URBAN | CROSSROADS

CORDOVA ROAD LOGISTICS FACILITY

TRAFFIC ANALYSIS

PREPARED BY: Janette Cachola | jcachola@urbanxroads.com
Marlie Whiteman | mwhiteman@urbanxroads.com
John Kain | jkain@urbanxroads.com

Reference Number	Agency	Date
15504-03 TA Report.docx	Town of Apple Valley	December 7, 2023

This Page Intentionally Left Blank

TABLE OF CONTENTS

Table of Contents iii

Appendices v

List of Exhibits vii

List of Tables ix

List of Abbreviated Terms xi

1 Introduction 1

1.1 Summary of Findings 1
1.2 Project Overview 3
1.3 Analysis Scenarios 5
1.4 Study Area 6
1.5 Recommendations 6

2 Methodologies 15

2.1 Level of Service 15
2.2 Intersection Capacity Analysis 15
2.3 Traffic Signal Warrant Analysis Methodology 17
2.4 Minimum Acceptable Levels of Service (LOS) 18
2.5 Deficiency Criteria 19
2.6 Project Fair Share Calculation Methodology 19

3 Area Conditions 21

3.1 Existing Circulation Network 21
3.2 Town of Apple Valley General Plan Circulation Element 21
3.3 Pedestrian Facilities 25
3.4 Transit Service 25
3.5 Truck Routes 25
3.6 Existing (2023) Traffic Counts 25
3.7 Intersection Operations Analysis 28
3.8 Traffic Signal Warrants Analysis 28

4 Projected Future Traffic 33

4.1 Project Trip Generation 33
4.2 Project Trip Distribution 34
4.3 Modal Split 34
4.4 Project Trip Assignment 34
4.5 Background Traffic 34

5 Opening Year Cumulative (2025) Traffic Conditions 45

5.1 Roadway Improvements 45
5.2 Without Project Traffic Volume Forecasts 45
5.3 With Project Traffic Volume Forecasts 45
5.4 Intersection Operations Analysis 52
5.5 Traffic Signal Warrants Analysis 52

6 Horizon Year (2040) Traffic Conditions 55

6.1 Roadway Improvements 55
6.2 Without Project Traffic Volume Forecasts 55
6.3 With Project Traffic Volume Forecasts 55
6.4 Intersection Operations Analysis 55
6.5 Traffic Signal Warrants Analysis 62
6.6 Queuing Analysis 62

7 Local and Regional Funding Mechanisms 65

7.1 Town of Apple Valley Development Impact Fee Program 65
7.2 Measure "I" Funds 65
7.3 Fair Share Contribution 65

8 References 69

APPENDICES

Appendix 1.1: Approved Traffic Study Scoping Agreement

Appendix 3.1: Traffic Counts – November 2023

Appendix 3.2: Existing (2023) Conditions Intersection Operations Analysis Worksheets

Appendix 3.3: Existing (2023) Conditions Traffic Signal Warrant Analysis Worksheets

Appendix 5.1: Opening Year Cumulative (2025) Without Project Conditions
Intersection Operations Analysis Worksheets

Appendix 5.2: Opening Year Cumulative (2025) With Project Conditions
Intersection Operations Analysis Worksheets

Appendix 5.3: Opening Year Cumulative (2025) Without Project Conditions
Traffic Signal Warrant Analysis Worksheets

Appendix 5.4: Opening Year Cumulative (2025) With Project Conditions
Traffic Signal Warrant Analysis Worksheets

Appendix 6.1: Horizon Year (2040) Without Project Conditions
Intersection Operations Analysis Worksheets

Appendix 6.2: Horizon Year (2040) With Project Conditions
Intersection Operations Analysis Worksheets

Appendix 6.3: Horizon Year (2040) Traffic Signal Warrant Analysis Worksheets

Appendix 6.4: Horizon Year (2040) With Project Conditions Queuing Analysis Worksheets

This page intentionally left blank

LIST OF EXHIBITS

Exhibit 1-1: Traffic Analysis Study Area 2
Exhibit 1-2: Preliminary Site Plan 4
Exhibit 1-3: Site Access Recommendations 8
Exhibit 1-4: Truck Access, Driveways 2, 3, and Driveway 5 10
Exhibit 1-5: Cumulative Plus Project (2025) Traffic Controls and Intersection Lane Configurations 11
Exhibit 1-6: Horizon Year (2040) With Project Traffic Controls and Intersection Lane Configurations 12
Exhibit 3-1: Existing Traffic Controls and Intersection Lane Configurations 22
Exhibit 3-2: Town of Apple Valley General Plan Street System 23
Exhibit 3-3: Town of Apple Valley General Plan Roadway Cross-Sections 24
Exhibit 3-4: Pedestrian Facilities 26
Exhibit 3-5: Town of Apple Valley Truck Routes 27
Exhibit 3-6: Existing (2023) AM Peak Hour Intersection Passenger Car Equivalent Volumes 29
Exhibit 3-7: Existing (2023) PM Peak Hour Intersection Passenger Car Equivalent Volumes 30
Exhibit 3-8: Existing (2023) Average Daily Traffic (ADT) Passenger Car Equivalent Volumes 31
Exhibit 4-1: Project (Truck) Trip Distribution 37
Exhibit 4-2: Project (Passenger Car) Trip Distribution 38
Exhibit 4-3: Project Only AM Peak Hour Intersection Passenger Car Equivalent Volumes 39
Exhibit 4-4: Project Only PM Peak Hour Intersection Passenger Car Equivalent Volumes 40
Exhibit 4-5: Project Only Average Daily Traffic (ADT) Passenger Car Equivalent Volumes 41
Exhibit 4-6: Cumulative Development Location Map 43
Exhibit 5-1: Opening Year Cumulative (2025) Without Project AM Peak Hour Intersection Volumes 46
Exhibit 5-2: Opening Year Cumulative (2025) Without Project PM Peak Hour Intersection Volumes 47
Exhibit 5-3: Opening Year Cumulative (2025) Without Project Average Daily Traffic (ADT) 48
Exhibit 5-4: Opening Year Cumulative (2025) With Project AM Peak Hour Intersection Volumes 49
Exhibit 5-5: Opening Year Cumulative (2025) With Project PM Peak Hour Intersection Volumes 50
Exhibit 5-6: Opening Year Cumulative (2025) With Project Average Daily Traffic 51
Exhibit 6-1: Horizon Year (2040) Without Project AM Peak Hour Intersection Volumes 56
Exhibit 6-2: Horizon Year (2040) Without Project PM Peak Hour Intersection Volumes 57
Exhibit 6-3: Horizon Year (2040) Without Project Average Daily Traffic (ADT) 58
Exhibit 6-4: Horizon Year (2040) With Project AM Peak Hour Intersection Volumes 59

Exhibit 6-5: Horizon Year (2040) With Project PM Peak Hour Intersection Volumes 60
Exhibit 6-6: Horizon Year (2040) With Project Average Daily Traffic (ADT) 61

LIST OF TABLES

Table 1-1: Intersection Analysis Locations 6
Table 1-2: Summary of LOS 7
Table 2-1: Signalized Intersection LOS Thresholds 16
Table 2-2: Unsignalized Intersection LOS Thresholds 17
Table 3-1: Intersection Analysis for Existing (2023) Conditions 32
Table 4-1: Project Trip Generation Summary (Actual Vehicles) 35
Table 4-2: Project Trip Generation Summary Passenger Car Equivalent (PCE) 36
Table 4-3: Cumulative Development land use Summary 44
Table 5-1: Intersection Analysis for Opening year Cumulative (2025) Conditions 54
Table 6-1: Intersection Analysis for Horizon Year (2040) Conditions 63
Table 6-2: Queuing Summary for Horizon Year (2040) Conditions With Improvements 64
Table 7-1: Project Fair Share Calculations 67

This page intentionally left blank

LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CAMUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CMP	Congestion Management Program
DIF	Development Impact Fee
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
NCHRP	National Cooperative Highway Research Program
PHF	Peak Hour Factor
Project	Cordova Road Logistics Facility
SBCTA	San Bernardino County Transportation Authority
SBTAM	San Bernardino Transportation Analysis Model
SCAG	Southern California Association of Governments
sf	Square Feet
TA	Traffic Analysis
v/c	Volume to Capacity
vphgpl	Vehicles per Hour Green per Lane
WP	With Project

This page intentionally left blank

1 INTRODUCTION

This report presents the results of the Traffic Analysis (TA) for Cordova Road Logistics Facility ("Project"), which is located south of Quarry Road and east of Dachshund Rd in the Town of Apple Valley, as shown on Exhibit 1-1. The purpose of this TA is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project, and where necessary recommend improvements to achieve acceptable operations consistent with General Plan level of service goals and policies. This traffic study has been prepared in accordance with the San Bernardino County Transportation Impact Study Guideline (July 9, 2019) as the Town of Apple Valley utilizes the County Guidelines, and consultation with Town staff during the traffic study scoping process. (1) (2) The Town approved Project Traffic Study Scoping agreement is provided in Appendix 1.1 of this TA.

1.1 SUMMARY OF FINDINGS

Study area intersections are currently operating at an acceptable LOS under Existing traffic conditions.

For cumulative conditions without the Project, the following intersections are anticipated to operate at an unacceptable LOS:

- Dachshund Av. / Johnson Rd. (#1) - LOS F AM and PM peak hours
- Dale Evans Pkwy. / Johnson Rd. (#2) – LOS F AM and PM peak hours
- Stoddard Wells Rd. / Johnson Rd. (#3) – LOS F AM and PM peak hours
- I-15 NB Ramps - Outer Hwy. 15 / Stoddard Wells Rd. (#4) – LOS F AM and PM peak hours
- Quarry Rd. / Stoddard Wells Rd. (#5) – LOS F PM peak hour
- Quarry Rd. / I-15 SB Ramps (#6) – LOS F PM peak hour

