0	**5**	0	0	0	0	**8**
07:15 AM	0	**4**	0	**4**	0	0	0	0	1	3	0	4	0	0	0	0	8
07:30 AM	0	0	**1**	1	0	0	0	0	1	2	0	3	0	0	**1**	**1**	5
07:45 AM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total Volume	0	9	1	10	0	0	0	0	3	11	0	14	0	0	1	1	25
% App. Total	0	90	10		0	0	0		21.4	78.6	0		0	0	100		
PHF	.000	.563	.250	.625	.000	.000	.000	.000	.750	.688	.000	.700	.000	.000	.250	.250	.781

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County of Riverside
N/S: Harvill Avenue
E/W: Rider Street
Weather: Clear

File Name : 03_CRV_Harvill_Rider AM
Site Code : 05122133
Start Date : 2/8/2022
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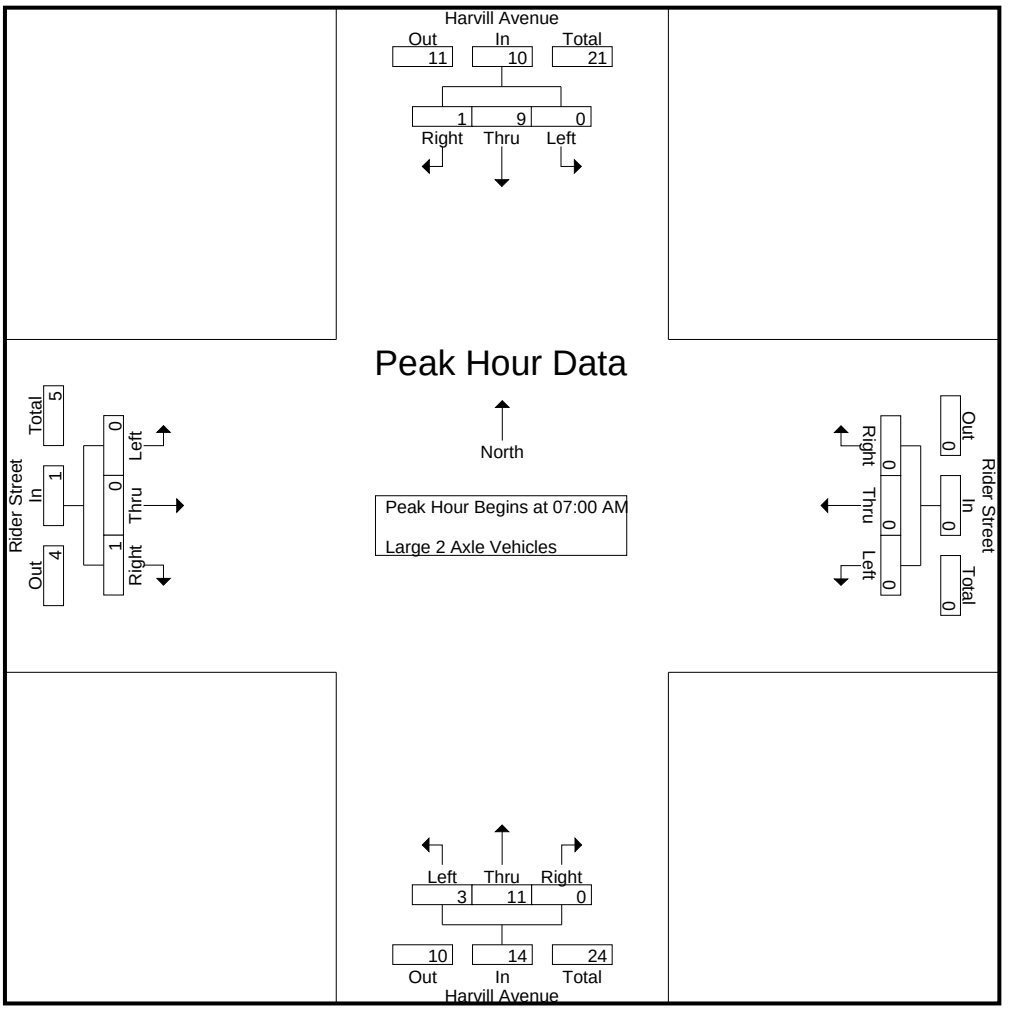

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	3	0	3	0	0	0	0	**1**	**4**	0	**5**	0	0	0	0
+15 mins.	0	**4**	0	**4**	0	0	0	0	1	3	0	4	0	0	0	0
+30 mins.	0	0	**1**	1	0	0	0	0	1	2	0	3	0	0	**1**	**1**
+45 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0
Total Volume	0	9	1	10	0	0	0	0	3	11	0	14	0	0	1	1
% App. Total	0	90	10		0	0	0		21.4	78.6	0		0	0	100	
PHF	.000	.563	.250	.625	.000	.000	.000	.000	.750	.688	.000	.700	.000	.000	.250	.250

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Groups Printed- 3 Axle Vehicles

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

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

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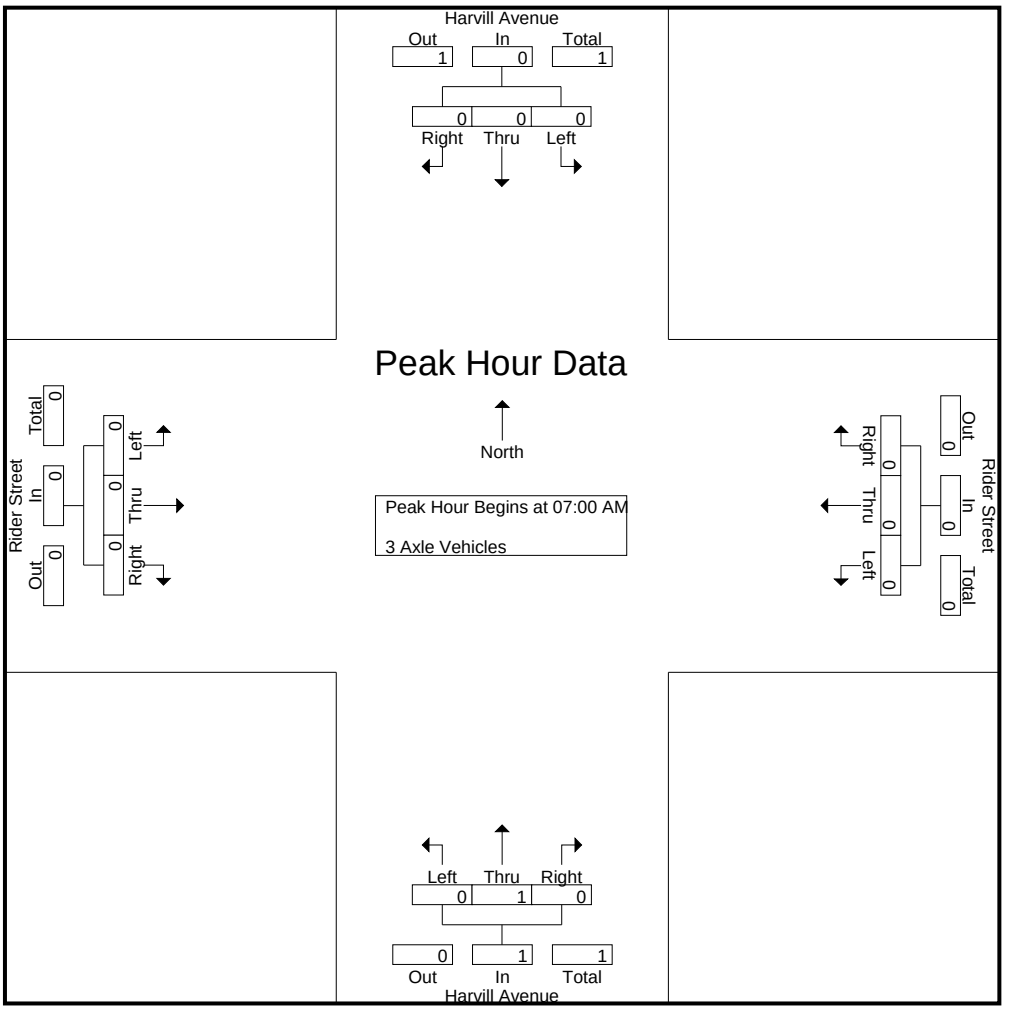

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

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

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Groups Printed- 4+ Axle Trucks

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	0	2	0	0	0	0	1	2	0	3	0	0	0	0	5
07:15 AM	1	2	1	4	0	0	0	0	0	0	0	0	1	0	0	1	5
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	1	1	1	3	0	0	1	1	0	0	0	0	0	0	0	0	4
Total	2	5	2	9	0	0	1	1	1	3	0	4	1	0	0	1	15
08:00 AM	0	1	0	1	0	0	1	1	0	0	0	0	1	0	0	1	3
08:15 AM	2	3	0	5	1	0	0	1	0	1	0	1	0	0	0	0	7
08:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:45 AM	0	2	0	2	1	0	0	1	0	0	0	0	1	0	0	1	4
Total	2	8	0	10	2	0	1	3	0	1	0	1	2	0	0	2	16
Grand Total	4	13	2	19	2	0	2	4	1	4	0	5	3	0	0	3	31
Apprch %	21.1	68.4	10.5		50	0	50		20	80	0		100	0	0		
Total %	12.9	41.9	6.5	61.3	6.5	0	6.5	12.9	3.2	12.9	0	16.1	9.7	0	0	9.7	

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	**2**	0	2	0	0	0	0	**1**	**2**	0	**3**	0	0	0	0	**5**
07:15 AM	**1**	2	**1**	**4**	0	0	0	0	0	0	0	0	**1**	0	0	**1**	5
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	1	1	1	3	0	0	**1**	**1**	0	0	0	0	0	0	0	0	4
Total Volume	2	5	2	9	0	0	1	1	1	3	0	4	1	0	0	1	15
% App. Total	22.2	55.6	22.2		0	0	100		25	75	0		100	0	0		
PHF	.500	.625	.500	.563	.000	.000	.250	.250	.250	.375	.000	.333	.250	.000	.000	.250	.750

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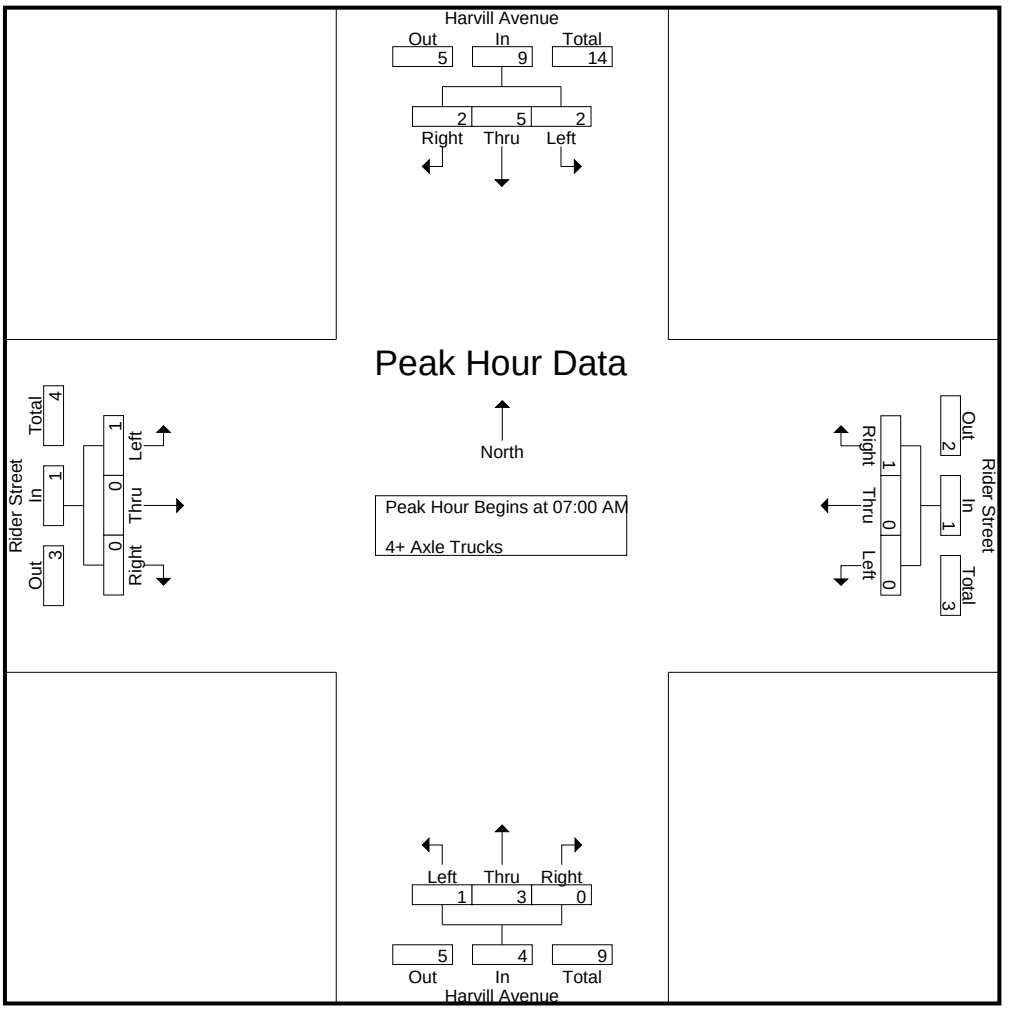

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	**2**	0	2	0	0	0	0	**1**	**2**	0	**3**	0	0	0	0
+15 mins.	**1**	2	**1**	**4**	0	0	0	0	0	0	0	0	**1**	0	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	1	1	1	3	0	0	**1**	**1**	0	0	0	0	0	0	0	0
Total Volume	2	5	2	9	0	0	1	1	1	3	0	4	1	0	0	1
% App. Total	22.2	55.6	22.2		0	0	100		25	75	0		100	0	0	
PHF	.500	.625	.500	.563	.000	.000	.250	.250	.250	.375	.000	.333	.250	.000	.000	.250