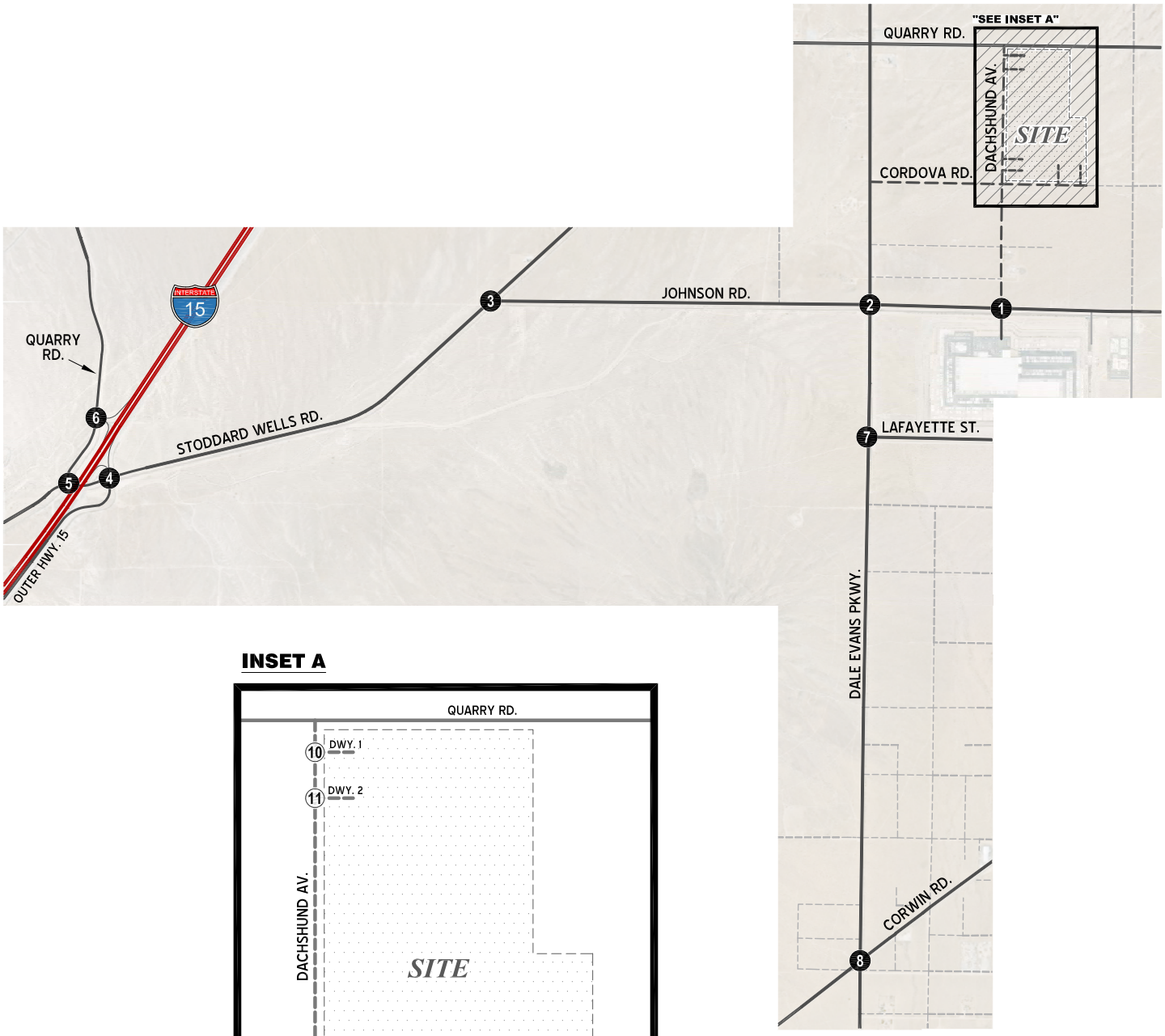
There are no additional study area intersections anticipated to operate at an unacceptable with the addition of Project traffic.

For opening year cumulative conditions without the Project, the following intersections are anticipated to meet peak hour volume warrants for traffic signal control:

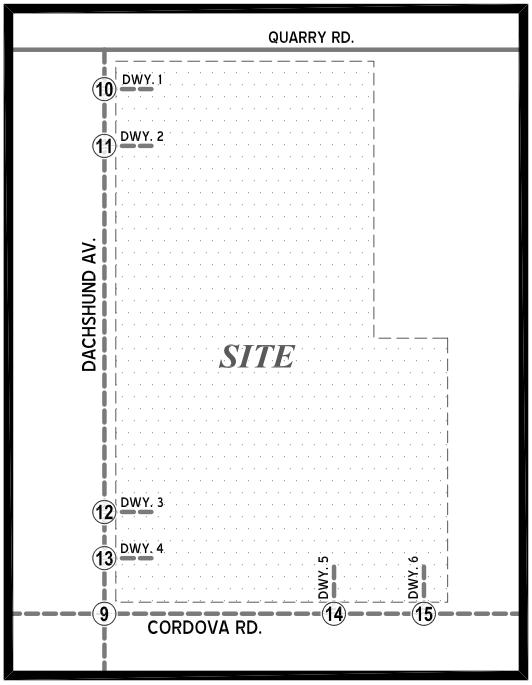
- Dachshund Av. / Johnson Rd. (#1)
- Dale Evans Pkwy. / Johnson Rd. (#2)
- Stoddard Wells Rd. / Johnson Rd. (#3)
- I-15 NB Ramps - Outer Hwy. 15 / Stoddard Wells Rd. (#4)
- Quarry Rd. / Stoddard Wells Rd. (#5)
- Quarry Rd. / I-15 SB Ramps (#6)
- Dale Evans Pkwy. / Lafayette St. (#7)

Additional traffic signals are warranted for long range future conditions, with or without the Project, as documented in Section 6. The addition of Project traffic does not cause a change in traffic control at off-site study area intersections.

EXHIBIT 1-1: TRAFFIC ANALYSIS STUDY AREA



INSET A



LEGEND:

- 9 = EXISTING ANALYSIS LOCATION
- 7 = FUTURE ANALYSIS LOCATION
- = FUTURE ROADWAY

N

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

- Project to construct Project-adjacent roadways at their ultimate half-section widths in accordance with Town of Apple Valley standards, and including sidewalk, curb-and-gutter, landscaping, etc.:
  - construct Dachshund Avenue at its ultimate easterly half-section width plus 10' as a Secondary Road
  - construct Cordova Road at its ultimate northerly half-section width plus 10' as a Secondary Road
- Project to implement stop control for egress at Project driveways and construct the necessary ingress and egress lanes at each driveway needed to facilitate site access.
- Project Driveways 1, 4, and 6, to be restricted to passenger cars only (no large trucks).
- If adjacent development (Cordova Quarry located at the southeast corner of Dachshund Avenue and Cordova Road) does not construct future roadway connections on 1) Dachshund Avenue from Cordova Road to Johnson Road and 2) Cordova Road from Dachshund Avenue to Dale Evans Parkway prior to occupancy of the Cordova Road Logistics Facility, then the Project should construct both roadways at their ultimate half-section widths plus 10' to provide interim Project site access.

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 payment of fair share contributions to intersection improvements that are not already addressed in existing fee programs. The Project Applicant would be required to pay requisite fees consistent with the Town's requirements (see Section 7 *Local and Regional Funding Mechanisms*).

1.2 PROJECT OVERVIEW

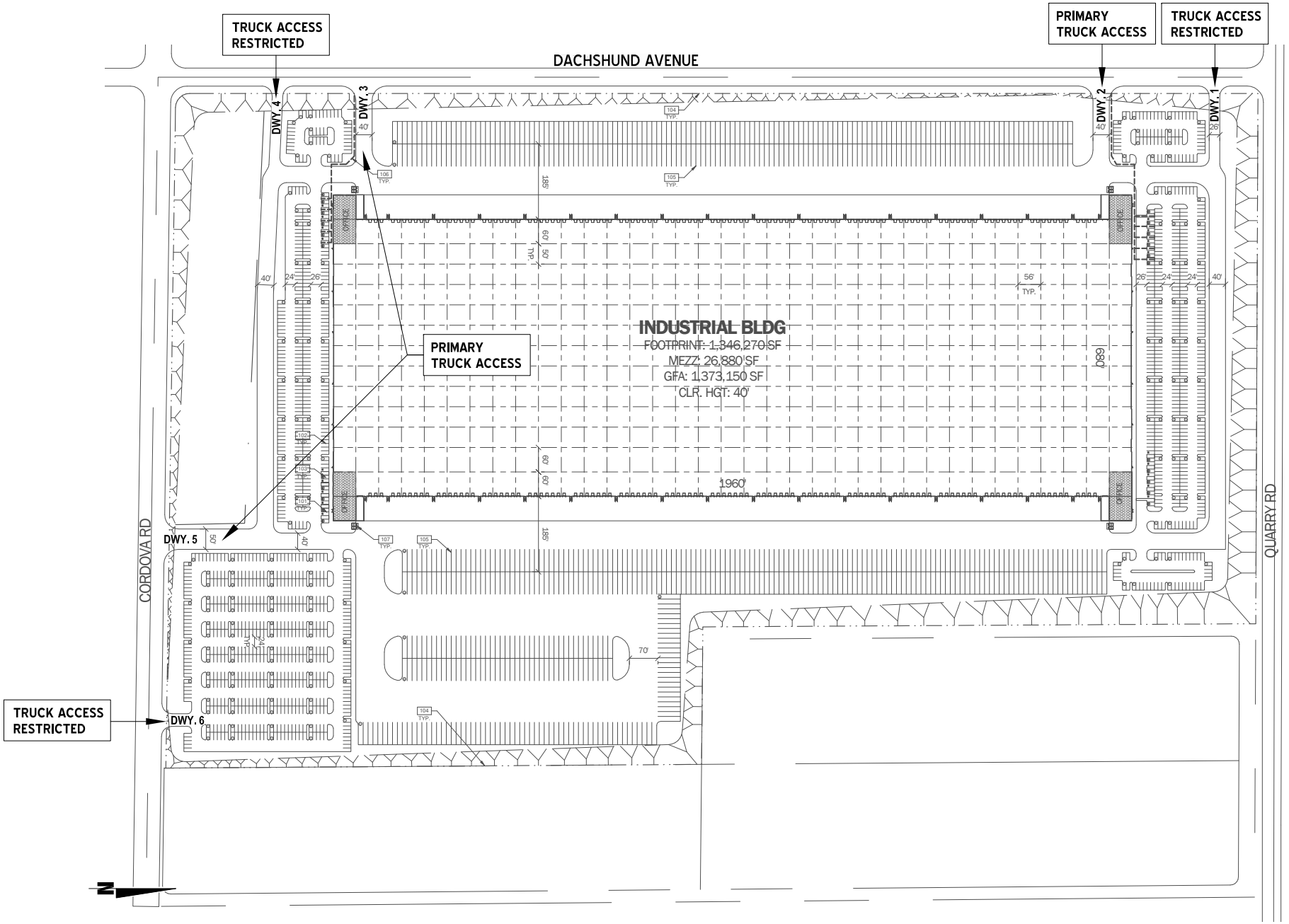
A preliminary site plan for the proposed Project is shown on Exhibit 1-2. The Project is proposed to consist of 1,346,270 square feet (sf) of high cube warehouse/distribution. For purposes of this analysis, the Project is assumed to consist of 1,144,330 square of high cube warehouse floor area (85% of total), and 201,940 square feet of cold storage (15% 0f total). The Project has been evaluated in a single phase. As indicated on Exhibit 1-2, the Project will have four access points along the future Dachshund Avenue and two access points along the future Cordova Road.

Regional access to the Project site is available from the I-15 Freeway via Stoddard Wells Road interchanges. Exhibit 1-1 depicts the location of the proposed Project in relation to the existing roadway network and the study area intersections.

In order to develop the traffic characteristics of the high-cube warehouse land use for the Proposed Project, trip-generation statistics published in the TUMF High-Cube Warehouse Trip Generation Study (WSP, January 29, 2019) are used. The purpose of WSP 2019 study was to gather enough data to develop reliable trip generation rates for centers for use in traffic impact studies in the Inland Empire.

For the remaining high-cube cold storage portion of the Proposed Project, the trip generation rates published by the Institute of Transportation Engineers (ITE) as provided in their Trip Generation Manual, 11th Edition (2021) have been utilized. ITE land use code 157 (High-Cube Cold Storage Warehouse) has been used to derive site specific trip generation estimates for 201,940 square feet (15% of the overall building square footage). 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.

EXHIBIT 1-2: PRELIMINARY SITE PLAN



The Project is anticipated to generate a total of 4,518 Passenger Car Equivalent (PCE) trip-ends per day with 253 AM PCE peak vehicle hour trips and 334 PM PCE peak hour vehicle trips. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

1.3 ANALYSIS SCENARIOS

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

- Existing (2023) Conditions
- Background Without Project (2025)
- Background With Project (2025)
- Cumulative Without Project (2040)
- Cumulative With Project (2040)

1.3.1 EXISTING (2023) CONDITIONS

Information for Existing (2023) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared.

1.3.2 OPENING YEAR CUMULATIVE (2025) CONDITIONS

The Opening Year Cumulative (2025) 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 (2023) conditions of 4.04% (2 percent per year over 2 year) is included for Opening Year Cumulative (2025) traffic conditions. 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 2025 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 2025 traffic conditions.

1.3.4 HORIZON YEAR (2040) CONDITIONS

Traffic projections for Horizon Year (2040) conditions were derived from the San Bernardino County Transportation Analysis Model (SBTAM) using accepted procedures for model forecast refinement and smoothing. The Horizon Year conditions analysis is utilized to determine if General Plan roadway configurations adequately serve projected long range future traffic volumes at the target Level of Service (LOS) identified in the Town of Apple Valley (lead agency) General Plan.

1.4 STUDY AREA

To ensure that this TA satisfies the Town of Apple Valley's traffic study requirements, Urban Crossroads, Inc. prepared a Project traffic study scoping package for review by Town of Apple Valley 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 Town is included in Appendix 1.1 of this TA.

The 15 study area intersections shown on Exhibit 1-1 and listed in Table 1-1 were selected for evaluation in this TA based on consultation with Town of Apple Valley staff. At a minimum, the study area includes intersections where the Project is anticipated to contribute 50 or more peak hour trips per the Town's traffic study guidelines. (1) The "50 peak hour trip" criterion represents a minimum number of trips at which a typical intersection would have the potential to be affected by a given development proposal. The 50 peak hour trip criterion is a traffic engineering rule of thumb that is accepted and widely used within San Bernardino County for estimating a potential area of influence (i.e., study area).

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

#	Intersection	#	Intersection
1	Dachshund Av. / Johnson Rd.	9	Dachshund Av. / Cordova Rd.
2	Dale Evans Pkwy. / Johnson Rd.	10	Dachshund Av. / Dwy. 1
3	Stoddard Wells Rd. / Johnson Rd.	11	Dachshund Av. / Dwy. 2
4	I-15 NB Ramps - Outer Hwy. 15 / Stoddard Wells Rd.	12	Dachshund Av. / Dwy. 3
5	Quarry Rd. / Stoddard Wells Rd.	13	Dachshund Av. / Dwy. 4
6	Quarry Rd. / I-15 SB Ramps	14	Dwy. 5 / Cordova Rd.
7	Dale Evans Pkwy. / Lafayette St.	15	Dwy. 6 / Cordova Rd.
8	Dale Evans Pkwy. / Corwin Rd.		

Section 2 *Methodologies* provides information on the methodologies used in the analysis and Section 5 *Opening Year Cumulative (2025) Traffic Conditions,* and Section 6 *Horizon Year (2040) Traffic Conditions* includes the detailed analysis. A summary of LOS results for all analysis scenarios is presented on Table 1-2.

1.5 RECOMMENDATIONS

1.5.1 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. On-site and site-adjacent recommendations are shown on Exhibit 1-3.

TABLE 1-2: LEVEL OF SERVICE (LOS) SUMMARY

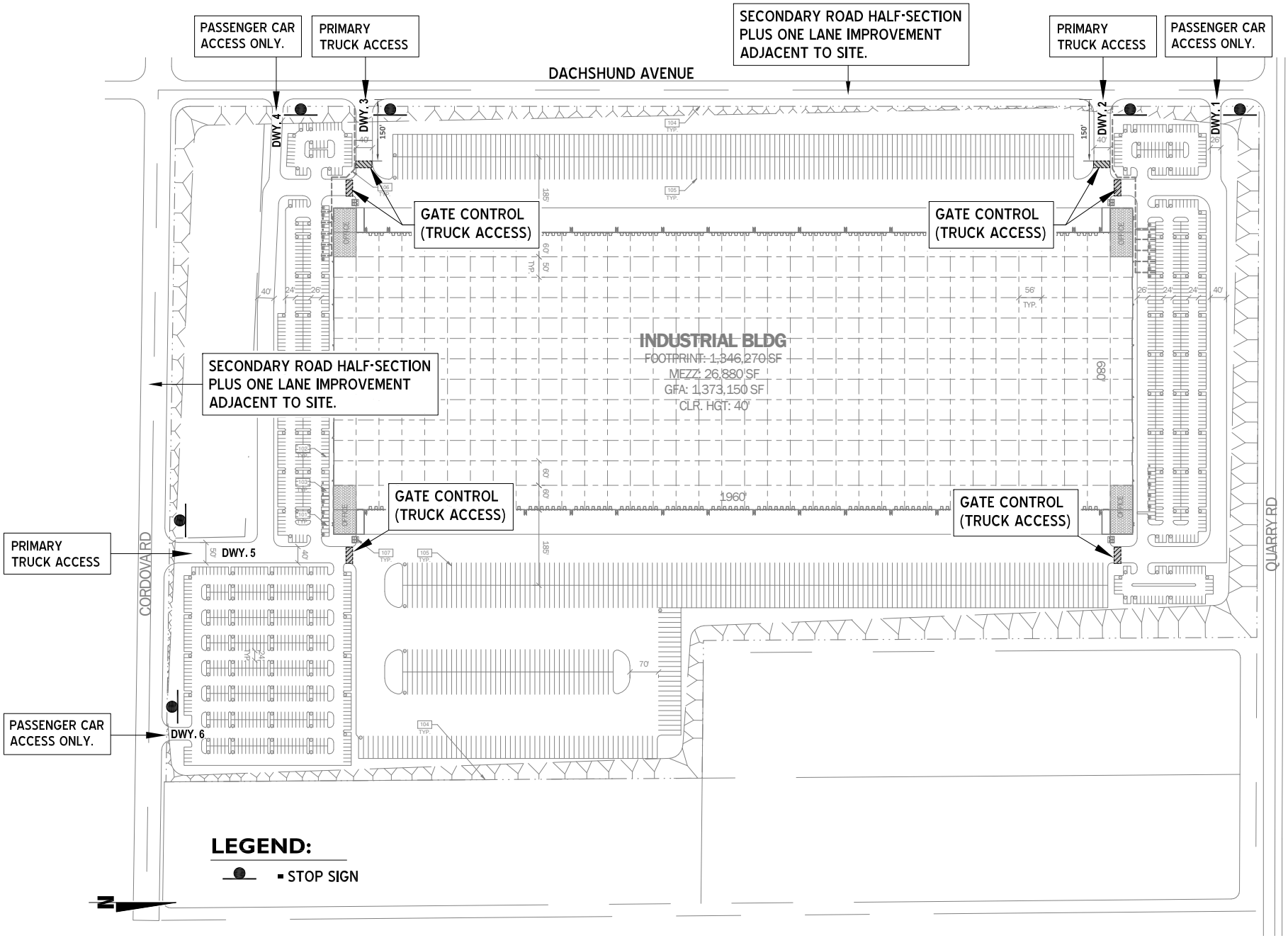
#	Intersection	Existing (2023)		2025 w/o Project		2025 w/ Project		HY (2040) w/o Project		HY (2040) w/ Project	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Dachshund Av. / Johnson Rd.										
	- With Cross-Street Stop	●	●	●	●	●	●	●	●	●	●
	- With Traffic Signal	N/A	N/A	●	●	●	●	●	●	●	●
2	Dale Evans Pkwy. / Johnson Rd.										
	- Without Improvements	●	●	●	●	●	●	●	●	●	●
	- With Improvements	N/A	N/A	●	●	●	●	●	●	●	●
3	Stoddard Wells Rd. / Johnson Rd.										
	- Without Improvements	●	●	●	●	●	●	●	●	●	●
	- With Improvements	N/A	N/A	●	●	●	●	●	●	●	●
4	I-15 NB Ramps - Outer Hwy. 15 / Stoddard Wells Rd.										
	- Without Improvements	●	●	●	●	●	●	●	●	●	●
	- With Improvements	N/A	N/A	●	●	●	●	●	●	●	●
5	Quarry Rd. / Stoddard Wells Rd.										
	- Without Improvements	●	●	●	●	●	●	●	●	●	●
	- With Improvements	N/A	N/A	●	●	●	●	●	●	●	●
6	Quarry Rd. / I-15 SB Ramps										
	- Without Improvements	●	●	●	●	●	●	●	●	●	●
	- With Improvements	N/A	N/A	●	●	●	●	●	●	●	●
7	Dale Evans Pkwy. / Lafayette St.										
	- Without Improvements	●	●	●	●	●	●	●	●	●	●
	- With Improvements	N/A	N/A	N/A	N/A	N/A	N/A	●	●	●	●
8	Dale Evans Pkwy. / Corwin Rd.										
	- Without Improvements	●	●	●	●	●	●	●	●	●	●
	- With Improvements	N/A	N/A	N/A	N/A	N/A	N/A	●	●	●	●
9	Dachshund Av. / Cordova Rd.										
	- With Cross-Street Stop	N/A	N/A	●	●	●	●	●	●	●	●
	- With Traffic Signal	N/A	N/A	N/A	N/A	N/A	N/A	●	●	●	●
10	Dachshund Av. / Dwy. 1	N/A	N/A	N/A	N/A	●	●	N/A	N/A	●	●
11	Dachshund Av. / Dwy. 2	N/A	N/A	N/A	N/A	●	●	N/A	N/A	●	●
12	Dachshund Av. / Dwy. 3	N/A	N/A	N/A	N/A	●	●	N/A	N/A	●	●
13	Dachshund Av. / Dwy. 4	N/A	N/A	N/A	N/A	●	●	N/A	N/A	●	●
14	Dwy. 5 / Cordova Rd.	N/A	N/A	N/A	N/A	●	●	N/A	N/A	●	●
15	Dwy. 6 / Cordova Rd.	N/A	N/A	N/A	N/A	●	●	N/A	N/A	●	●

Legend:

● = A - D ● = E ● = F

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Excel\[15504 - Report.xlsx]1-1_LOS Summary

EXHIBIT 1-3: SITE ACCESS RECOMMENDATIONS



Due to the typical wide turning radius of large trucks, a truck turning template has been overlaid on the site plan at each applicable Project driveway anticipated to be utilized by heavy trucks in order to determine appropriate curb radii and to verify that trucks will have sufficient space to execute turning maneuvers (see Exhibit 1-4). A WB-67 truck (53-foot trailer) has been utilized for the purposes of this analysis. As shown on Exhibit 1-4, the curb radius should be updated to 50 feet, in order to accommodate the ingress and egress of heavy trucks.

Traffic control recommendations regarding Opening Year Cumulative conditions are shown on Exhibit 1-5. Exhibit 1-6 shows the intersection lane recommendations for horizon year conditions.

Recommendation 1 – Project to construct Dachshund Avenue at its ultimate easterly half-section width plus 10' as a Secondary Road (88-foot right-of-way) with the Town's standard, from Quarry Road to Cordova Road.

If adjacent development (Cordova Quarry located southeast corner of Dachshund Avenue and Cordova Road) does not construct connection from Dachshund Avenue/Cordova Road intersection to existing roadway to the south prior to occupancy of the Cordova Road Logistics Facility, then the Project should construct Dachshund Avenue to its ultimate half-section widths plus 10' as a Secondary Roadway, from Cordova Road to Johnson Road.

Recommendation 2 – Project to construct Cordova Road at its ultimate northerly half-section width plus 10' as a Secondary Road (88-foot right-of-way) with the Town's standard, from Dachshund Avenue to the easterly Project boundary.

If adjacent development (Cordova Quarry located southeast corner of Dachshund Avenue and Cordova Road) does not construct connection from Dachshund Avenue/Cordova Road intersection to existing roadway to the west prior to occupancy of the Cordova Road Logistics Facility, then the Project should construct, the Project is to also construct Cordova Road to its ultimate half-section widths plus 10' as a Secondary Roadway, from Dachshund Avenue to Dale Evans Parkways.