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File Name : 03_CRV_Harvill_Rider PM
Site Code : 05122133
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Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	119	12	131	1	0	3	4	6	78	1	85	4	1	15	20	240
04:15 PM	1	96	8	105	0	0	1	1	5	65	1	71	10	0	11	21	198
04:30 PM	0	115	8	123	2	0	0	2	7	57	1	65	9	0	8	17	207
04:45 PM	0	100	3	103	0	0	0	0	4	61	0	65	4	0	8	12	180
Total	1	430	31	462	3	0	4	7	22	261	3	286	27	1	42	70	825
05:00 PM	0	81	10	91	0	0	0	0	2	64	0	66	5	0	9	14	171
05:15 PM	0	78	2	80	1	0	0	1	7	61	0	68	4	0	11	15	164
05:30 PM	1	80	4	85	4	0	0	4	2	59	0	61	1	0	3	4	154
05:45 PM	0	70	10	80	0	0	1	1	4	66	1	71	4	0	6	10	162
Total	1	309	26	336	5	0	1	6	15	250	1	266	14	0	29	43	651
Grand Total	2	739	57	798	8	0	5	13	37	511	4	552	41	1	71	113	1476
Apprch %	0.3	92.6	7.1		61.5	0	38.5		6.7	92.6	0.7		36.3	0.9	62.8		
Total %	0.1	50.1	3.9	54.1	0.5	0	0.3	0.9	2.5	34.6	0.3	37.4	2.8	0.1	4.8	7.7	
Passenger Vehicles	2	711	51	764	8	0	5	13	36	498	4	538	40	1	71	112	1427
% Passenger Vehicles	100	96.2	89.5	95.7	100	0	100	100	97.3	97.5	100	97.5	97.6	100	100	99.1	96.7
Large 2 Axle Vehicles	0	17	1	18	0	0	0	0	1	5	0	6	0	0	0	0	24
% Large 2 Axle Vehicles	0	2.3	1.8	2.3	0	0	0	0	2.7	1	0	1.1	0	0	0	0	1.6
3 Axle Vehicles	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
% 3 Axle Vehicles	0	0.3	0	0.3	0	0	0	0	0	0.6	0	0.5	0	0	0	0	0.3
4+ Axle Trucks	0	9	5	14	0	0	0	0	0	5	0	5	1	0	0	1	20
% 4+ Axle Trucks	0	1.2	8.8	1.8	0	0	0	0	0	1	0	0.9	2.4	0	0	0.9	1.4

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**119**	**12**	**131**	1	0	**3**	**4**	6	**78**	**1**	**85**	4	**1**	**15**	20	**240**
04:15 PM	**1**	96	8	105	0	0	1	1	5	65	1	71	**10**	0	11	**21**	198
04:30 PM	0	115	8	123	**2**	0	0	2	**7**	57	1	65	9	0	8	17	207
04:45 PM	0	100	3	103	0	0	0	0	4	61	0	65	4	0	8	12	180
Total Volume	1	430	31	462	3	0	4	7	22	261	3	286	27	1	42	70	825
% App. Total	0.2	93.1	6.7		42.9	0	57.1		7.7	91.3	1		38.6	1.4	60		
PHF	.250	.903	.646	.882	.375	.000	.333	.438	.786	.837	.750	.841	.675	.250	.700	.833	.859

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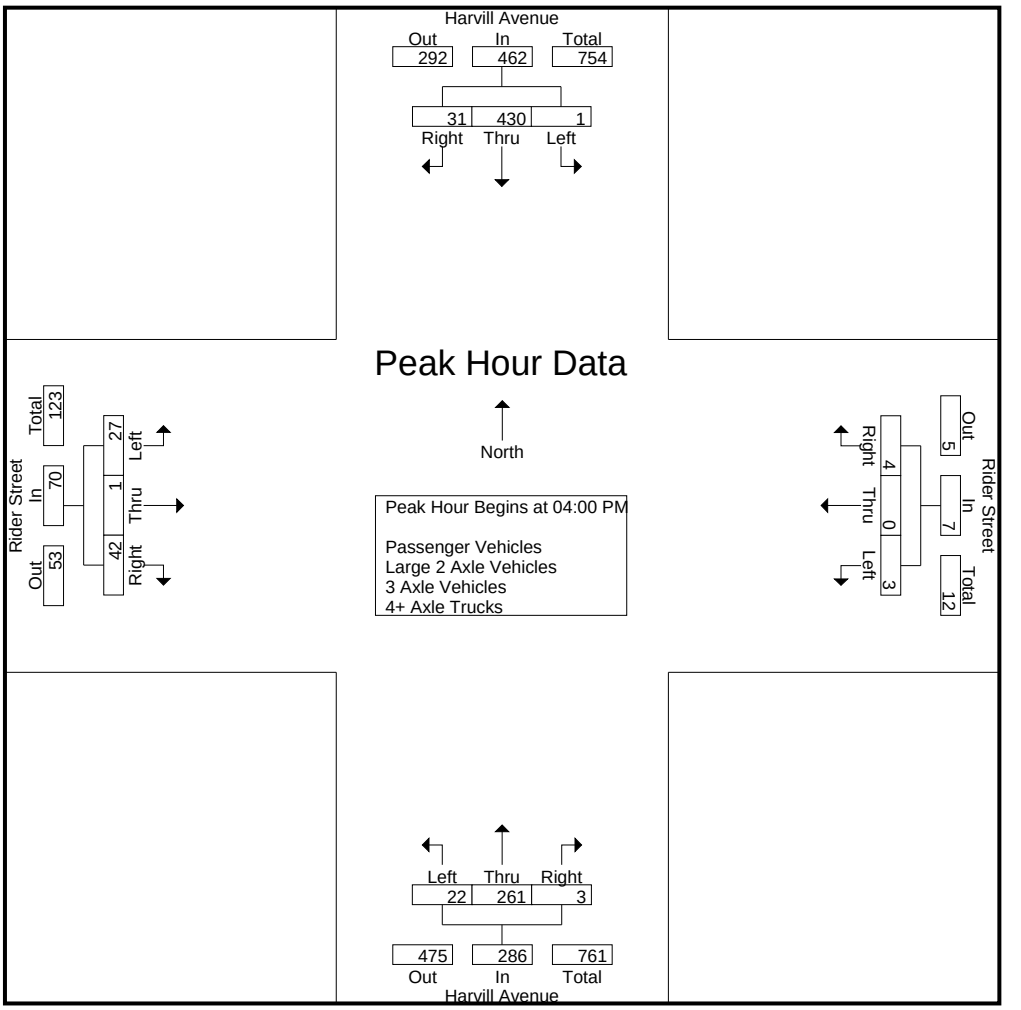

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**119**	**12**	**131**	1	0	**3**	**4**	6	**78**	**1**	**85**	4	**1**	**15**	20
+15 mins.	**1**	96	8	105	0	0	1	1	5	65	1	71	**10**	0	11	**21**
+30 mins.	0	115	8	123	**2**	0	0	2	**7**	57	1	65	9	0	8	17
+45 mins.	0	100	3	103	0	0	0	0	4	61	0	65	4	0	8	12
Total Volume	1	430	31	462	3	0	4	7	22	261	3	286	27	1	42	70
% App. Total	0.2	93.1	6.7		42.9	0	57.1		7.7	91.3	1		38.6	1.4	60	
PHF	.250	.903	.646	.882	.375	.000	.333	.438	.786	.837	.750	.841	.675	.250	.700	.833

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Groups Printed- Large 2 Axle Vehicles

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	4	1	5	0	0	0	0	0	0	0	0	0	0	0	0	5
04:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	7	1	8	0	0	0	0	0	1	0	1	0	0	0	0	9
05:00 PM	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
05:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:30 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:45 PM	0	1	0	1	0	0	0	0	1	2	0	3	0	0	0	0	4
Total	0	10	0	10	0	0	0	0	1	4	0	5	0	0	0	0	15
Grand Total	0	17	1	18	0	0	0	0	1	5	0	6	0	0	0	0	24
Apprch %	0	94.4	5.6		0	0	0		16.7	83.3	0		0	0	0		
Total %	0	70.8	4.2	75	0	0	0	0	4.2	20.8	0	25	0	0	0	0	

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**4**	**1**	**5**	0	0	0	0	0	0	0	0	0	0	0	0	**5**
04:15 PM	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	7	1	8	0	0	0	0	0	1	0	1	0	0	0	0	9
% App. Total	0	87.5	12.5		0	0	0		0	100	0		0	0	0		
PHF	.000	.438	.250	.400	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.450

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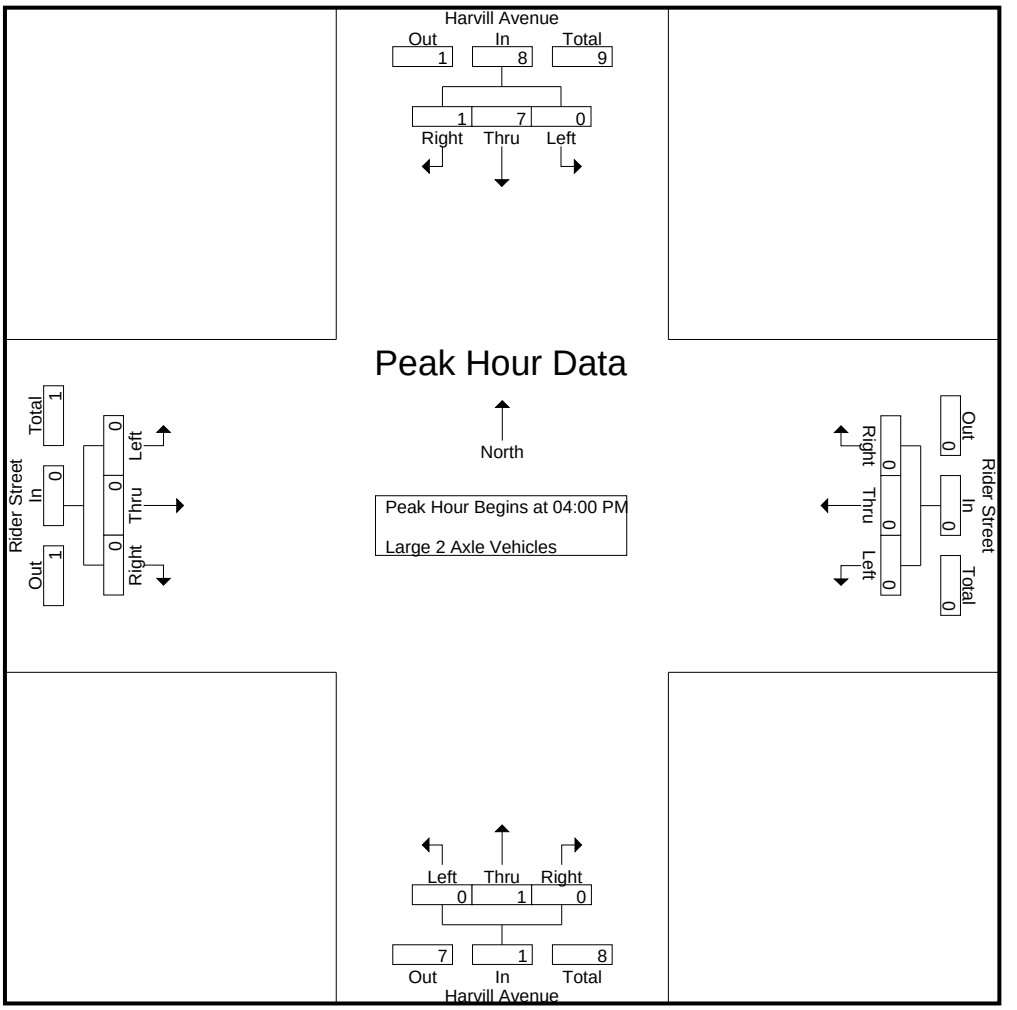

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**4**	**1**	**5**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	7	1	8	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	87.5	12.5		0	0	0		0	100	0		0	0	0	
PHF	.000	.438	.250	.400	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

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County of Riverside
N/S: Harvill Avenue
E/W: Rider Street
Weather: Clear

File Name : 03_CRV_Harvill_Rider PM
Site Code : 05122133
Start Date : 2/8/2022
Page No : 1

Groups Printed- 3 Axle Vehicles

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	2	0	2	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
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Grand Total	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	40	0	40	0	0	0	0	0	60	0	60	0	0	0	0	