Recommendation 3 – Dachshund Avenue & Cordova Road (#9) – For horizon year conditions, provide a 200' northbound left turn pocket on Dachshund Avenue approaching Cordova Road, a 200' southbound left turn pocket on Dachshund Avenue approaching Cordova Road, a 200' eastbound left turn pocket on Cordova Road approaching Dachshund Avenue, and a 200' westbound left turn pocket on Cordova Road approaching Dachshund Avenue. A traffic signal is recommended for horizon year conditions. Project fair share contribution (see Section 7.3) towards the traffic signal is recommended.

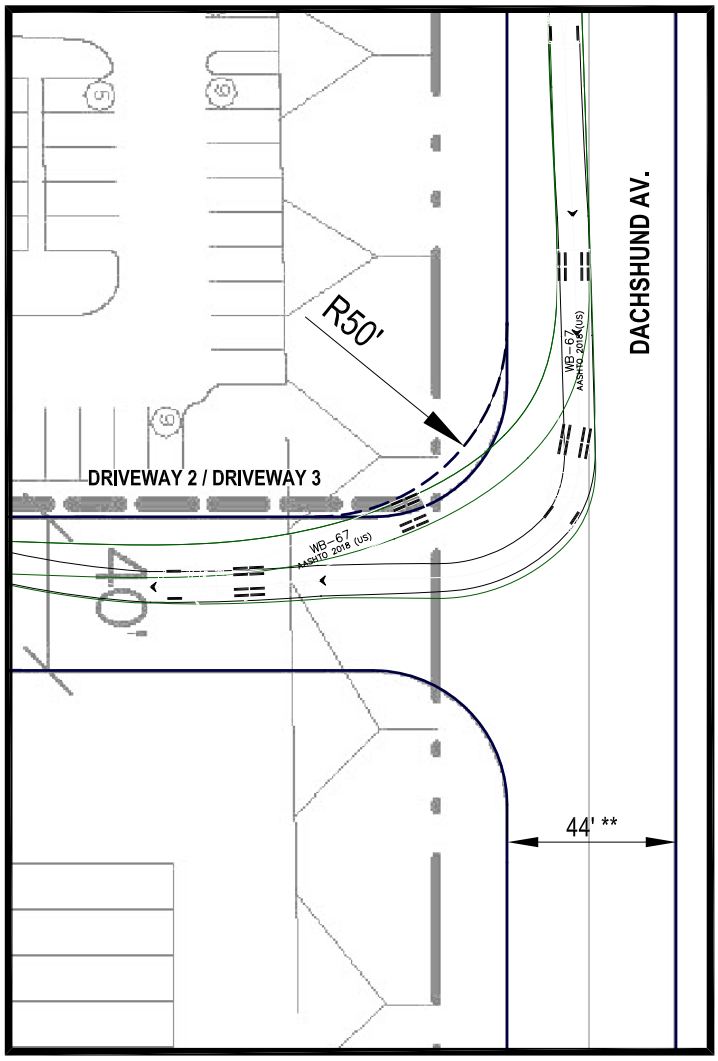
Recommendation 4 – Dachshund Avenue & Driveway 1 (#10) – Cross-street stop sign control will adequately serve future traffic conditions at this driveway location. Project Driveway 1 is to be restricted to passenger cars only (no large trucks).

Recommendation 5 – Dachshund Avenue & Driveway 2 (#11) – Cross-street stop sign control will adequately serve future traffic conditions at this driveway location. To accommodate large trucks, adjust the Driveway 2 / Dachshund Avenue on-site curb returns to 50' radii as indicated on Exhibit 1-4.

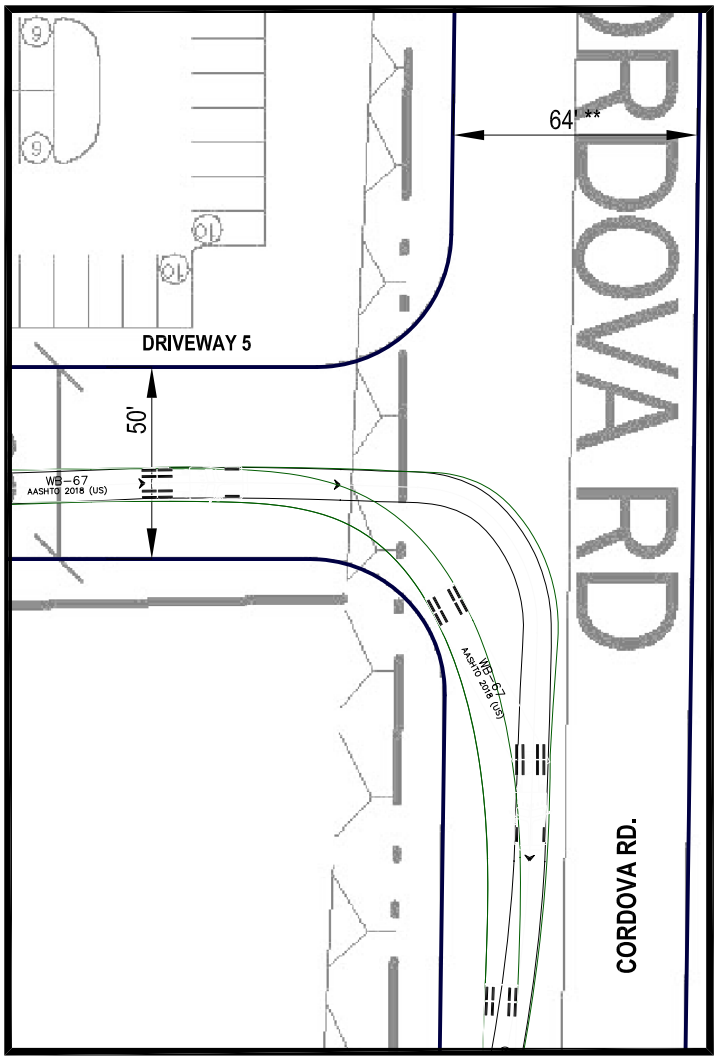
Recommendation 6 – Dachshund Avenue & Driveway 3 (#12) – Cross-street stop sign control will adequately serve future traffic conditions at this driveway location. To accommodate large trucks, adjust the Dachshund Avenue / Driveway 3 on-site curb returns to 50' radii as indicated on Exhibit 1-4.

EXHIBIT 1-4: TRUCK ACCESS, DRIVEWAYS 2, 3, AND DRIVEWAY 5

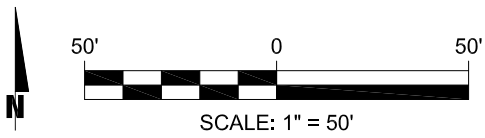
INBOUND ALONG DACHSHUND AV.



OUTBOUND ALONG CORDOVA RD.

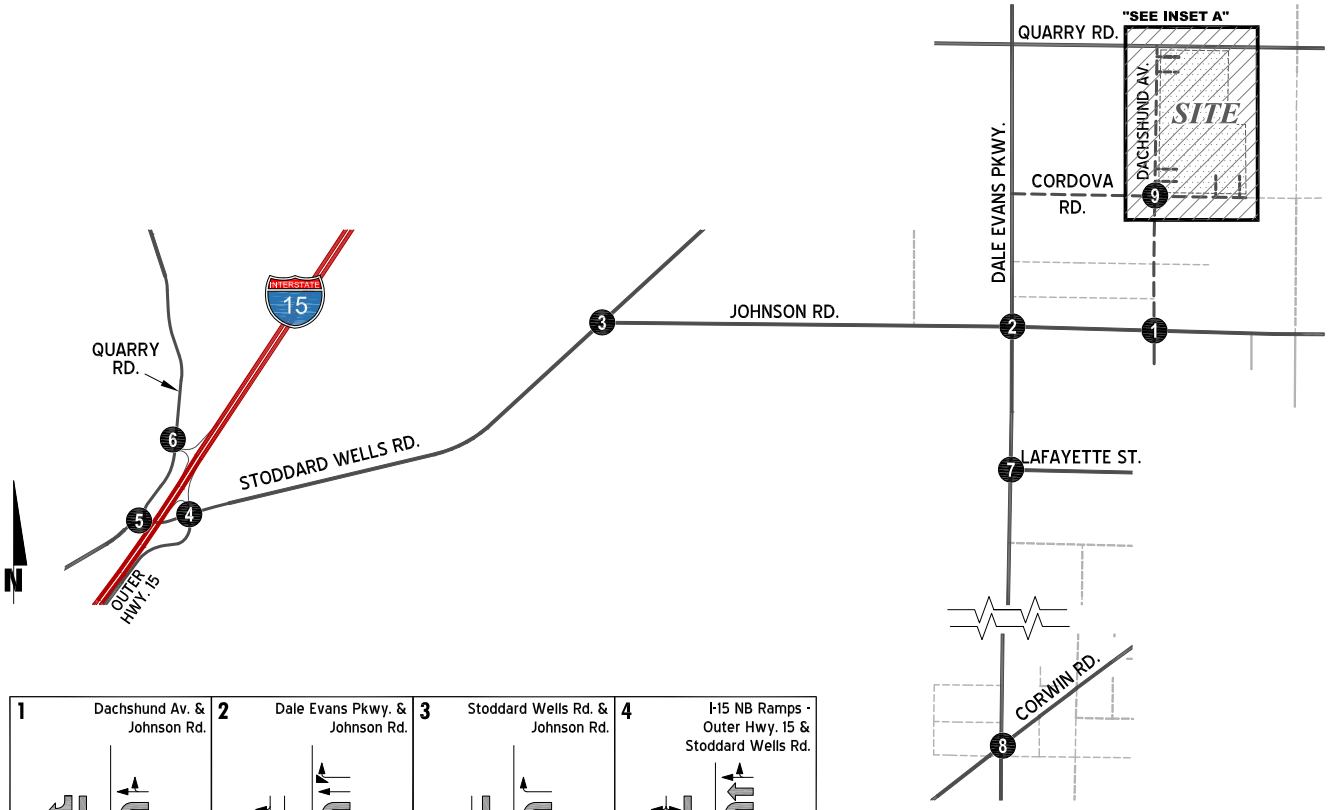


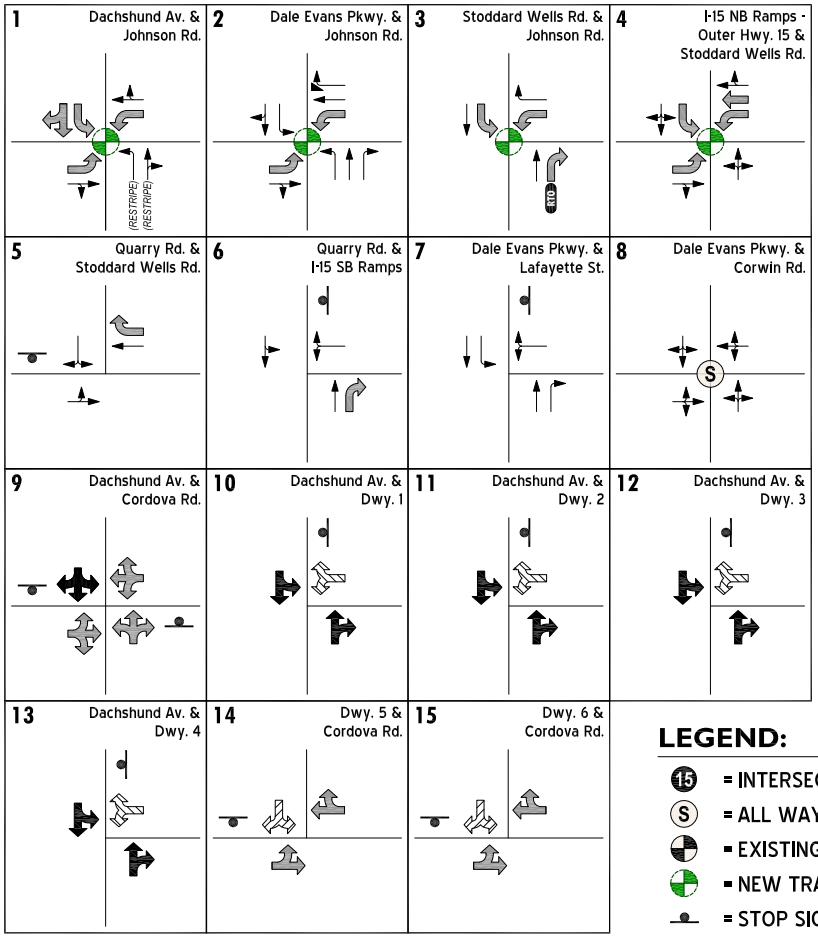
** OUTSIDE CURB TO EASTERLY EDGE OF PAVEMENT IS EQUIVALENT TO THE HALF-SECTION PLUS ONE LANE IMPROVEMENT ON DACHSHUND AVENUE, ADJACENT TO THE SITE