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

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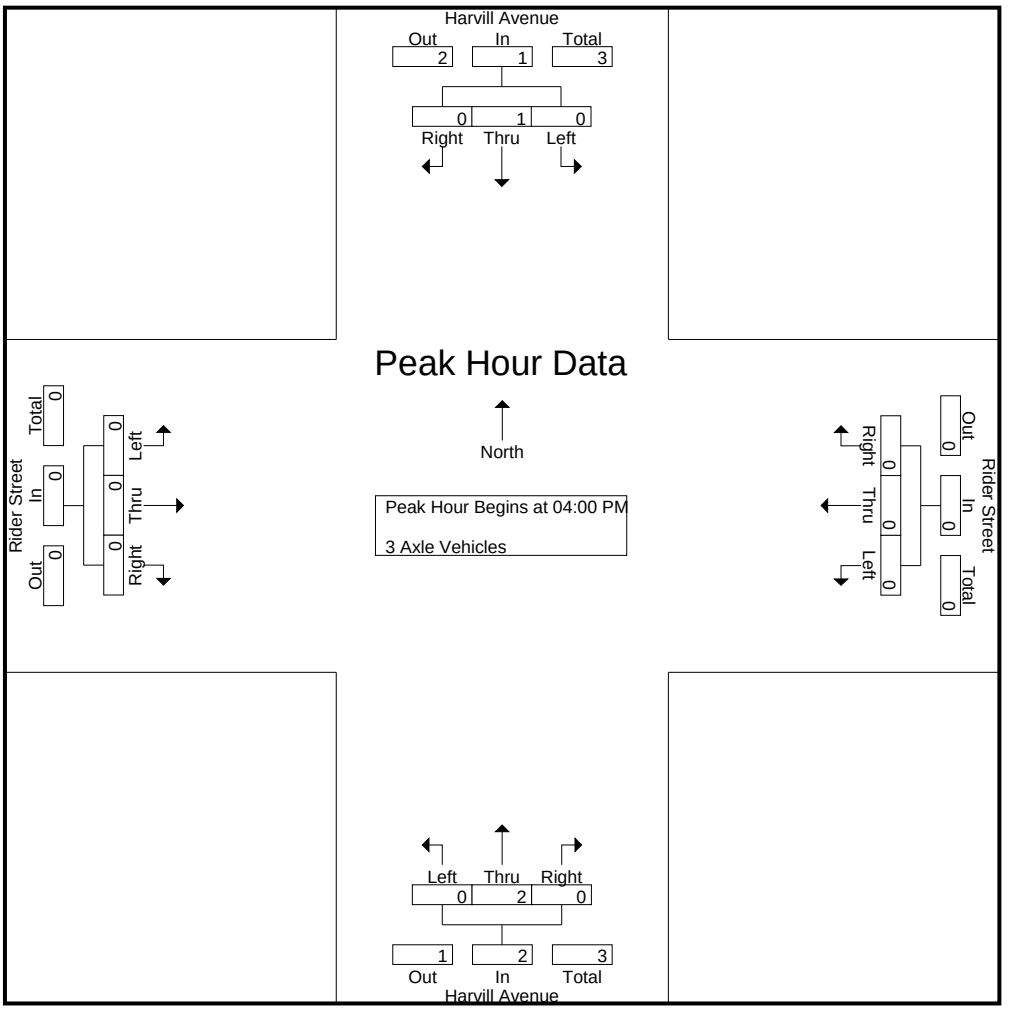
County of Riverside
N/S: Harvill Avenue
E/W: Rider Street
Weather: Clear

File Name : 03_CRV_Harvill_Rider PM
Site Code : 05122133
Start Date : 2/8/2022
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	**1**	0	**1**	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	1	0	1	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000

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County of Riverside
N/S: Harvill Avenue
E/W: Rider Street
Weather: Clear

File Name : 03_CRV_Harvill_Rider PM
Site Code : 05122133
Start Date : 2/8/2022
Page No : 1

Groups Printed- 4+ Axle Trucks

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:15 PM	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	2	0	2	0	0	0	0	0	2	0	2	1	0	0	1	5
Total	0	5	3	8	0	0	0	0	0	3	0	3	1	0	0	1	12
05:00 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:15 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:45 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	4	2	6	0	0	0	0	0	2	0	2	0	0	0	0	8
Grand Total	0	9	5	14	0	0	0	0	0	5	0	5	1	0	0	1	20
Apprch %	0	64.3	35.7		0	0	0		0	100	0		100	0	0		
Total %	0	45	25	70	0	0	0	0	0	25	0	25	5	0	0	5	

	Harvill Avenue Southbound				Rider Street Westbound				Harvill Avenue Northbound				Rider Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**2**	**1**	**3**	0	0	0	0	0	0	0	0	0	0	0	0	3
04:15 PM	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:30 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	2	0	2	0	0	0	0	0	**2**	0	**2**	**1**	0	0	**1**	**5**
Total Volume	0	5	3	8	0	0	0	0	0	3	0	3	1	0	0	1	12
% App. Total	0	62.5	37.5		0	0	0		0	100	0		100	0	0		
PHF	.000	.625	.750	.667	.000	.000	.000	.000	.000	.375	.000	.375	.250	.000	.000	.250	.600

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County of Riverside
N/S: Harvill Avenue
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File Name : 03_CRV_Harvill_Rider PM
Site Code : 05122133
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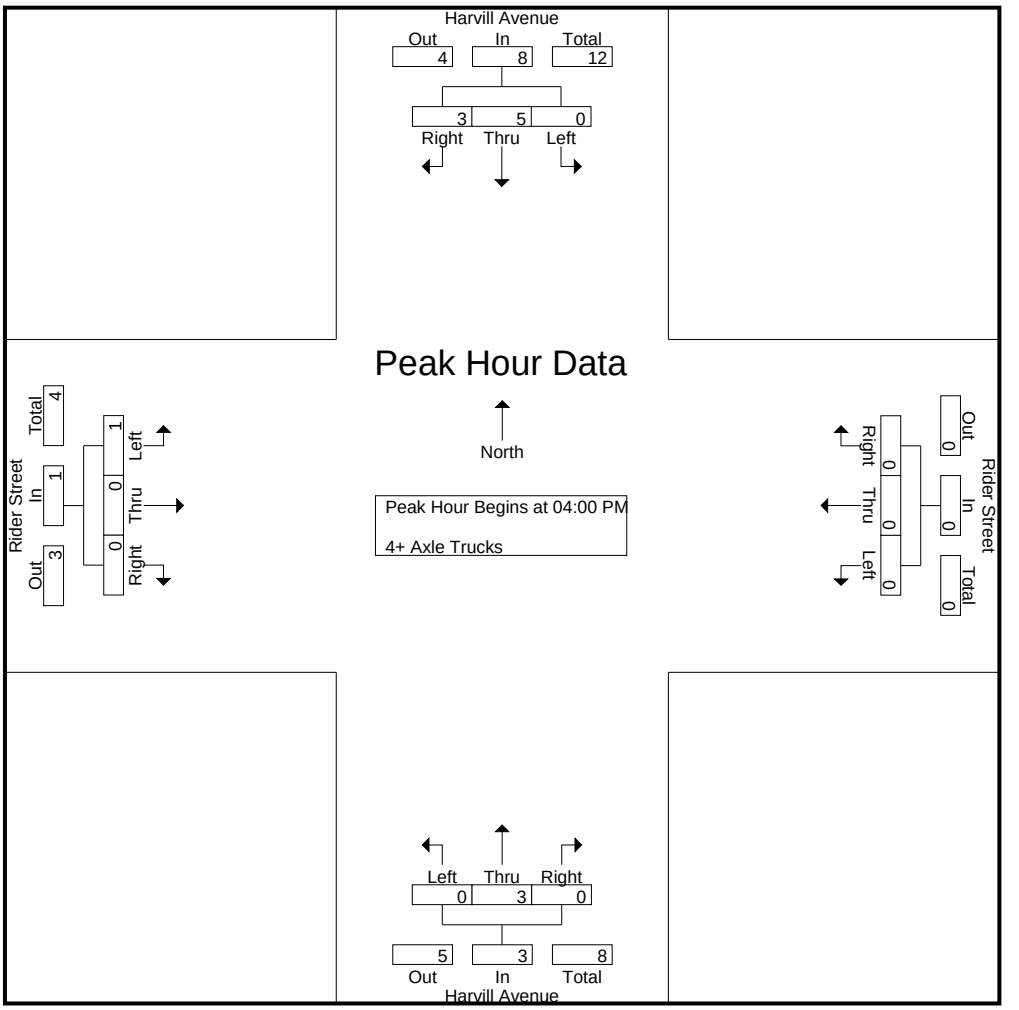

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**2**	**1**	**3**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	**2**	0	**2**	**1**	0	0	**1**
Total Volume	0	5	3	8	0	0	0	0	0	3	0	3	1	0	0	1
% App. Total	0	62.5	37.5		0	0	0		0	100	0		100	0	0	
PHF	.000	.625	.750	.667	.000	.000	.000	.000	.000	.375	.000	.375	.250	.000	.000	.250

Location: County of Riverside
N/S: Harvill Avenue
E/W: Rider Street

Date: 2/8/2022
Day: Tuesday

PEDESTRIANS

	North Leg Harvill Avenue	East Leg Rider Street	South Leg Harvill Avenue	West Leg Rider Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	1	1
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	1	1

	North Leg Harvill Avenue	East Leg Rider Street	South Leg Harvill Avenue	West Leg Rider Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	0	1
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	1	0	1
5:45 PM	0	1	0	0	1
TOTAL VOLUMES:	0	2	1	0	3

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Location: County of Riverside
N/S: Harvill Avenue
E/W: Rider Street

Date: 2/8/2022
Day: Tuesday

BICYCLES

	Southbound Harvill Avenue			Westbound Rider Street			Northbound Harvill Avenue			Eastbound Rider 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	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 Harvill Avenue			Westbound Rider Street			Northbound Harvill Avenue			Eastbound Rider 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	1	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	1	1	0	0	0	0	2
TOTAL VOLUMES:	0	1	0	0	0	0	1	1	0	0	0	0	3

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A816

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tuesday, May 10, 2022
JOB #: SC3419

CITY: Perris
LOCATION: TMC1 Harvill and Cajalco

AM	EASTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
0:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:30	0	8	0	0	0	0	0	0	0	0	0	0	0	8
3:45	0	9	0	0	0	0	0	0	0	0	0	0	0	9
4:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
4:15	0	7	0	0	0	0	0	0	0	0	0	0	0	7
4:30	0	24	2	0	0	0	0	0	0	0	0	0	0	26
4:45	0	24	1	0	0	0	0	0	0	0	0	0	0	25
5:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
5:15	0	3	0	0	0	2	0	0	0	0	0	0	0	5
5:30	0	1	0	0	1	0	0	0	0	0	0	0	0	2
5:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
6:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
6:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
6:30	0	4	0	0	0	0	0	0	0	0	0	0	0	4
6:45	0	5	0	0	0	0	0	0	0	0	0	0	0	5
7:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
7:15	0	1	0	0	0	0	0	0	1	0	0	0	0	2
7:30	0	3	0	0	0	1	0	0	0	0	0	0	0	4
7:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
8:00	0	4	0	0	0	0	0	0	1	0	0	0	0	5
8:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
8:30	0	3	2	0	2	0	0	0	0	0	0	0	0	7
8:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
9:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
9:15	0	2	0	0	0	1	0	0	1	0	0	0	0	4
9:30	0	0	0	0	1	0	0	0	1	0	0	0	0	2
9:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
10:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
10:15	0	1	0	0	0	0	0	0	1	0	0	0	0	2
10:30	0	3	1	0	0	0	0	0	0	0	0	0	0	4
10:45	0	1	0	0	0	0	0	0	1	0	0	0	0	2
11:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
11:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
11:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
11:45	0	3	0	0	1	0	0	0	1	0	0	0	0	5
TOTAL	0	158	9	0	5	4	0	0	8	0	0	0	0	184

AM PEAK HOUR	4:00 AM
AM PEAK VOLUME	66

PM	EASTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	1	0	0	0	0	0	0	2	0	0	0	0	3
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
12:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
13:00	0	3	0	0	1	0	0	0	1	0	0	0	0	5
13:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
13:30	0	3	0	0	0	1	0	0	0	0	0	0	0	4
13:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
14:00	1	2	0	0	0	0	0	0	0	0	0	0	0	3
14:15	0	4	0	0	1	0	0	0	0	0	0	0	0	5
14:30	0	11	0	0	0	0	0	0	0	0	0	0	0	11
14:45	0	21	1	0	0	0	0	0	0	0	0	0	0	22
15:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	2	0	0	0	0	2
16:30	0	1	0	0	0	0	0	0	1	0	0	0	0	2
16:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
17:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	1	0	0	0	0	0	0	2	0	0	0	0	3
18:00	0	0	0	0	0	0	0	0	2	0	0	0	0	2
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	1	1	0	0	0	0	0	0	0	0	0	0	0	2
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	1	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2	65	1	0	2	2	0	0	11	0	0	0	0	83

PM PEAK HOUR	2:00 PM
PM PEAK VOLUME	41

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	2	223	10	0	7	6	0	0	19	0	0	0	0	267
% OF TOTAL	0.7%	83.5%	3.7%	0.0%	2.6%	2.2%	0.0%	0.0%	7.1%	0.0%	0.0%	0.0%	0.0%	100.0%
Class	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	
TOTAL: ALL	3	445	24	0	11	13	0	0	39	0	0	0	0	535
% OF TOTAL	1.1%	166.7%	9.0%	0.0%	4.1%	4.9%	0.0%	0.0%	14.6%	0.0%	0.0%	0.0%	0.0%	100.0%

24-HOUR ROADWAY SEGMENT COUNTS (WITH FHWA CLASSIFICATION)

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tuesday, May 10, 2022
JOB #: SC3419

CITY: Perris
LOCATION: TMC1 Harvill and Cajalco

AM	WESTBOUND													
TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
0:30	0	23	0	0	0	0	0	0	0	0	0	0	0	23
0:45	0	6	0	0	0	0	0	0	0	0	0	0	0	6
1:00	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:30	0	1	0	0	0	0	0	0	1	0	0	0	0	2
4:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00	0	0	0	0	0	0	0	0	1	0	0	0	0	1
5:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	0	0	0	0	0	0	0	0	3	0	0	0	0	3
5:45	0	0	0	0	0	0	0	0	1	0	0	0	0	1
6:00	0	0	0	0	1	0	0	0	1	0	0	0	0	2
6:15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:30	0	1	0	0	0	0	0	0	1	0	0	0	0	2
6:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
7:15	0	0	0	0	0	0	0	0	1	0	0	0	0	1
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
8:15	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30	0	2	0	0	1	0	0	0	0	0	0	0	0	3
8:45	0	2	1	0	0	0	0	0	0	0	0	0	0	3
9:00	0	6	3	0	0	0	0	0	0	0	0	0	0	9
9:15	0	3	1	0	0	0	0	0	0	0	0	0	0	4
9:30	0	0	0	0	0	1	0	0	0	0	0	0	0	1
9:45	0	1	1	0	0	0	0	0	0	0	0	0	0	2
10:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
10:15	0	0	0	0	0	0	0	0	1	0	0	0	0	1
10:30	0	1	0	0	0	0	0	0	2	0	0	0	0	3
10:45	0	3	1	0	0	0	0	0	0	0	0	0	0	4
11:00	0	1	0	0	0	0	0	0	2	0	0	0	0	3
11:15	0	2	0	0	0	0	0	0	0	0	0	0	0	2
11:30	0	3	0	0	0	0	0	0	1	0	0	0	0	4
11:45	0	3	1	0	1	0	0	0	0	0	0	0	0	5
TOTAL	1	71	9	0	3	3	0	0	16	0	0	0	0	103

AM PEAK HOUR	12:15 AM
AM PEAK VOLUME	33

PM	WESTBOUND													
Time	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
12:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
12:15	0	2	0	0	0	2	0	0	0	0	0	0	0	4
12:30	0	2	0	0	0	0	0	0	0	0	0	0	0	2
12:45	0	2	0	0	0	0	0	0	1	0	0	0	0	3
13:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
13:15	0	1	0	0	0	1	0	0	0	0	0	0	0	2
13:30	0	20	2	0	0	0	0	0	0	0	0	0	0	22
13:45	0	2	0	0	0	0	0	0	1	0	0	0	0	3
14:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
14:15	0	9	0	0	0	0	0	0	0	0	0	0	0	9
14:30	0	50	2	0	0	0	0	0	1	0	0	0	0	53
14:45	0	8	0	0	1	0	0	0	0	0	0	0	0	9
15:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
15:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
15:30	0	1	1	0	0	0	0	0	0	0	0	0	0	2
15:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
16:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
16:15	0	4	0	0	0	0	0	0	0	0	0	0	0	4
16:30	0	6	0	0	0	0	0	0	0	0	0	0	0	6
16:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
17:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
17:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	3	0	0	0	0	0	0	0	0	0	0	0	3
18:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
18:45	0	1	0	0	0	0	0	0	1	0	0	0	0	2
19:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
19:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	1	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	151	5	0	1	4	0	0	4	0	0	0	0	165

PM PEAK HOUR	2:15 PM
PM PEAK VOLUME	74

CLASS 1	Class 1 — Motorcycles	**CLASS 8**	3 to 4 Axles, Single Trailer
CLASS 2	Passenger Cars	**CLASS 9**	5 Axles, Single Trailer
CLASS 3	2 Axles, 4-Tire Single Units	**CLASS 10**	6 or More Axles, Single Trailer
CLASS 4	Buses	**CLASS 11**	5 or Less Axles, Multi-Trailers
CLASS 5	2 Axles, 6-Tire Single Units	**CLASS 12**	6 Axles, Multi-Trailers
CLASS 6	3 Axles, Single Unit	**CLASS 13**	7 or More Axles, Multi-Trailers
CLASS 7	4 or More Axles, Single Unit		

TOTAL: AM+PM	1	222	14	0	4	7	0	0	20	0	0	0	0	268
% OF TOTAL	0.4%	82.8%	5.2%	0.0%	1.5%	2.6%	0.0%	0.0%	7.5%	0.0%	0.0%	0.0%	0.0%	100.0%

Class	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**

Counts Unlimited, Inc.

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County of Riverside
Harvill Avenue
N/ Rider Street
24 Hour Directional Classification Count

CRV001
Site Code: 051-22113

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
02/08/22	0	14	1	0	0	0	0	0	2	0	0	0	0	17
01:00	0	7	0	0	0	0	0	0	2	0	0	0	0	9
02:00	0	8	0	0	0	0	0	0	1	0	0	0	0	9
03:00	0	47	3	0	0	0	0	0	0	0	0	0	0	50
04:00	0	98	1	0	0	0	0	0	5	0	0	0	0	104
05:00	1	189	14	2	2	2	0	1	5	0	0	0	0	216
06:00	1	303	58	**6**	3	2	0	1	4	0	0	0	0	378
07:00	1	**499**	**117**	1	7	1	0	2	3	0	0	0	0	**631**
08:00	0	223	48	0	7	**4**	0	0	4	0	0	0	0	286
09:00	0	149	39	1	**10**	3	**1**	1	**9**	0	0	0	0	213
10:00	**3**	131	50	1	9	3	0	**3**	7	0	0	0	0	207
11:00	0	146	44	2	10	1	0	2	8	0	0	0	0	213
12 PM	**2**	170	42	0	5	4	0	1	**8**	0	0	0	0	232
13:00	0	190	49	**7**	5	**10**	0	1	7	0	0	0	0	269
14:00	1	203	46	0	**6**	2	0	**2**	0	0	**1**	0	0	261
15:00	1	**323**	**88**	0	5	2	0	2	1	0	0	0	0	**422**
16:00	1	238	53	0	0	1	**1**	0	3	0	0	0	**1**	298
17:00	0	224	41	0	3	1	0	0	2	0	0	0	0	271
18:00	0	168	22	0	1	0	0	0	1	0	0	0	0	192
19:00	0	115	7	0	0	0	0	0	0	0	0	0	0	122
20:00	0	86	3	0	0	0	0	0	1	0	0	0	0	90
21:00	0	61	11	0	1	0	0	2	2	0	0	0	0	77
22:00	0	41	3	0	0	0	0	0	1	0	0	0	0	45
23:00	0	30	1	0	0	0	0	0	0	0	0	0	0	31
Total	11	3663	741	20	74	36	2	18	76	0	1	0	1	4643
Percent	0.2%	78.9%	16.0%	0.4%	1.6%	0.8%	0.0%	0.4%	1.6%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	07:00	07:00	06:00	09:00	08:00	09:00	10:00	09:00					07:00
Vol.	3	499	117	6	10	4	1	3	9					631
PM Peak	12:00	15:00	15:00	13:00	14:00	13:00	16:00	14:00	12:00		14:00		16:00	15:00
Vol.	2	323	88	7	6	10	1	2	8		1		1	422
Grand Total	11	3663	741	20	74	36	2	18	76	0	1	0	1	4643
Percent	0.2%	78.9%	16.0%	0.4%	1.6%	0.8%	0.0%	0.4%	1.6%	0.0%	0.0%	0.0%	0.0%	

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County of Riverside
Harvill Avenue
N/ Rider Street
24 Hour Directional Classification Count

CRV001
Site Code: 051-22113

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
02/08/22	0	20	0	0	0	0	0	0	1	0	0	0	0	21
01:00	0	13	0	0	0	0	0	0	2	0	0	0	0	15
02:00	0	11	1	0	0	0	0	0	4	0	0	0	0	16
03:00	0	16	1	0	0	0	0	0	2	0	0	0	0	19
04:00	1	35	1	0	1	0	0	0	1	0	0	0	0	39
05:00	0	103	16	0	3	0	0	0	5	0	0	0	0	127
06:00	0	124	31	0	7	0	0	0	4	0	0	0	0	166
07:00	0	153	41	0	7	0	0	0	8	0	0	0	0	209
08:00	0	**162**	**49**	**5**	**12**	1	0	2	9	0	0	0	0	**240**
09:00	**2**	136	40	2	7	1	0	0	2	0	0	0	0	190
10:00	1	118	37	0	8	1	0	2	**10**	0	0	0	0	177
11:00	1	149	41	2	12	**3**	0	**6**	9	0	0	0	0	223
12 PM	**2**	152	35	0	8	2	0	3	**6**	0	0	0	0	208
13:00	0	179	50	0	9	2	0	2	6	0	1	0	0	249
14:00	0	209	67	0	2	**4**	0	1	5	0	0	0	0	288
15:00	1	**372**	93	2	**12**	2	0	**6**	5	**1**	**2**	0	0	**496**
16:00	0	334	**103**	0	11	1	0	2	6	0	0	0	0	457
17:00	0	244	75	**3**	6	1	0	1	5	0	0	0	0	335
18:00	1	189	23	1	2	0	0	0	2	0	0	0	0	218
19:00	1	124	7	0	2	0	0	0	1	0	0	0	0	135
20:00	0	70	9	0	0	0	0	0	0	0	0	0	0	79
21:00	0	58	15	0	0	2	0	0	0	0	0	0	0	75
22:00	0	44	3	0	0	2	0	0	1	0	0	0	0	50
23:00	0	37	2	0	0	1	0	0	3	0	0	0	0	43
Total	10	3052	740	15	109	23	0	25	97	1	3	0	0	4075
Percent	0.2%	74.9%	18.2%	0.4%	2.7%	0.6%	0.0%	0.6%	2.4%	0.0%	0.1%	0.0%	0.0%	
AM Peak	09:00	08:00	08:00	08:00	08:00	11:00		11:00	10:00					08:00
Vol.	2	162	49	5	12	3		6	10					240
PM Peak	12:00	15:00	16:00	17:00	15:00	14:00		15:00	12:00	15:00	15:00			15:00
Vol.	2	372	103	3	12	4		6	6	1	2			496
Grand Total	10	3052	740	15	109	23	0	25	97	1	3	0	0	4075
Percent	0.2%	74.9%	18.2%	0.4%	2.7%	0.6%	0.0%	0.6%	2.4%	0.0%	0.1%	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
02/08/22	0	34	1	0	0	0	0	0	3	0	0	0	0	38
01:00	0	20	0	0	0	0	0	0	4	0	0	0	0	24
02:00	0	19	1	0	0	0	0	0	5	0	0	0	0	25
03:00	0	63	4	0	0	0	0	0	2	0	0	0	0	69
04:00	1	133	2	0	1	0	0	0	6	0	0	0	0	143
05:00	1	292	30	2	5	2	0	1	10	0	0	0	0	343
06:00	1	427	89	**6**	10	2	0	1	8	0	0	0	0	544
07:00	1	**652**	**158**	1	14	1	0	2	11	0	0	0	0	**840**
08:00	0	385	97	5	19	**5**	0	2	13	0	0	0	0	526
09:00	2	285	79	3	17	4	**1**	1	11	0	0	0	0	403
10:00	**4**	249	87	1	17	4	0	5	**17**	0	0	0	0	384
11:00	1	295	85	4	**22**	4	0	**8**	17	0	0	0	0	436
12 PM	**4**	322	77	0	13	6	0	4	**14**	0	0	0	0	440
13:00	0	369	99	**7**	14	**12**	0	3	13	0	1	0	0	518
14:00	1	412	113	0	8	6	0	3	5	0	1	0	0	549
15:00	2	**695**	**181**	2	**17**	4	0	**8**	6	**1**	**2**	0	0	**918**
16:00	1	572	156	0	11	2	**1**	2	9	0	0	0	**1**	755
17:00	0	468	116	3	9	2	0	1	7	0	0	0	0	606
18:00	1	357	45	1	3	0	0	0	3	0	0	0	0	410
19:00	1	239	14	0	2	0	0	0	1	0	0	0	0	257
20:00	0	156	12	0	0	0	0	0	1	0	0	0	0	169
21:00	0	119	26	0	1	2	0	2	2	0	0	0	0	152
22:00	0	85	6	0	0	2	0	0	2	0	0	0	0	95
23:00	0	67	3	0	0	1	0	0	3	0	0	0	0	74
Total	21	6715	1481	35	183	59	2	43	173	1	4	0	1	8718
Percent	0.2%	77.0%	17.0%	0.4%	2.1%	0.7%	0.0%	0.5%	2.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	07:00	07:00	06:00	11:00	08:00	09:00	11:00	10:00					07:00
Vol.	4	652	158	6	22	5	1	8	17					840
PM Peak	12:00	15:00	15:00	13:00	15:00	13:00	16:00	15:00	12:00	15:00	15:00		16:00	15:00
Vol.	4	695	181	7	17	12	1	8	14	1	2		1	918
Grand Total	21	6715	1481	35	183	59	2	43	173	1	4	0	1	8718
Percent	0.2%	77.0%	17.0%	0.4%	2.1%	0.7%	0.0%	0.5%	2.0%	0.0%	0.0%	0.0%	0.0%	

APPENDIX 3.2: EXISTING (2022) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	35	0	5	7	0	3	7	750	7	9	238	47
Future Vol, veh/h	35	0	5	7	0	3	7	750	7	9	238	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	160	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	36	0	5	7	0	3	7	773	7	9	245	48

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	688	1081	147	932	1102	390	293	0	0	780	0	0
Stage 1	287	287	-	791	791	-	-	-	-	-	-	-
Stage 2	401	794	-	141	311	-	-	-	-	-	-	-
Critical Hdwy	6.5	6.5	6.9	6.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	407	220	880	291	213	614	1280	-	-	846	-	-
Stage 1	702	678	-	353	404	-	-	-	-	-	-	-
Stage 2	602	403	-	853	662	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	400	216	880	286	210	614	1280	-	-	846	-	-
Mov Cap-2 Maneuver	470	313	-	314	314	-	-	-	-	-	-	-
Stage 1	698	671	-	351	402	-	-	-	-	-	-	-
Stage 2	596	401	-	839	655	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.9	15	0.1	0.3
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1280	-	-	499	314	614	846	-	-
HCM Lane V/C Ratio	0.006	-	-	0.083	0.023	0.005	0.011	-	-
HCM Control Delay (s)	7.8	-	-	12.9	16.7	10.9	9.3	-	-
HCM Lane LOS	A	-	-	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0	0	-	-

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	1	30	2	0	15	27	285	4	17	197	21
Future Vol, veh/h	45	1	30	2	0	15	27	285	4	17	197	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	47	1	32	2	0	16	28	300	4	18	207	22
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	9.3	8.5	9.8	9.3
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	96%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	4%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	190	99	45	1	30	2	0	15	17	131
LT Vol	27	0	0	45	0	0	2	0	0	17	0
Through Vol	0	190	95	0	1	0	0	0	0	0	131
RT Vol	0	0	4	0	0	30	0	0	15	0	0
Lane Flow Rate	28	200	104	47	1	32	2	0	16	18	138
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.046	0.294	0.153	0.085	0.002	0.046	0.004	0	0.024	0.03	0.209
Departure Headway (Hd)	5.799	5.298	5.269	6.489	5.989	5.29	6.622	6.122	5.422	5.953	5.452
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	615	676	677	548	593	670	536	0	653	599	655
Service Time	3.557	3.056	3.028	4.275	3.775	3.076	4.415	3.915	3.215	3.716	3.215
HCM Lane V/C Ratio	0.046	0.296	0.154	0.086	0.002	0.048	0.004	0	0.025	0.03	0.211
HCM Control Delay	8.8	10.3	9	9.9	8.8	8.3	9.4	8.9	8.4	8.9	9.7
HCM Lane LOS	A	B	A	A	A	A	A	N	A	A	A
HCM 95th-tile Q	0.1	1.2	0.5	0.3	0	0.1	0	0	0.1	0.1	0.8