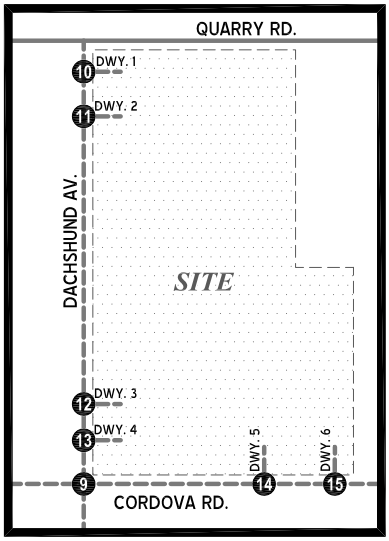
02 - Truck Turn.dwg

EXHIBIT 1-5: CUMULATIVE PLUS PROJECT (2025)
TRAFFIC CONTROLS AND INTERSECTION LANE CONFIGURATIONS





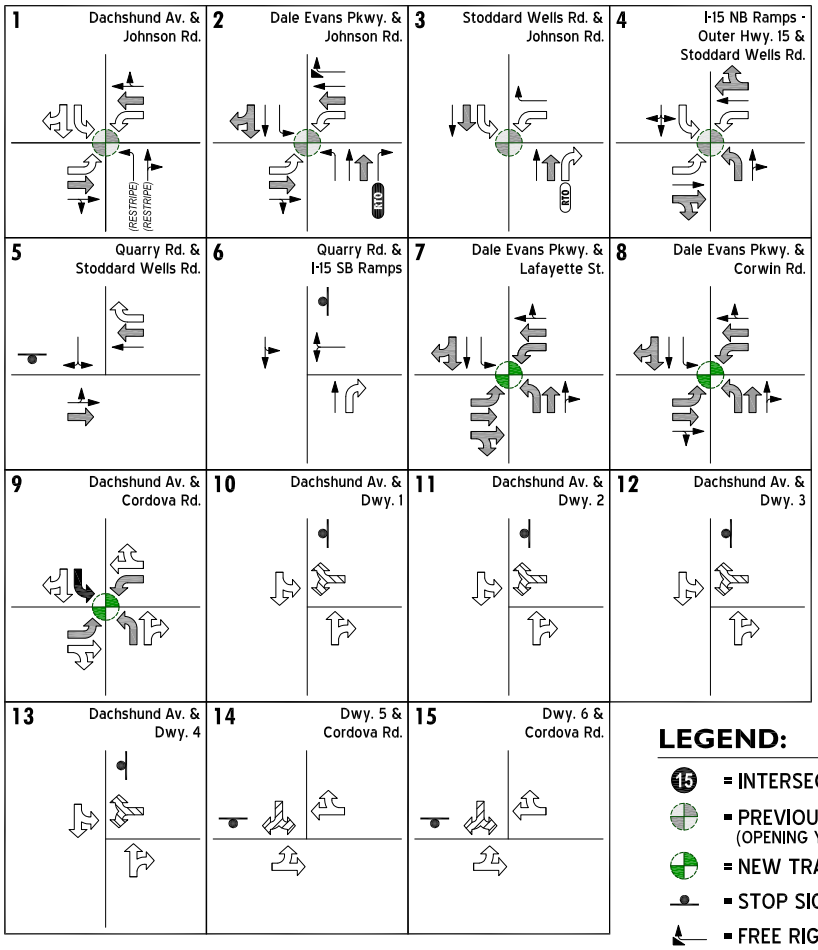
INSET A



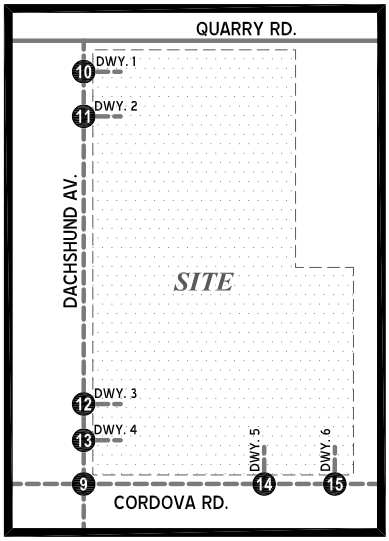
LEGEND:

- 15 = INTERSECTION ID
- S = ALL WAY STOP
- = EXISTING TRAFFIC SIGNAL
- = NEW TRAFFIC SIGNAL
- = STOP SIGN
- = FREE RIGHT TURN
- = EXISTING LANE
- = LANE IMPROVEMENT
- = DRIVEWAY IMPROVEMENT
- = CUMULATIVE IMPROVEMENT
- RTO = RIGHT TURN OVERLAP PHASING IMPROVEMENT

EXHIBIT 1-6: HORIZON YEAR (2040) WITH PROJECT TRAFFIC CONTROLS AND INTERSECTION LANE CONFIGURATIONS



INSET A



LEGEND:

- 15 = INTERSECTION ID
- = PREVIOUS TRAFFIC SIGNAL (OPENING YEAR CONDITIONS)
- = NEW TRAFFIC SIGNAL
- = STOP SIGN
- = FREE RIGHT TURN
- = EXISTING LANE
- = LANE IMPROVEMENT
- = DRIVEWAY IMPROVEMENT
- = CUMULATIVE IMPROVEMENT
- = PREVIOUS IMPROVEMENT (OPENING YEAR CONDITIONS)
- = FUTURE INTERCHANGE
- RTO = RIGHT TURN OVERLAP PHASING IMPROVEMENT
- RTO = PREVIOUS RIGHT TURN OVERLAP PHASING IMPROVEMENT

Recommendation 7 – Dachshund Avenue & Driveway 4 (#13) – Cross-street stop sign control will adequately serve future traffic conditions at this driveway location. Project Driveway 4 is to be restricted to passenger cars only (no large trucks).

Recommendation 8 – Driveway 5 & Cordova Road (#14) – Cross-street stop sign control will adequately serve future traffic conditions at this driveway location.

Recommendation 9 – Driveway 6 & Cordova Road (#15) – Cross-street stop sign control will adequately serve future traffic conditions at this driveway location. Project Driveway 6 is to be restricted to passenger cars only (no large trucks).

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 Town of Apple Valley sight distance standards at the time of preparation of final grading, landscape, and street improvement plans.

This Page Intentionally Left Blank

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 Town of Apple Valley'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 Town of Apple Valley 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.

Consistent with Appendix B of the San Bernardino County CMP, the following saturation flow rates, in vehicles per hour green per lane (vphgpl), will be utilized in the traffic analysis for signalized intersections:

Existing and Opening Year Cumulative Traffic Conditions:

- Exclusive through: 1800 vphgpl
- Exclusive left: 1700 vphgpl
- Exclusive right: 1800 vphgpl
- Exclusive dual left: 1600 vphgpl
- Exclusive triple left: 1500 vphgpl

Horizon Year (2040) Traffic Conditions:

- Exclusive through: 1900 vphgpl
- Exclusive left: 1800 vphgpl
- Exclusive dual left: 1700 vphgpl
- Exclusive right: 1900 vphgpl
- Exclusive dual right: 1800 vphgpl
- Exclusive triple left: 1600 vphgpl or less

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

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

Source: HCM, 6th Edition

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

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

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Customary practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g., PHF = [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. 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 Town of Apple Valley 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 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. Posted speed limits on the major roadways with unsignalized intersections are 40 miles per hour or below, which coincides with using the rural warrants.

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 all study area intersections.

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 *Opening Year Cumulative (2025) Traffic Conditions, and* Section 6 *Horizon Year (2040) Traffic Conditions* of this report. It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.4 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

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

2.4.1 TOWN OF APPLE VALLEY

According to the Town of Apple Valley's General Plan, LOS C or better is preferable, but LOS D is the minimum acceptable condition that should be maintained during the peak commute hours, where feasible.

2.4.2 CMP

The CMP definition of deficiency is based on maintaining a level of service standard of LOS E or better, where feasible, except where an existing LOS F condition is identified in the CMP document. However, in an effort to overstate as opposed to understate potential deficiencies, LOS D has been utilized for the CMP intersections for the purposes of this analysis. (2)

2.5 DEFICIENCY CRITERIA

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies. Per the Town's Traffic Study Guidelines: In accordance with the Town's General Plan Circulation Element, at intersections where the LOS falls below, or is expected to fall below an acceptable threshold with or without the addition of the project, feasible measures shall be identified to mitigate the project's impacts for all project scenario conditions. The TA calculates the project's fair share towards each improvement required to serve cumulative conditions with or without the Project.

2.6 PROJECT FAIR SHARE CALCULATION METHODOLOGY

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

Project Fair Share % = Project (2040) AM/PM Traffic / (2040 With Project AM/PM Total Traffic – Existing AM/PM Traffic)

The project fair share percentage has been calculated for both the AM peak hour and PM peak hour and the highest of the two has been selected. The Project fair share contribution calculations are presented in Section 7 *Local and Regional Funding Mechanisms* of this TA.

This Page Intentionally Left Blank

3 AREA CONDITIONS

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

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the agreement with Town of Apple Valley staff (Appendix 1.1), the study area includes a total of 15 existing and future intersections as shown previously on Exhibit 1-3. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 TOWN OF APPLE VALLEY GENERAL PLAN CIRCULATION ELEMENT

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

Dale Evans Parkway is classified as a Major Divided Parkway on the Town of Apple Valley General Plan Street System. The Major Divided Parkway classification has a 142-foot right-of-way and 112-foot curb-to-curb measurement. Bike lanes or parking are included adjacent to the curb.

Major Divided Arterials have a 128-foot right-of-way and 104-foot curb-to-curb measurement. Bike lanes or parking are included adjacent to the curb. Stoddard Wells Road southwest of Johnson Road is classified as a Major Divided Arterial.