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	63	0	13	5	0	16	6	352	6	6	447	31
Future Vol, veh/h	63	0	13	5	0	16	6	352	6	6	447	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	160	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	66	0	14	5	0	17	6	371	6	6	471	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	698	889	252	634	902	189	504	0	0	377	0	0
Stage 1	500	500	-	386	386	-	-	-	-	-	-	-
Stage 2	198	389	-	248	516	-	-	-	-	-	-	-
Critical Hdwy	6.5	6.5	6.9	6.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	402	285	754	439	280	827	1071	-	-	1193	-	-
Stage 1	527	546	-	614	614	-	-	-	-	-	-	-
Stage 2	791	612	-	740	538	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	391	282	754	428	277	827	1071	-	-	1193	-	-
Mov Cap-2 Maneuver	446	389	-	493	384	-	-	-	-	-	-	-
Stage 1	524	543	-	610	610	-	-	-	-	-	-	-
Stage 2	771	608	-	723	535	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14	10.1	0.1	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1071	-	-	480	493	827	1193	-	-
HCM Lane V/C Ratio	0.006	-	-	0.167	0.011	0.02	0.005	-	-
HCM Control Delay (s)	8.4	-	-	14	12.4	9.4	8	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	1	42	3	0	4	22	270	3	1	445	38
Future Vol, veh/h	29	1	42	3	0	4	22	270	3	1	445	38
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	34	1	49	3	0	5	26	314	3	1	517	44
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	9.9	9.6	11.1	13.2
HCM LOS	A	A	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	97%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	3%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	22	180	93	29	1	42	3	0	4	1	297
LT Vol	22	0	0	29	0	0	3	0	0	1	0
Through Vol	0	180	90	0	1	0	0	0	0	0	297
RT Vol	0	0	3	0	0	42	0	0	4	0	0
Lane Flow Rate	26	209	108	34	1	49	3	0	5	1	345
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.046	0.348	0.179	0.069	0.002	0.084	0.007	0	0.008	0.002	0.538
Departure Headway (Hd)	6.483	5.981	5.959	7.363	6.862	6.161	7.527	7.027	6.327	6.115	5.614
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	554	603	603	487	522	582	476	0	565	587	645
Service Time	4.208	3.706	3.684	5.1	4.6	3.899	5.268	4.768	4.068	3.837	3.336
HCM Lane V/C Ratio	0.047	0.347	0.179	0.07	0.002	0.084	0.006	0	0.009	0.002	0.535
HCM Control Delay	9.5	11.9	10	10.6	9.6	9.5	10.3	9.8	9.1	8.8	14.7
HCM Lane LOS	A	B	A	B	A	A	B	N	A	A	B
HCM 95th-tile Q	0.1	1.6	0.6	0.2	0	0.3	0	0	0	0	3.2

APPENDIX 3.3: EXISTING (2022) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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

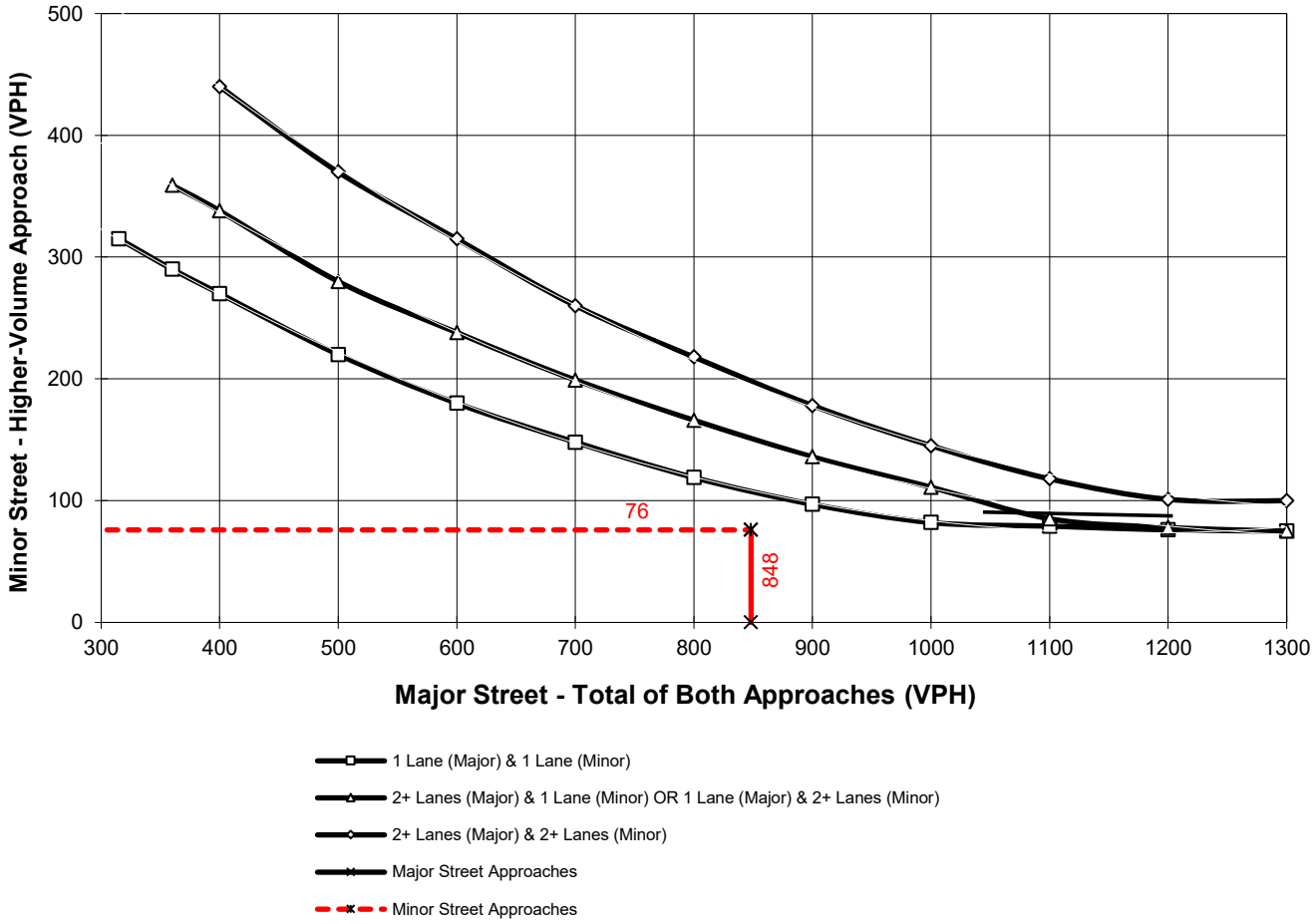
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2022) Conditions - Weekday PM Peak Hour**

Major Street Name = **Harvill Avenue** — Total of Both Approaches (VPH) = **848**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Old Cajalco Road** — High Volume Approach (VPH) = **76**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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

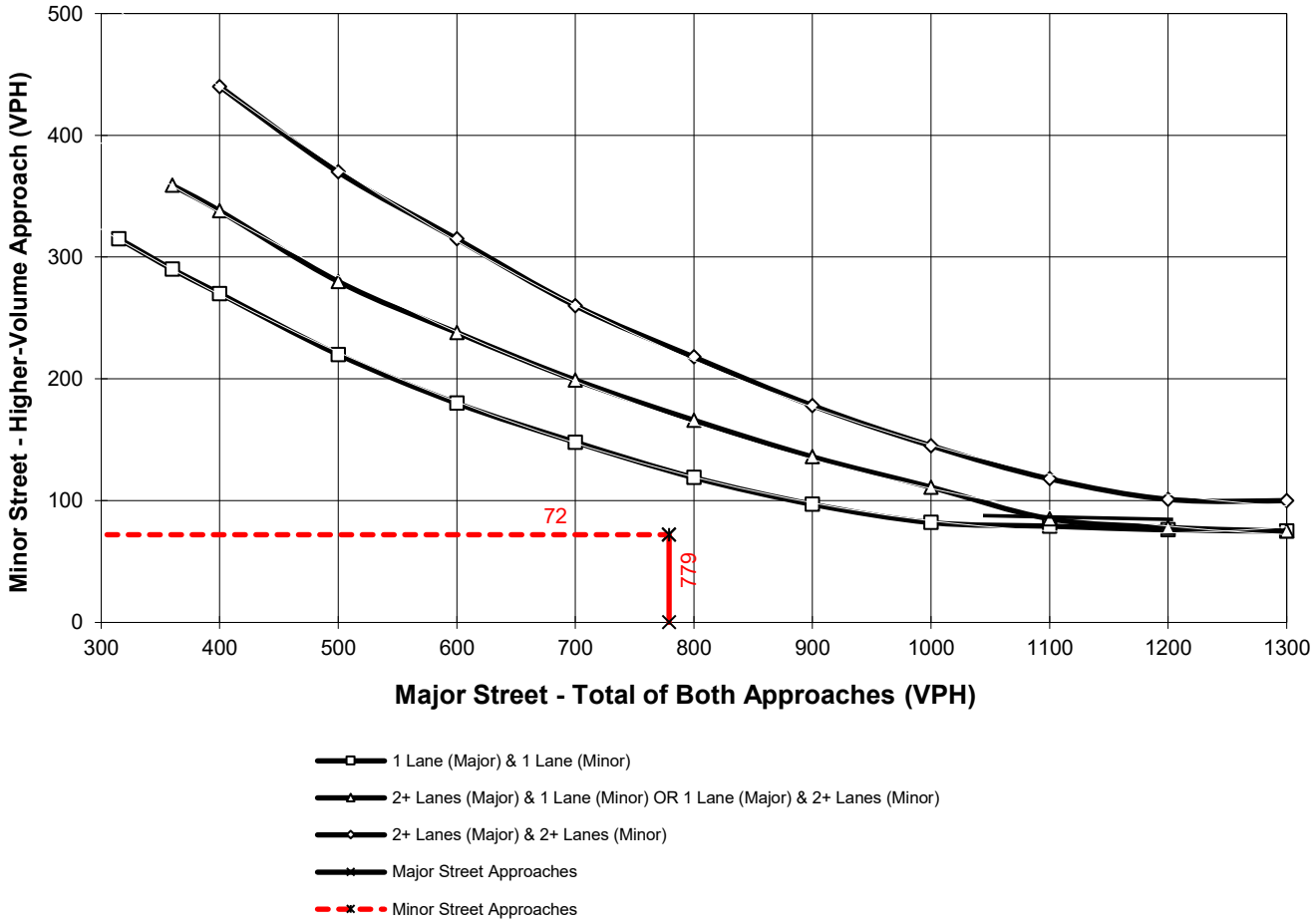
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2022) Conditions - Weekday PM Peak Hour**

Major Street Name = **Harvill Avenue** — Total of Both Approaches (VPH) = **779**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Rider Street** — High Volume Approach (VPH) = **72**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 5.1: EAP (2024) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	0	0	2	9	1
Future Vol, veh/h	1	0	0	2	9	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	0	2	10	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	13	11	11	0	-	0
Stage 1	11	-	-	-	-	-
Stage 2	2	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	1011	1076	1621	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	1026	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1011	1076	1621	-	-	-
Mov Cap-2 Maneuver	927	-	-	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	1026	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1621	-	927	-	-
HCM Lane V/C Ratio	-	-	0.001	-	-
HCM Control Delay (s)	0	-	8.9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	2	6	0	2	7
Future Vol, veh/h	2	2	6	0	2	7
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	-	100	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	2	7	0	2	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	20	6	10	0	-	0
Stage 1	6	-	-	-	-	-
Stage 2	14	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	1002	1083	1623	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1014	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	998	1083	1623	-	-	-
Mov Cap-2 Maneuver	919	-	-	-	-	-
Stage 1	1018	-	-	-	-	-
Stage 2	1014	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	7.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1623	-	994	-	-
HCM Lane V/C Ratio	0.004	-	0.004	-	-
HCM Control Delay (s)	7.2	-	8.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	0	5	7	0	3	7	780	7	9	247	56
Future Vol, veh/h	39	0	5	7	0	3	7	780	7	9	247	56
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	160	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	40	0	5	7	0	3	7	804	7	9	255	58

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	718	1127	157	968	1153	406	313	0	0	811	0	0
Stage 1	302	302	-	822	822	-	-	-	-	-	-	-
Stage 2	416	825	-	146	331	-	-	-	-	-	-	-
Critical Hdwy	6.5	6.5	6.9	6.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	391	206	867	276	199	600	1259	-	-	824	-	-
Stage 1	688	668	-	339	391	-	-	-	-	-	-	-
Stage 2	590	390	-	848	649	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	384	202	867	271	196	600	1259	-	-	824	-	-
Mov Cap-2 Maneuver	457	301	-	301	301	-	-	-	-	-	-	-
Stage 1	684	661	-	337	389	-	-	-	-	-	-	-
Stage 2	584	388	-	834	642	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	15.4	0.1	0.3
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1259	-	-	483	301	600	824	-	-
HCM Lane V/C Ratio	0.006	-	-	0.094	0.024	0.005	0.011	-	-
HCM Control Delay (s)	7.9	-	-	13.2	17.3	11	9.4	-	-
HCM Lane LOS	A	-	-	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0	0	-	-