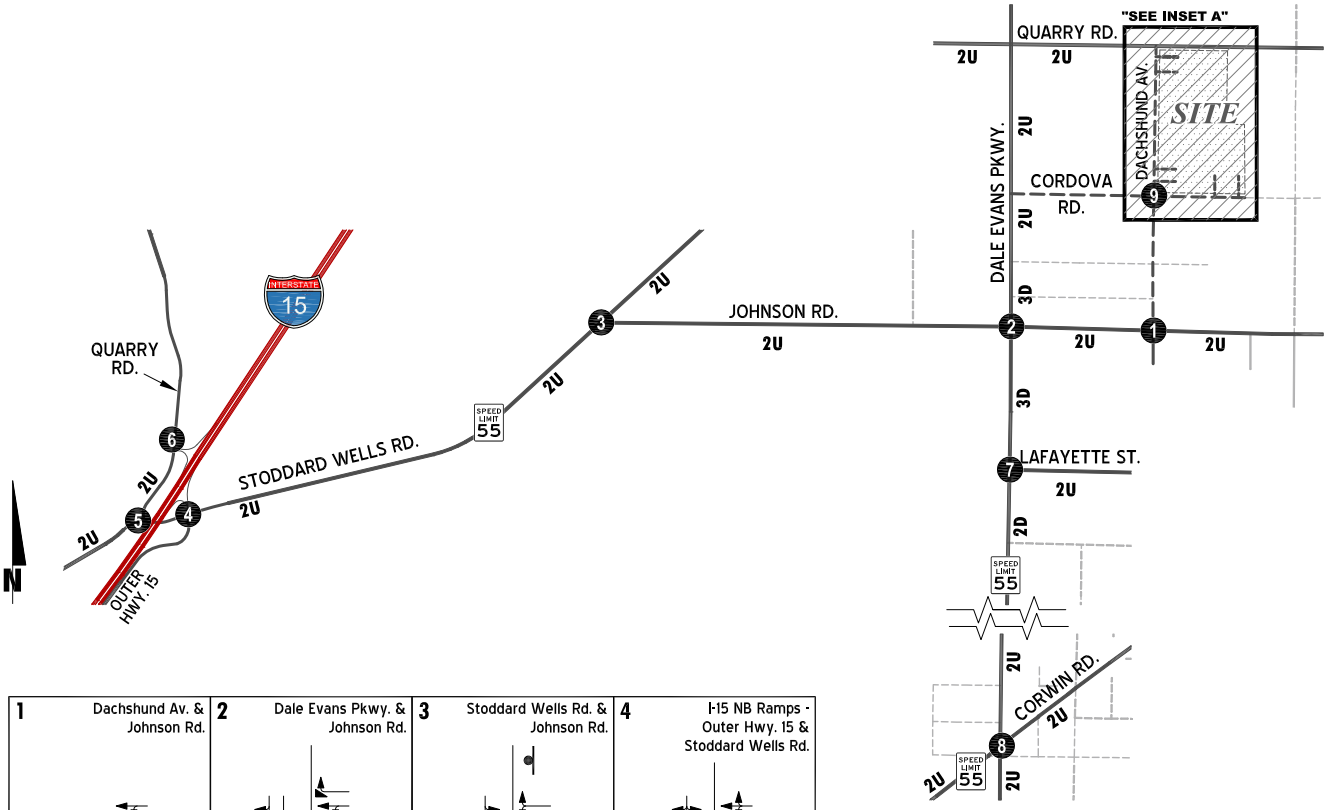
The Major Road classification is identified as having 104-foot right-of-way and 80-foot curb-to-curb measurement. The following study area roadways are classified as a Major Road:

- Johnson Road
- Corwin Road, which has a modified road section southwest of Dale Evans Parkway

The Secondary Arterial designation is identified as having an 88-foot right-of-way and 64-foot curb-to-curb measurement. Bike lanes or parking are included adjacent to the curb. The following study area roadways are classified as a Secondary Arterial:

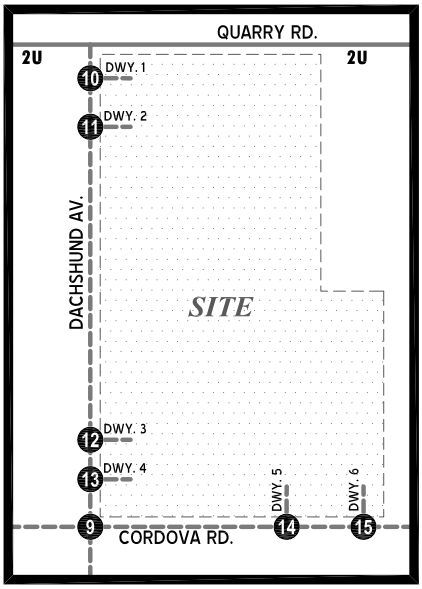
- Quarry Road
- Dachshund Avenue
- Cordova Road
- Lafayette Street

EXHIBIT 3-1: EXISTING TRAFFIC CONTROLS AND INTERSECTION LANE CONFIGURATIONS



1 Dachshund Av. & Johnson Rd.	2 Dale Evans Pkwy. & Johnson Rd.	3 Stoddard Wells Rd. & Johnson Rd.	4 I-15 NB Ramps - Outer Hwy. 15 & Stoddard Wells Rd.
5 Quarry Rd. & Stoddard Wells Rd.	6 Quarry Rd. & I-15 SB Ramps	7 Dale Evans Pkwy. & Lafayette St.	8 Dale Evans Pkwy. & Corwin Rd.
9 Dachshund Av. & Cordova Rd. **FUTURE INTERSECTION**	10 Dachshund Av. & Dwy. 1 **FUTURE INTERSECTION**	11 Dachshund Av. & Dwy. 2 **FUTURE INTERSECTION**	12 Dachshund Av. & Dwy. 3 **FUTURE INTERSECTION**
13 Dachshund Av. & Dwy. 4 **FUTURE INTERSECTION**	14 Dwy. 5 & Cordova Rd. **FUTURE INTERSECTION**	15 Dwy. 6 & Cordova Rd. **FUTURE INTERSECTION**	

INSET A



LEGEND:

15 = INTERSECTION ID	4 = NUMBER OF LANES
S = ALL WAY STOP	D = DIVIDED
= STOP SIGN	U = UNDIVIDED
= FREE RIGHT TURN	

EXHIBIT 3-2: TOWN OF APPLE VALLEY GENERAL PLAN STREET SYSTEM

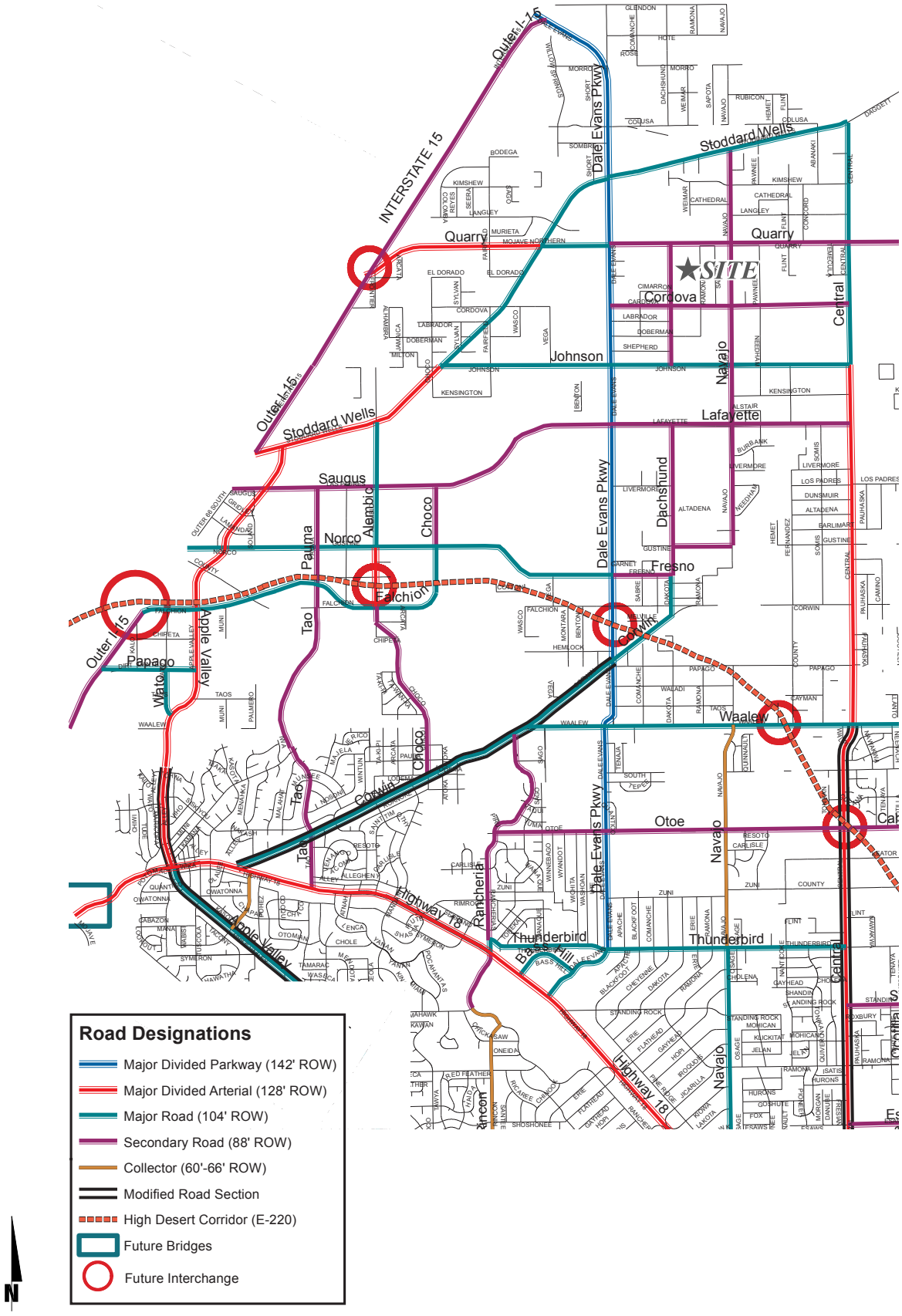
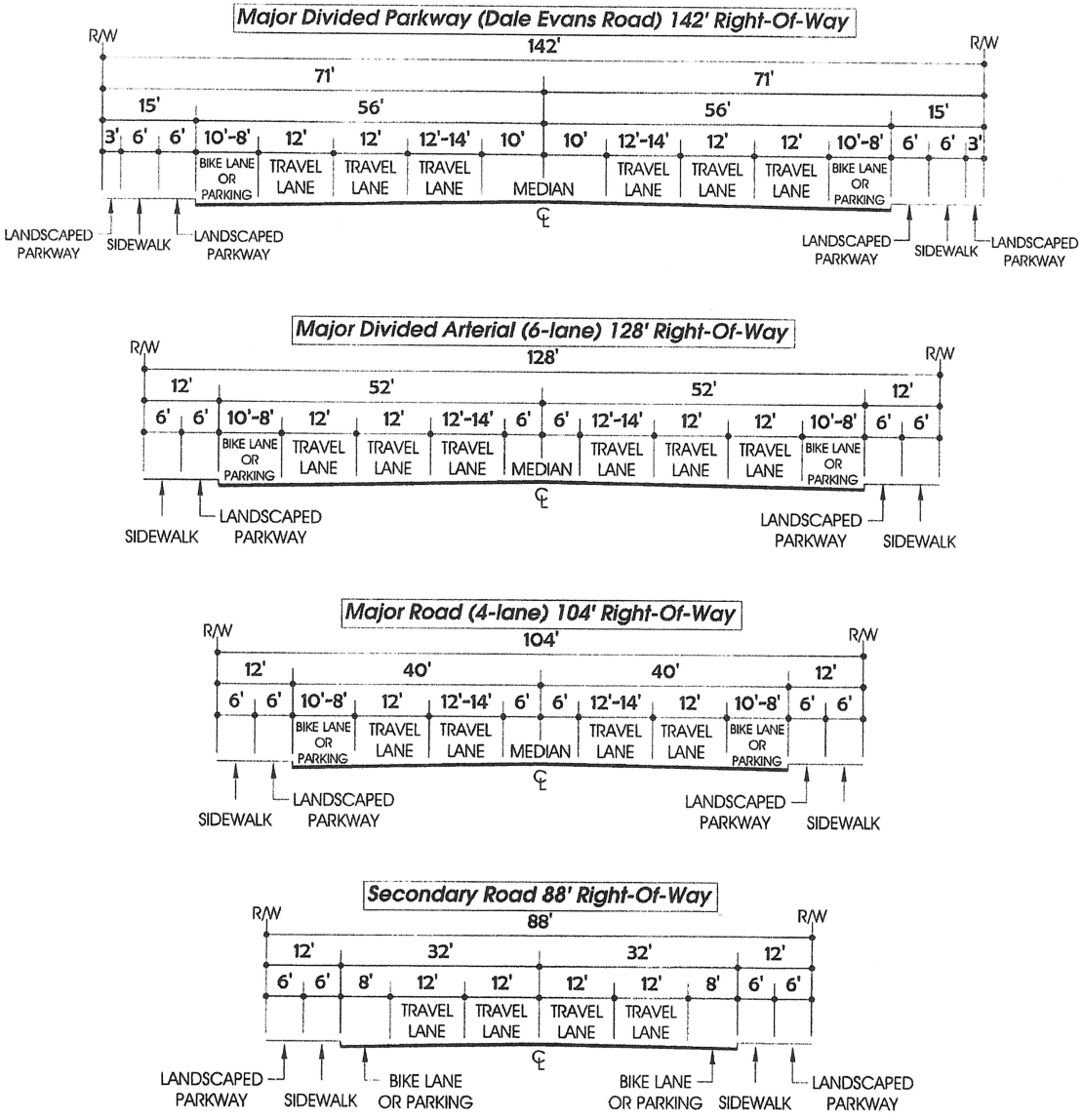


EXHIBIT 3-3: TOWN OF APPLE VALLEY GENERAL PLAN ROADWAY CROSS-SECTIONS



3.3 PEDESTRIAN FACILITIES

Exhibit 3-4 illustrates the pedestrian facilities along the Project site. Sidewalks are proposed along the Project frontage on Cordova Road and Dachshund Avenue.