Intersection	
Intersection Delay, s/veh	9.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	1	33	2	0	16	34	296	4	18	204	21
Future Vol, veh/h	47	1	33	2	0	16	34	296	4	18	204	21
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	49	1	35	2	0	17	36	312	4	19	215	22
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	9.4	8.6	9.9	9.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	96%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	4%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	197	103	47	1	33	2	0	16	18	136
LT Vol	34	0	0	47	0	0	2	0	0	18	0
Through Vol	0	197	99	0	1	0	0	0	0	0	136
RT Vol	0	0	4	0	0	33	0	0	16	0	0
Lane Flow Rate	36	208	108	49	1	35	2	0	17	19	143
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.058	0.308	0.159	0.09	0.002	0.052	0.004	0	0.026	0.032	0.219
Departure Headway (Hd)	5.839	5.338	5.311	6.559	6.059	5.36	6.803	6.303	5.603	6.014	5.512
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	610	669	671	542	585	661	529	0	643	592	647
Service Time	3.606	3.104	3.077	4.352	3.853	3.153	4.503	4.003	3.303	3.782	3.281
HCM Lane V/C Ratio	0.059	0.311	0.161	0.09	0.002	0.053	0.004	0	0.026	0.032	0.221
HCM Control Delay	9	10.5	9.1	10	8.9	8.5	9.5	9	8.5	9	9.8
HCM Lane LOS	A	B	A	A	A	A	A	N	A	A	A
HCM 95th-tile Q	0.2	1.3	0.6	0.3	0	0.2	0	0	0.1	0.1	0.8

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	1	9	4	2
Future Vol, veh/h	2	1	1	9	4	2
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	-	100	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	1	1	10	4	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	17	5	6	0	-	0
Stage 1	5	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	1006	1084	1628	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1016	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1005	1084	1628	-	-	-
Mov Cap-2 Maneuver	923	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1016	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1628	-	971	-	-
HCM Lane V/C Ratio	0.001	-	0.003	-	-
HCM Control Delay (s)	7.2	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	7	3	3	3	2
Future Vol, veh/h	7	7	3	3	3	2
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	-	100	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	8	3	3	3	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	13	4	5	0	-	0
Stage 1	4	-	-	-	-	-
Stage 2	9	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	1011	1085	1630	-	-	-
Stage 1	1024	-	-	-	-	-
Stage 2	1019	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1009	1085	1630	-	-	-
Mov Cap-2 Maneuver	926	-	-	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	1019	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	3.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1630	-	999	-	-
HCM Lane V/C Ratio	0.002	-	0.015	-	-
HCM Control Delay (s)	7.2	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	0	14	5	0	17	6	366	6	6	465	36
Future Vol, veh/h	74	0	14	5	0	17	6	366	6	6	465	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	160	-	-	110	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	78	0	15	5	0	18	6	385	6	6	489	38

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	725	923	264	657	939	196	527	0	0	391	0	0
Stage 1	520	520	-	400	400	-	-	-	-	-	-	-
Stage 2	205	403	-	257	539	-	-	-	-	-	-	-
Critical Hdwy	6.5	6.5	6.9	6.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	387	272	741	425	266	819	1050	-	-	1179	-	-
Stage 1	512	535	-	603	605	-	-	-	-	-	-	-
Stage 2	784	603	-	731	525	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	375	269	741	413	263	819	1050	-	-	1179	-	-
Mov Cap-2 Maneuver	472	438	-	534	431	-	-	-	-	-	-	-
Stage 1	509	532	-	599	601	-	-	-	-	-	-	-
Stage 2	762	599	-	713	522	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.8	10	0.1	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1050	-	-	501	534	819	1179	-	-
HCM Lane V/C Ratio	0.006	-	-	0.185	0.01	0.022	0.005	-	-
HCM Control Delay (s)	8.4	-	-	13.8	11.8	9.5	8.1	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	12.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	1	51	3	0	4	27	280	3	1	462	39
Future Vol, veh/h	30	1	51	3	0	4	27	280	3	1	462	39
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	35	1	59	3	0	5	31	326	3	1	537	45
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	10.1	9.8	11.4	14
HCM LOS	B	A	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	97%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	3%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	187	96	30	1	51	3	0	4	1	308
LT Vol	27	0	0	30	0	0	3	0	0	1	0
Through Vol	0	187	93	0	1	0	0	0	0	0	308
RT Vol	0	0	3	0	0	51	0	0	4	0	0
Lane Flow Rate	31	217	112	35	1	59	3	0	5	1	358
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.057	0.366	0.188	0.072	0.002	0.103	0.007	0	0.008	0.002	0.567
Departure Headway (Hd)	6.577	6.076	6.054	7.472	6.971	6.27	7.663	7.163	6.463	6.203	5.702
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	545	593	594	480	513	571	467	0	553	578	634
Service Time	4.306	3.805	3.783	5.213	4.712	4.011	5.408	4.908	4.208	3.927	3.426
HCM Lane V/C Ratio	0.057	0.366	0.189	0.073	0.002	0.103	0.006	0	0.009	0.002	0.565
HCM Control Delay	9.7	12.3	10.2	10.8	9.7	9.7	10.5	9.9	9.3	8.9	15.7
HCM Lane LOS	A	B	B	B	A	A	B	N	A	A	C
HCM 95th-tile Q	0.2	1.7	0.7	0.2	0	0.3	0	0	0	0	3.6

APPENDIX 5.2: EAP (2024) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		EAP (2024)
				CALC CS	DATE	09/15/22
Jurisdiction: **County of Riverside**				CHK CS	DATE	09/15/22
Major Street: **Patterson Av.**				Critical Approach Speed (Major)		25 mph
Minor Street: **Driveway 1**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **156** vpd Minor Street Future ADT = **21** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume	Urban	Rural	Urban	Rural
XX Satisfied / XX Not Satisfied				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **156** / *1* **21**	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 (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / XX Not Satisfied				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 **156** / *1* **21**	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				
Satisfied / XX Not Satisfied	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 1% **B** 1%				

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-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		EAP (2024)
				CALC CS	DATE	09/15/22
Jurisdiction: **County of Riverside**				CHK CS	DATE	09/15/22
Major Street: **Patterson Av.**				Critical Approach Speed (Major)		25 mph
Minor Street: **Driveway 2**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **153** vpd Minor Street Future ADT = **78** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **153**	*1* **78**	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 (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **153**	*1* **78**	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					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 2% **B** 1%				

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

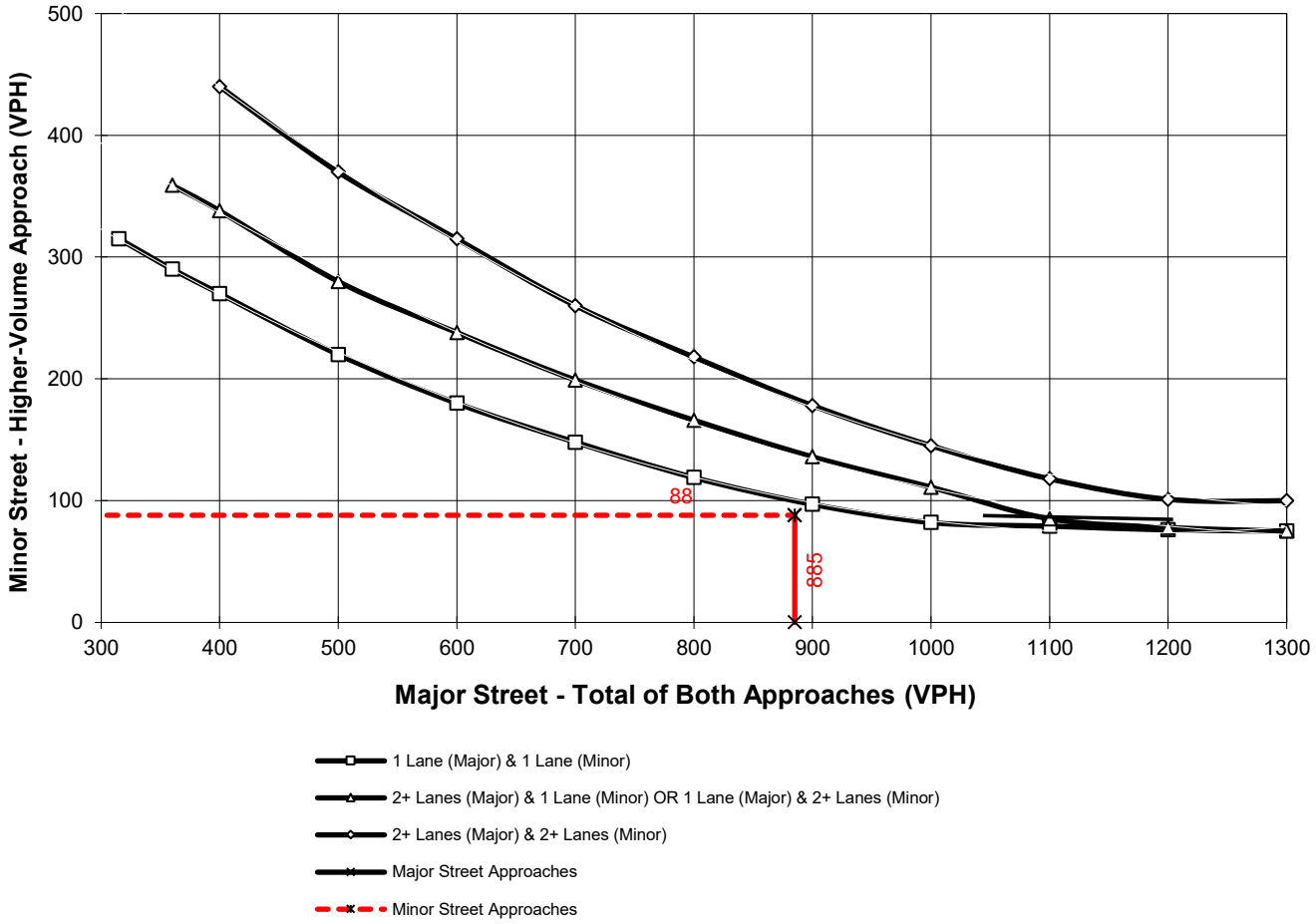
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **Harvill Avenue** — Total of Both Approaches (VPH) = **885**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Old Cajalco Road** — High Volume Approach (VPH) = **88**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

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

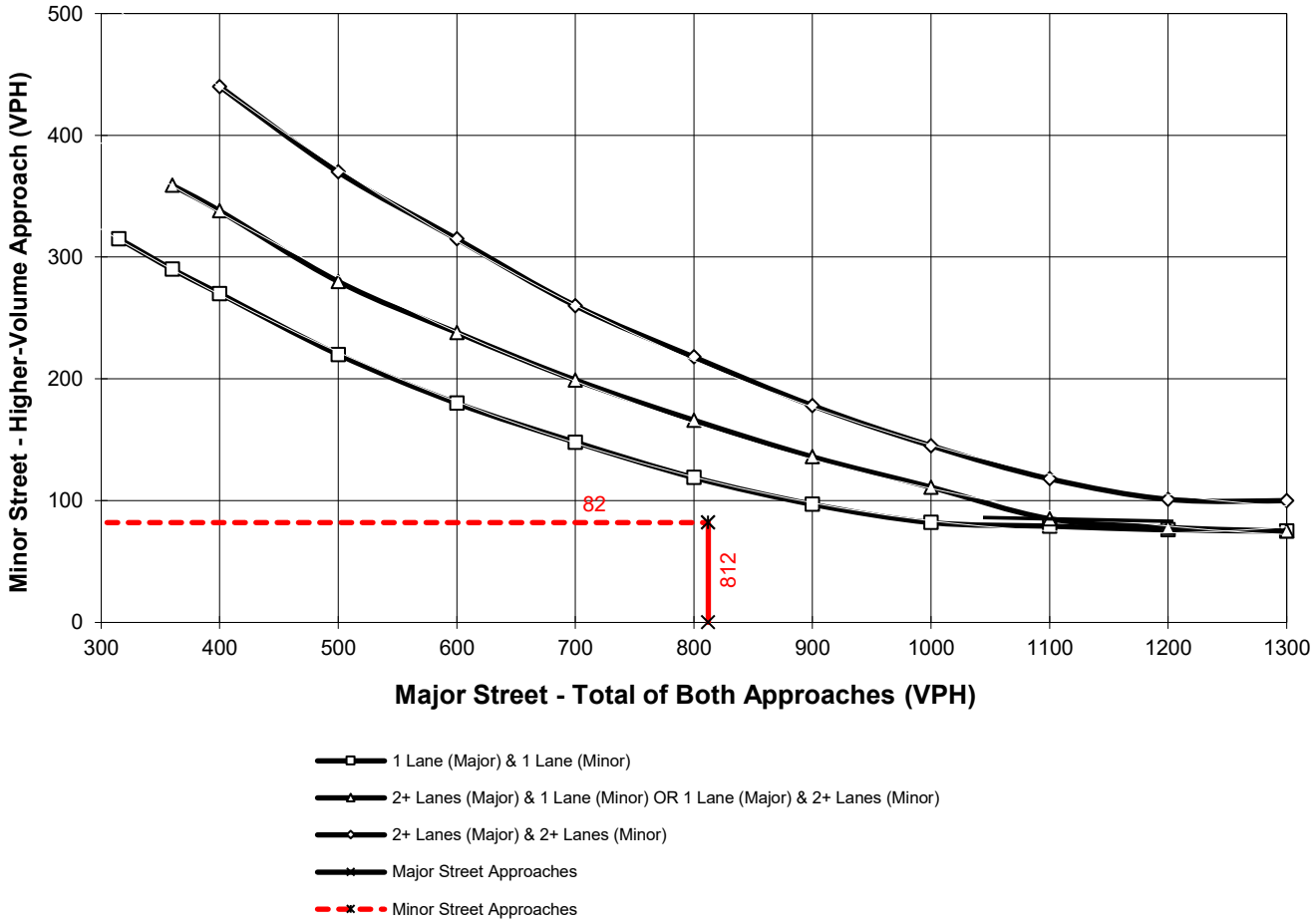
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAP (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **Harvill Avenue**
Total of Both Approaches (VPH) = **812**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Rider Street**
High Volume Approach (VPH) = **82**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 6.1: EAPC (2024) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

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Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	0	0	0	0	3	2	2	10	1
Future Vol, veh/h	1	0	0	0	0	0	0	3	2	2	10	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	1	0	0	0	0	0	0	3	2	2	11	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	20	21	12	20	20	4	12	0	0	5	0	0
Stage 1	16	16	-	4	4	-	-	-	-	-	-	-
Stage 2	4	5	-	16	16	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	998	877	1074	998	878	1085	1620	-	-	1630	-	-
Stage 1	1009	886	-	1024	897	-	-	-	-	-	-	-
Stage 2	1024	896	-	1009	886	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	997	876	1074	997	877	1085	1620	-	-	1630	-	-
Mov Cap-2 Maneuver	917	805	-	917	806	-	-	-	-	-	-	-
Stage 1	1009	885	-	1024	897	-	-	-	-	-	-	-
Stage 2	1024	896	-	1008	885	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	0	0	1.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1620	-	-	917	-	1630	-	-
HCM Lane V/C Ratio	-	-	-	0.001	-	0.001	-	-
HCM Control Delay (s)	0	-	-	8.9	0	7.2	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	2	1	0	1	6	2	1	1	2	7
Future Vol, veh/h	2	0	2	1	0	1	6	2	1	1	2	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	2	1	0	1	7	2	1	1	2	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	25	25	6	26	29	3	10	0	0	3	0	0
Stage 1	8	8	-	17	17	-	-	-	-	-	-	-
Stage 2	17	17	-	9	12	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	991	872	1083	990	868	1087	1623	-	-	1632	-	-
Stage 1	1019	893	-	1008	885	-	-	-	-	-	-	-
Stage 2	1008	885	-	1017	890	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	986	868	1083	984	864	1087	1623	-	-	1632	-	-
Mov Cap-2 Maneuver	909	800	-	908	797	-	-	-	-	-	-	-
Stage 1	1015	892	-	1004	881	-	-	-	-	-	-	-
Stage 2	1003	881	-	1014	889	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	8.6	4.8	0.7
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1623	-	-	988	989	1632	-	-
HCM Lane V/C Ratio	0.004	-	-	0.004	0.002	0.001	-	-
HCM Control Delay (s)	7.2	-	-	8.7	8.6	7.2	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	0	13	14	0	8	30	1056	36	48	926	74
Future Vol, veh/h	46	0	13	14	0	8	30	1056	36	48	926	74
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	160	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	47	0	13	14	0	8	31	1089	37	49	955	76

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1698	2279	516	1746	2299	563	1031	0	0	1126	0	0
Stage 1	1091	1091	-	1170	1170	-	-	-	-	-	-	-
Stage 2	607	1188	-	576	1129	-	-	-	-	-	-	-
Critical Hdwy	6.5	6.5	6.9	6.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	98	40	509	91	39	475	682	-	-	628	-	-
Stage 1	233	293	-	208	269	-	-	-	-	-	-	-
Stage 2	455	264	-	475	281	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	87	35	509	80	34	475	682	-	-	628	-	-
Mov Cap-2 Maneuver	164	121	-	152	126	-	-	-	-	-	-	-
Stage 1	223	270	-	199	257	-	-	-	-	-	-	-
Stage 2	427	252	-	426	259	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	32	24.5	0.3	0.5
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	682	-	-	193	152	475	628	-	-
HCM Lane V/C Ratio	0.045	-	-	0.315	0.095	0.017	0.079	-	-
HCM Control Delay (s)	10.5	-	-	32	31.2	12.7	11.2	-	-
HCM Lane LOS	B	-	-	D	D	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.3	0.3	0.1	0.3	-	-

Intersection	
Intersection Delay, s/veh	52.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	1	37	2	0	16	47	614	4	20	866	48
Future Vol, veh/h	60	1	37	2	0	16	47	614	4	20	866	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	63	1	39	2	0	17	49	646	4	21	912	51
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	13.1	11.6	28.7	73.7
HCM LOS	B	B	D	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	98%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	2%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	47	409	209	60	1	37	2	0	16	20	577
LT Vol	47	0	0	60	0	0	2	0	0	20	0
Through Vol	0	409	205	0	1	0	0	0	0	0	577
RT Vol	0	0	4	0	0	37	0	0	16	0	0
Lane Flow Rate	49	431	220	63	1	39	2	0	17	21	608
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.103	0.841	0.428	0.162	0.003	0.087	0.006	0	0.039	0.042	1.136
Departure Headway (Hd)	7.74	7.237	7.223	9.498	8.993	8.284	9.678	9.178	8.478	7.235	6.732
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	466	504	501	380	400	435	372	0	425	493	541
Service Time	5.44	4.937	4.923	7.198	6.693	5.984	7.378	6.878	6.178	5.001	4.498
HCM Lane V/C Ratio	0.105	0.855	0.439	0.166	0.003	0.09	0.005	0	0.04	0.043	1.124
HCM Control Delay	11.3	37.6	15.2	14	11.7	11.8	12.4	11.9	11.5	10.3	106.5
HCM Lane LOS	B	E	C	B	B	B	B	N	B	B	F
HCM 95th-tile Q	0.3	8.5	2.1	0.6	0	0.3	0	0	0.1	0.1	20.2

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	1	2	0	2	1	10	0	0	5	2
Future Vol, veh/h	2	0	1	2	0	2	1	10	0	0	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	1	2	0	2	1	11	0	0	5	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	20	19	6	20	20	11	7	0	0	11	0	0
Stage 1	6	6	-	13	13	-	-	-	-	-	-	-
Stage 2	14	13	-	7	7	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	998	879	1083	998	878	1076	1627	-	-	1621	-	-
Stage 1	1021	895	-	1013	889	-	-	-	-	-	-	-
Stage 2	1011	889	-	1020	894	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	996	878	1083	997	877	1076	1627	-	-	1621	-	-
Mov Cap-2 Maneuver	916	807	-	997	877	-	-	-	-	-	-	-
Stage 1	1020	895	-	1012	888	-	-	-	-	-	-	-
Stage 2	1008	888	-	1019	894	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	8.5	0.7	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1627	-	-	966	1035	1621	-	-
HCM Lane V/C Ratio	0.001	-	-	0.003	0.004	-	-	-
HCM Control Delay (s)	7.2	-	-	8.7	8.5	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	7	2	0	1	3	3	1	1	5	2
Future Vol, veh/h	7	0	7	2	0	1	3	3	1	1	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	100	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	0	8	2	0	1	3	3	1	1	5	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	18	18	6	22	19	4	7	0	0	4	0	0
Stage 1	8	8	-	10	10	-	-	-	-	-	-	-
Stage 2	10	10	-	12	9	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	1001	880	1083	995	879	1085	1627	-	-	1631	-	-
Stage 1	1019	893	-	1016	891	-	-	-	-	-	-	-
Stage 2	1016	891	-	1014	892	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	998	877	1083	986	876	1085	1627	-	-	1631	-	-
Mov Cap-2 Maneuver	918	806	-	986	876	-	-	-	-	-	-	-
Stage 1	1017	892	-	1014	889	-	-	-	-	-	-	-
Stage 2	1013	889	-	1006	891	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	8.6	3.1	0.9
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1627	-	-	994	1017	1631	-	-
HCM Lane V/C Ratio	0.002	-	-	0.015	0.003	0.001	-	-
HCM Control Delay (s)	7.2	-	-	8.7	8.6	7.2	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	77	0	14	31	0	49	6	1005	12	13	860	37
Future Vol, veh/h	77	0	14	31	0	49	6	1005	12	13	860	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	160	-	-	110	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	81	0	15	33	0	52	6	1058	13	14	905	39

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1494	2036	472	1558	2049	536	944	0	0	1071	0	0
Stage 1	953	953	-	1077	1077	-	-	-	-	-	-	-
Stage 2	541	1083	-	481	972	-	-	-	-	-	-	-
Critical Hdwy	6.4	6.5	6.9	6.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	137	58	544	120	56	494	735	-	-	658	-	-
Stage 1	282	340	-	237	298	-	-	-	-	-	-	-
Stage 2	498	296	-	540	333	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	120	56	544	114	54	494	735	-	-	658	-	-
Mov Cap-2 Maneuver	206	164	-	189	165	-	-	-	-	-	-	-
Stage 1	280	333	-	235	296	-	-	-	-	-	-	-
Stage 2	442	294	-	514	326	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	31.8	18.9	0.1	0.2
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	735	-	-	228	189	494	658	-	-
HCM Lane V/C Ratio	0.009	-	-	0.42	0.173	0.104	0.021	-	-
HCM Control Delay (s)	9.9	-	-	31.8	28	13.1	10.6	-	-
HCM Lane LOS	A	-	-	D	D	B	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.9	0.6	0.3	0.1	-	-

Intersection	
Intersection Delay, s/veh	131.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	65	1	60	3	0	4	37	887	3	1	868	56
Future Vol, veh/h	65	1	60	3	0	4	37	887	3	1	868	56
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	76	1	70	3	0	5	43	1031	3	1	1009	65
Number of Lanes	1	1	1	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	15.1	13.1	143.5	137
HCM LOS	C	B	F	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	99%	0%	100%	0%	0%	100%	0%	0%	100%
Vol Right, %	0%	0%	1%	0%	0%	100%	0%	0%	100%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	37	591	299	65	1	60	3	0	4	1	579
LT Vol	37	0	0	65	0	0	3	0	0	1	0
Through Vol	0	591	296	0	1	0	0	0	0	0	579
RT Vol	0	0	3	0	0	60	0	0	4	0	0
Lane Flow Rate	43	688	347	76	1	70	3	0	5	1	673
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.093	1.392	0.702	0.205	0.003	0.166	0.01	0	0.012	0.003	1.362
Departure Headway (Hd)	8.179	7.675	7.668	10.658	10.15	9.44	10.986	10.486	9.786	8.222	7.718
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	441	481	476	339	355	382	328	0	368	438	478
Service Time	5.879	5.375	5.368	8.358	7.85	7.14	8.686	8.186	7.486	5.922	5.418
HCM Lane V/C Ratio	0.098	1.43	0.729	0.224	0.003	0.183	0.009	0	0.014	0.002	1.408
HCM Control Delay	11.7	210.8	26.5	16.1	12.9	14	13.8	13.2	12.6	10.9	198.5
HCM Lane LOS	B	F	D	C	B	B	B	N	B	B	F
HCM 95th-tile Q	0.3	30.9	5.4	0.8	0	0.6	0	0	0	0	29.3

APPENDIX 6.2: EAPC (2024) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

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Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		EAPC (2024)
				CALC CS	DATE	09/15/22
Jurisdiction: **County of Riverside**				CHK CS	DATE	09/15/22
Major Street: **Patterson Av.**				Critical Approach Speed (Major)		25 mph
Minor Street: **Driveway 1**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **199** vpd Minor Street Future ADT = **21** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **199**	*1* **21**	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 (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **199**	*1* **21**	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					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 1% **B** 2%				

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-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		EAPC (2024)
				CALC CS	DATE	09/15/22
Jurisdiction: **County of Riverside**				CHK CS	DATE	09/15/22
Major Street: **Patterson Av.**				Critical Approach Speed (Major)		25 mph
Minor Street: **Driveway 2**				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **1** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **203** vpd Minor Street Future ADT = **78** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **203**	*1* **78**	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 (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied				
	XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **203**	*1* **78**	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					
Satisfied	Not Satisfied				
	XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 3%	**B** 2%			

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

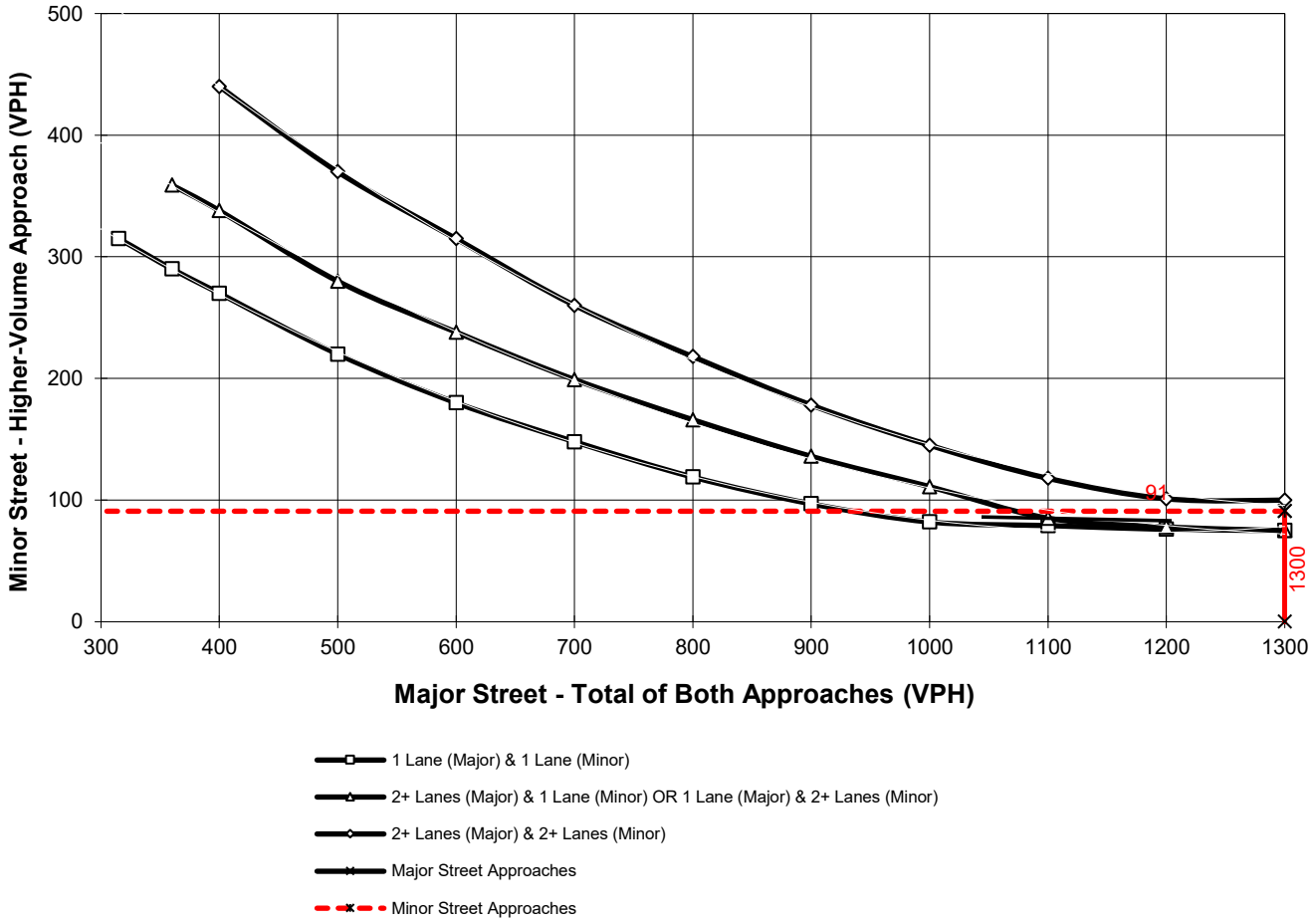
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAPC (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **Harvill Avenue** — Total of Both Approaches (VPH) = **1933**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Old Cajalco Road** — High Volume Approach (VPH) = **91**
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)