3.4 TRANSIT SERVICE

The study area is currently served by Victor Valley Transit Authority (VVTA), a public transit agency serving various jurisdictions within San Bernardino County. Based on a review of the existing transit routes within the vicinity of the proposed Project, Route 42 currently runs along Dale Evans Parkway, Johnson Road, and Corwin Road.

Transit service is reviewed and updated by VVTA 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. As such, it is recommended that the applicant work in conjunction with VVTA to potentially provide bus service to the site.

3.5 TRUCK ROUTES

The Town of Apple Valley and Caltrans' designated truck routes is shown on Exhibit 3-5. Through truck routes are included on Dale Evans Parkway and Johnson Road in the study area. Local Truck Routes are also shown on Stoddard Wells Road, Navajo, Lafayette Street, and Corwin Road. These designated truck routes have been utilized for both the proposed Project and future cumulative development projects for the purposes of this TA.

3.6 EXISTING (2023) TRAFFIC COUNTS

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

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

The 2023 weekday AM and weekday PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and near-by schools were in session and operating on normal schedules. As such, no additional adjustments were made to the traffic counts to establish the baseline condition. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1.

EXHIBIT 3-4: PEDESTRIAN FACILITIES

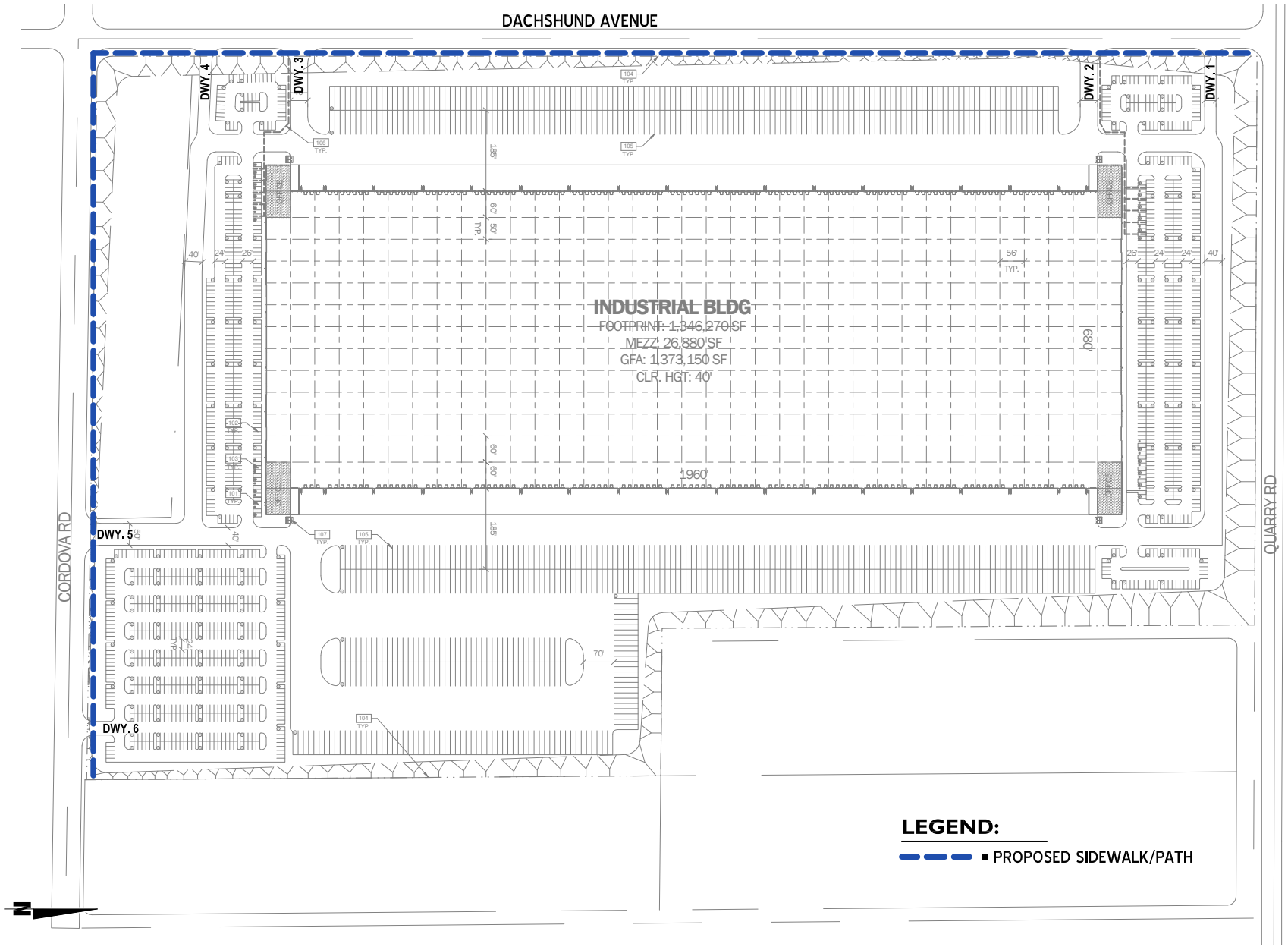
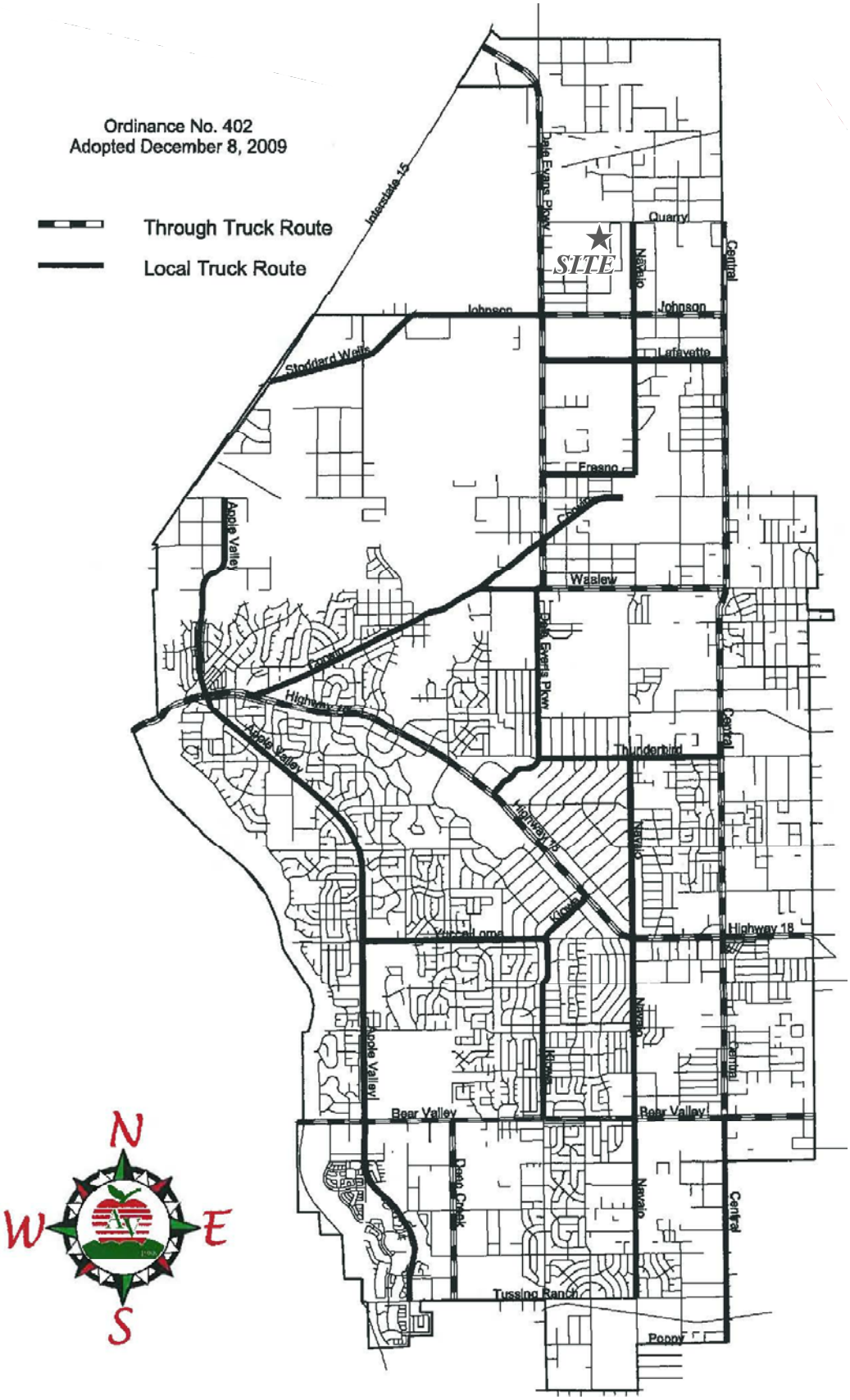


EXHIBIT 3-5: TOWN OF APPLE VALLEY TRUCK ROUTES



To represent the effect large trucks, buses, and recreational vehicles have on traffic flow, all trucks were converted into passenger car equivalent (PCE). By their size alone, these vehicles occupy the same space as two or more passenger cars. In addition, the time it takes for them to accelerate and slow-down is also much longer than for passenger cars and varies depending on the type of vehicle and number of axles. For this analysis, the following PCE factors have been used to estimate each turning movement: 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+-axle trucks. These factors are consistent with the values recommended for use in the Town's Guidelines.

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

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 10.870 = 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 9.20 percent. As such, the above equation utilizing a factor of 10.870 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 9.20 percent (i.e., 1/0.0920 = 10.87) and was assumed to sufficiently estimate average daily traffic (ADT) volumes for planning-level analyses. Existing weekday and weekend peak hour intersection volumes, in actual vehicles, are also shown on Exhibit 3-7.