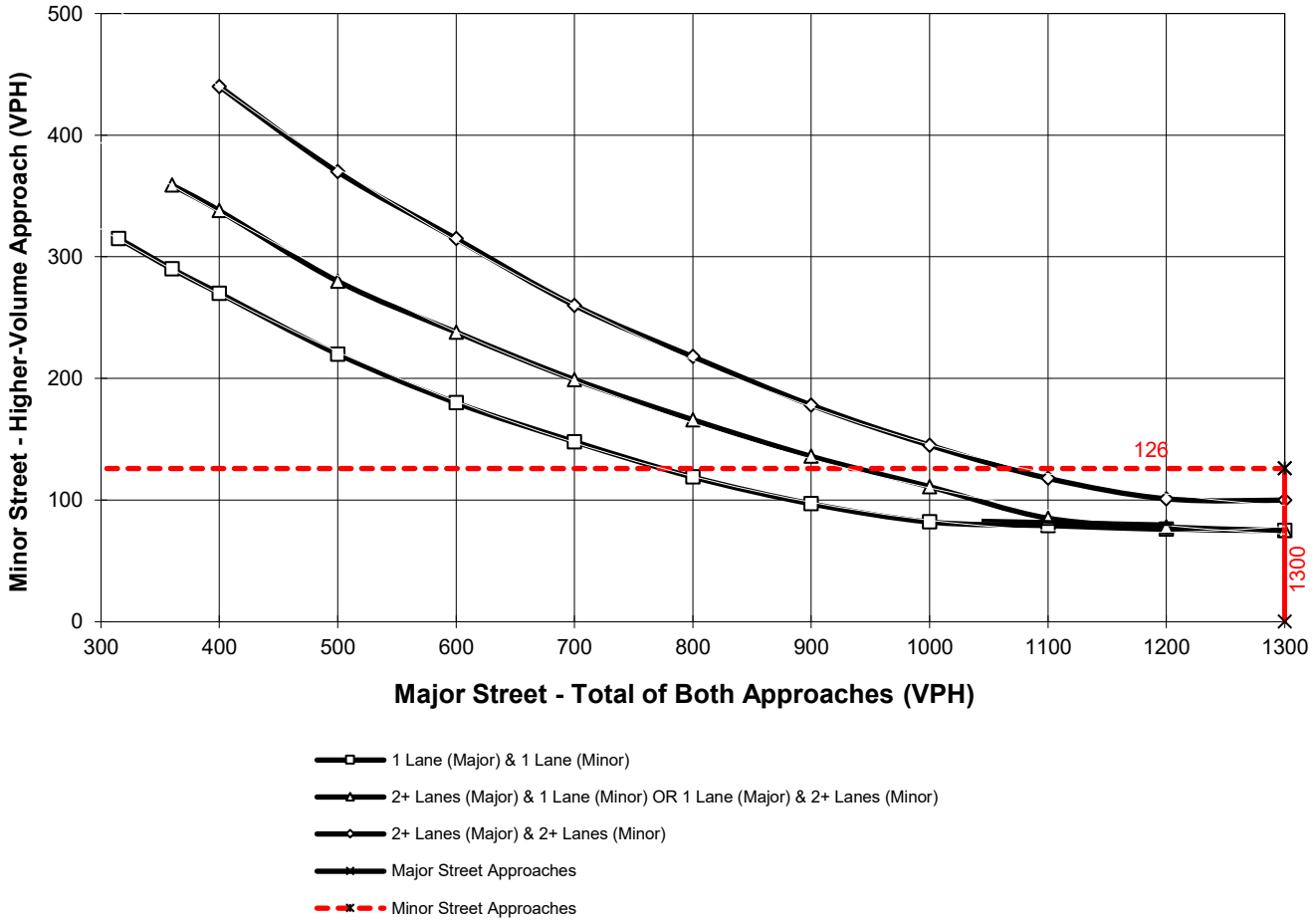
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAPC (2024) Conditions - Weekday PM Peak Hour**

Major Street Name = **Harvill Avenue**
Total of Both Approaches (VPH) = **1852**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Rider Street**
High Volume Approach (VPH) = **126**
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

APPENDIX 6.3: EAPC (2024) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

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Lane Group	EBL	EBT	EBR	WBL	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	60	1	37	2	16	47	614	20	866	48
Future Volume (vph)	60	1	37	2	16	47	614	20	866	48
Turn Type	Perm	NA	Perm	Perm	Perm	Prot	NA	Prot	NA	Perm
Protected Phases		4				5	2	1	6	
Permitted Phases	4		4	8	8					6
Detector Phase	4	4	4	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	36.2	36.2	36.2	35.6	35.6	9.6	37.2	9.6	37.2	37.2
Total Split (s)	36.2	36.2	36.2	36.2	36.2	11.1	39.2	9.6	37.7	37.7
Total Split (%)	42.6%	42.6%	42.6%	42.6%	42.6%	13.1%	46.1%	11.3%	44.4%	44.4%
Yellow Time (s)	4.2	4.2	4.2	3.6	3.6	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.2	5.2	4.6	4.6	4.6	6.2	4.6	6.2	6.2
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	16.9	16.9	16.9	17.0	17.0	7.9	33.8	7.3	29.9	29.9
Actuated g/C Ratio	0.36	0.36	0.36	0.36	0.36	0.17	0.72	0.16	0.64	0.64
v/c Ratio	0.12	0.00	0.06	0.00	0.02	0.16	0.25	0.07	0.39	0.05
Control Delay	18.8	18.0	0.2	18.0	0.1	29.8	8.3	31.7	12.7	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.8	18.0	0.2	18.0	0.1	29.8	8.3	31.7	12.7	1.7
LOS	B	B	A	B	A	C	A	C	B	A
Approach Delay		11.7					9.8		12.5	
Approach LOS		B					A		B	

Intersection Summary	
Cycle Length: 85	
Actuated Cycle Length: 46.7	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.39	
Intersection Signal Delay: 11.3	Intersection LOS: B
Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Harvill Av. & Rider St.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1	37	2	0	16	47	614	4	20	866	48
Future Volume (veh/h)	60	1	37	2	0	16	47	614	4	20	866	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	63	1	39	2	0	17	49	646	4	21	912	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	407	314	266	406	314	266	93	1595	10	47	1472	657
Arrive On Green	0.17	0.17	0.17	0.17	0.00	0.17	0.05	0.43	0.43	0.03	0.41	0.41
Sat Flow, veh/h	1440	1900	1610	1439	1900	1610	1810	3678	23	1810	3610	1610
Grp Volume(v), veh/h	63	1	39	2	0	17	49	317	333	21	912	51
Grp Sat Flow(s),veh/h/ln	1440	1900	1610	1439	1900	1610	1810	1805	1896	1810	1805	1610
Q Serve(g_s), s	1.6	0.0	0.9	0.0	0.0	0.4	1.1	5.1	5.1	0.5	8.5	0.8
Cycle Q Clear(g_c), s	1.6	0.0	0.9	0.1	0.0	0.4	1.1	5.1	5.1	0.5	8.5	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	407	314	266	406	314	266	93	783	822	47	1472	657
V/C Ratio(X)	0.15	0.00	0.15	0.00	0.00	0.06	0.52	0.40	0.41	0.45	0.62	0.08
Avail Cap(c_a), veh/h	1216	1381	1171	1234	1408	1193	276	1397	1467	212	2667	1190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	14.9	15.2	14.9	0.0	15.0	19.7	8.3	8.3	20.5	10.0	7.7
Incr Delay (d2), s/veh	0.2	0.0	0.3	0.0	0.0	0.1	1.7	0.3	0.3	2.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.3	0.0	0.0	0.1	0.5	1.5	1.6	0.2	2.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.7	14.9	15.5	14.9	0.0	15.1	21.4	8.6	8.6	23.0	10.4	7.8
LnGrp LOS	B	B	B	B	A	B	C	A	A	C	B	A
Approach Vol, veh/h		103			19			699			984	
Approach Delay, s/veh		15.6			15.1			9.5			10.6	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	24.7		12.2	6.8	23.6		12.2				
Change Period (Y+Rc), s	4.6	6.2		5.2	4.6	6.2		* 5.2				
Max Green Setting (Gmax), s	5.0	33.0		31.0	6.5	31.5		* 32				
Max Q Clear Time (g_c+I1), s	2.5	7.1		3.6	3.1	10.5		2.4				
Green Ext Time (p_c), s	0.0	4.2		0.3	0.0	6.9		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		10.5
HCM 6th LOS		B

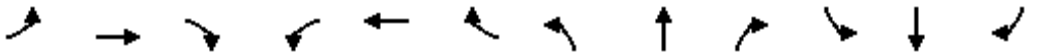
Notes

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

Lane Group	EBL	EBT	EBR	WBL	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	65	1	60	3	4	37	887	1	868	56
Future Volume (vph)	65	1	60	3	4	37	887	1	868	56
Turn Type	Perm	NA	Perm	Perm	Perm	Prot	NA	Prot	NA	Perm
Protected Phases		4				5	2	1	6	
Permitted Phases	4		4	8	8					6
Detector Phase	4	4	4	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	36.2	36.2	36.2	35.6	35.6	9.6	37.2	9.6	37.2	37.2
Total Split (s)	36.2	36.2	36.2	36.2	36.2	10.0	39.2	9.6	38.8	38.8
Total Split (%)	42.6%	42.6%	42.6%	42.6%	42.6%	11.8%	46.1%	11.3%	45.6%	45.6%
Yellow Time (s)	4.2	4.2	4.2	3.6	3.6	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.2	5.2	4.6	4.6	4.6	6.2	4.6	6.2	6.2
Lead/Lag						Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	15.8	15.8	15.8	15.9	15.9	6.9	27.9	6.7	26.1	26.1
Actuated g/C Ratio	0.33	0.33	0.33	0.33	0.33	0.15	0.59	0.14	0.55	0.55
v/c Ratio	0.16	0.00	0.12	0.01	0.01	0.16	0.49	0.00	0.51	0.07
Control Delay	18.3	18.0	2.7	17.3	0.0	30.2	11.6	32.0	13.3	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.3	18.0	2.7	17.3	0.0	30.2	11.6	32.0	13.3	2.8
LOS	B	B	A	B	A	C	B	C	B	A
Approach Delay		10.9					12.4		12.7	
Approach LOS		B					B		B	

Intersection Summary	
Cycle Length: 85	
Actuated Cycle Length: 47.5	
Natural Cycle: 85	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 12.4	Intersection LOS: B
Intersection Capacity Utilization 54.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 4: Harvill Av. & Rider St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	1	60	3	0	4	37	887	3	1	868	56
Future Volume (veh/h)	65	1	60	3	0	4	37	887	3	1	868	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	76	1	70	3	0	5	43	1031	3	1	1009	65
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	425	353	299	409	353	299	83	1702	5	4	1503	670
Arrive On Green	0.19	0.19	0.19	0.19	0.00	0.19	0.05	0.46	0.46	0.00	0.42	0.42
Sat Flow, veh/h	1434	1900	1610	1350	1900	1610	1810	3692	11	1810	3610	1610
Grp Volume(v), veh/h	76	1	70	3	0	5	43	504	530	1	1009	65
Grp Sat Flow(s),veh/h/ln	1434	1900	1610	1350	1900	1610	1810	1805	1898	1810	1805	1610
Q Serve(g_s), s	2.1	0.0	1.7	0.1	0.0	0.1	1.1	9.5	9.5	0.0	10.3	1.1
Cycle Q Clear(g_c), s	2.1	0.0	1.7	0.1	0.0	0.1	1.1	9.5	9.5	0.0	10.3	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	425	353	299	409	353	299	83	832	875	4	1503	670
V/C Ratio(X)	0.18	0.00	0.23	0.01	0.00	0.02	0.52	0.61	0.61	0.25	0.67	0.10
Avail Cap(c_a), veh/h	1136	1296	1098	1097	1321	1119	215	1311	1378	199	2589	1155
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	15.1	15.8	15.1	0.0	15.1	21.2	9.2	9.2	22.7	10.7	8.1
Incr Delay (d2), s/veh	0.2	0.0	0.4	0.0	0.0	0.0	1.8	0.7	0.7	11.8	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.6	0.0	0.0	0.0	0.4	2.3	2.4	0.0	2.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	15.1	16.2	15.1	0.0	15.1	23.0	9.9	9.8	34.4	11.3	8.1
LnGrp LOS	B	B	B	B	A	B	C	A	A	C	B	A
Approach Vol, veh/h		147			8			1077			1075	
Approach Delay, s/veh		16.1			15.1			10.4			11.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.7	27.2		13.6	6.7	25.1		13.6				
Change Period (Y+Rc), s	4.6	6.2		5.2	4.6	6.2		* 5.2				
Max Green Setting (Gmax), s	5.0	33.0		31.0	5.4	32.6		* 32				
Max Q Clear Time (g_c+I1), s	2.0	11.5		4.1	3.1	12.3		2.1				
Green Ext Time (p_c), s	0.0	6.0		0.4	0.0	6.6		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		11.1
HCM 6th LOS		B

Notes

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