3.7 INTERSECTION OPERATIONS ANALYSIS

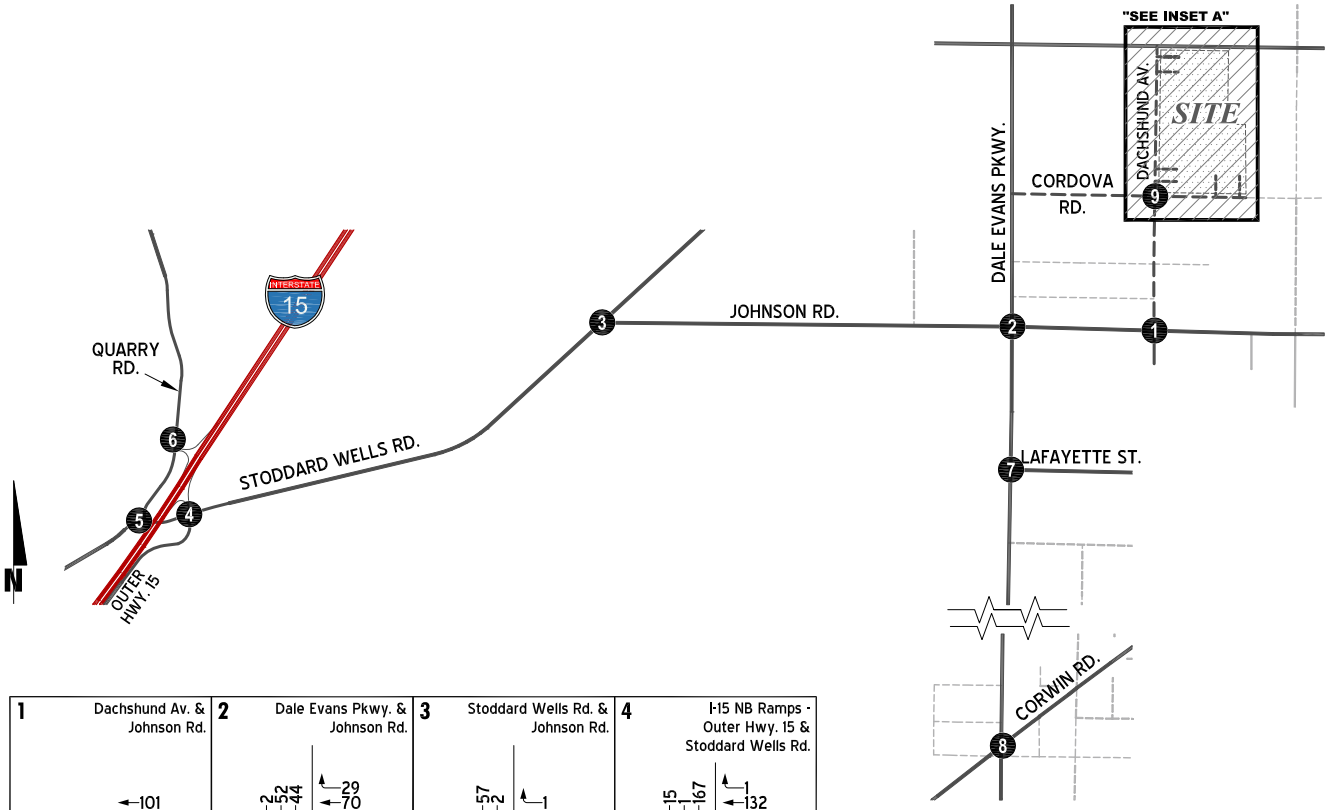
Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized on Table 3-1, which indicates that study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

The intersection operations analysis worksheets are included in Appendix 3.2 of this TA.

3.8 TRAFFIC SIGNAL WARRANTS ANALYSIS

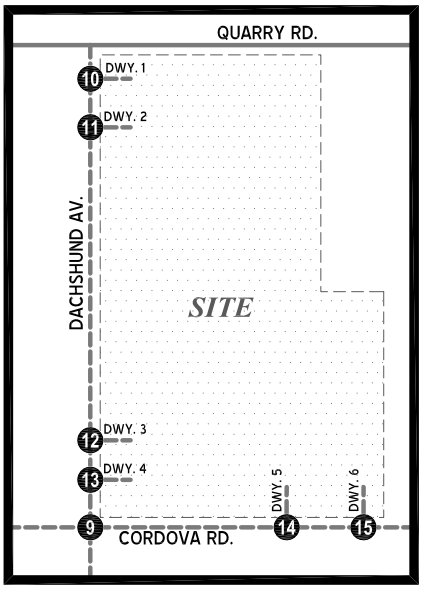
Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. There are no unsignalized study area intersections that currently warrant a traffic signal for Existing traffic conditions. Existing conditions traffic signal warrant analysis worksheets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

EXHIBIT 3-6: EXISTING (2023) AM PEAK HOUR INTERSECTION PASSENGER CAR EQUIVALENT VOLUMES



1 Dachshund Av. & Johnson Rd.	2 Dale Evans Pkwy. & Johnson Rd.	3 Stoddard Wells Rd. & Johnson Rd.	4 I-15 NB Ramps - Outer Hwy. 15 & Stoddard Wells Rd.
5 Quarry Rd. & Stoddard Wells Rd.	6 Quarry Rd. & I-15 SB Ramps	7 Dale Evans Pkwy. & Lafayette St.	8 Dale Evans Pkwy. & Corwin Rd.
9 Dachshund Av. & Cordova Rd. **FUTURE INTERSECTION**	10 Dachshund Av. & Dwy. 1 **FUTURE INTERSECTION**	11 Dachshund Av. & Dwy. 2 **FUTURE INTERSECTION**	12 Dachshund Av. & Dwy. 3 **FUTURE INTERSECTION**
13 Dachshund Av. & Dwy. 4 **FUTURE INTERSECTION**	14 Dwy. 5 & Cordova Rd. **FUTURE INTERSECTION**	15 Dwy. 6 & Cordova Rd. **FUTURE INTERSECTION**	

INSET A

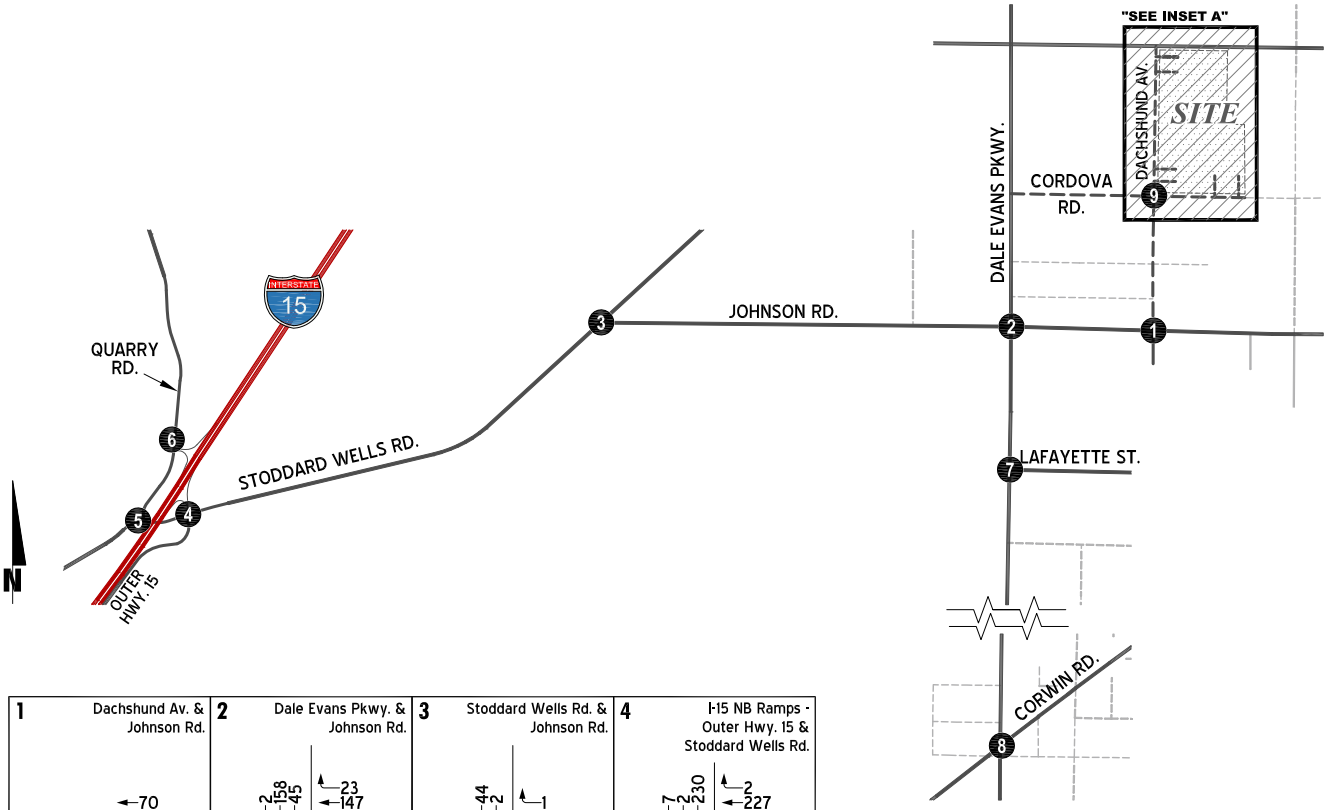


LEGEND:

= INTERSECTION ID

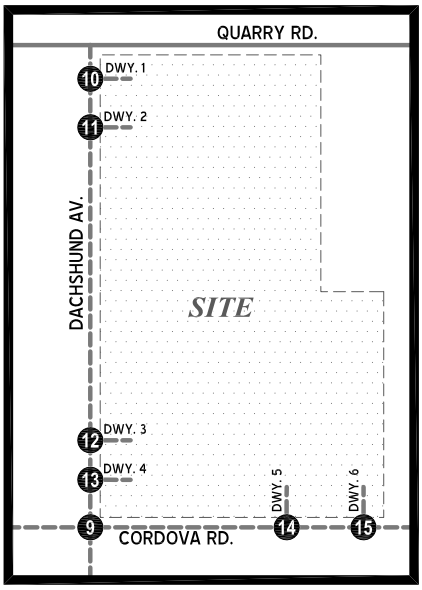
= FUTURE ROADWAY

EXHIBIT 3-7: EXISTING (2023) PM PEAK HOUR INTERSECTION PASSENGER CAR EQUIVALENT VOLUMES



1 Dachshund Av. & Johnson Rd.	2 Dale Evans Pkwy. & Johnson Rd.	3 Stoddard Wells Rd. & Johnson Rd.	4 I-15 NB Ramps - Outer Hwy. 15 & Stoddard Wells Rd.
5 Quarry Rd. & Stoddard Wells Rd.	6 Quarry Rd. & I-15 SB Ramps	7 Dale Evans Pkwy. & Lafayette St.	8 Dale Evans Pkwy. & Corwin Rd.
9 Dachshund Av. & Cordova Rd. **FUTURE INTERSECTION**	10 Dachshund Av. & Dwy. 1 **FUTURE INTERSECTION**	11 Dachshund Av. & Dwy. 2 **FUTURE INTERSECTION**	12 Dachshund Av. & Dwy. 3 **FUTURE INTERSECTION**
13 Dachshund Av. & Dwy. 4 **FUTURE INTERSECTION**	14 Dwy. 5 & Cordova Rd. **FUTURE INTERSECTION**	15 Dwy. 6 & Cordova Rd. **FUTURE INTERSECTION**	

INSET A



LEGEND:

= INTERSECTION ID

= FUTURE ROADWAY

EXHIBIT 3-8: EXISTING (2023) AVERAGE DAILY TRAFFIC (ADT)
PASSENGER CAR EQUIVALENT VOLUMES

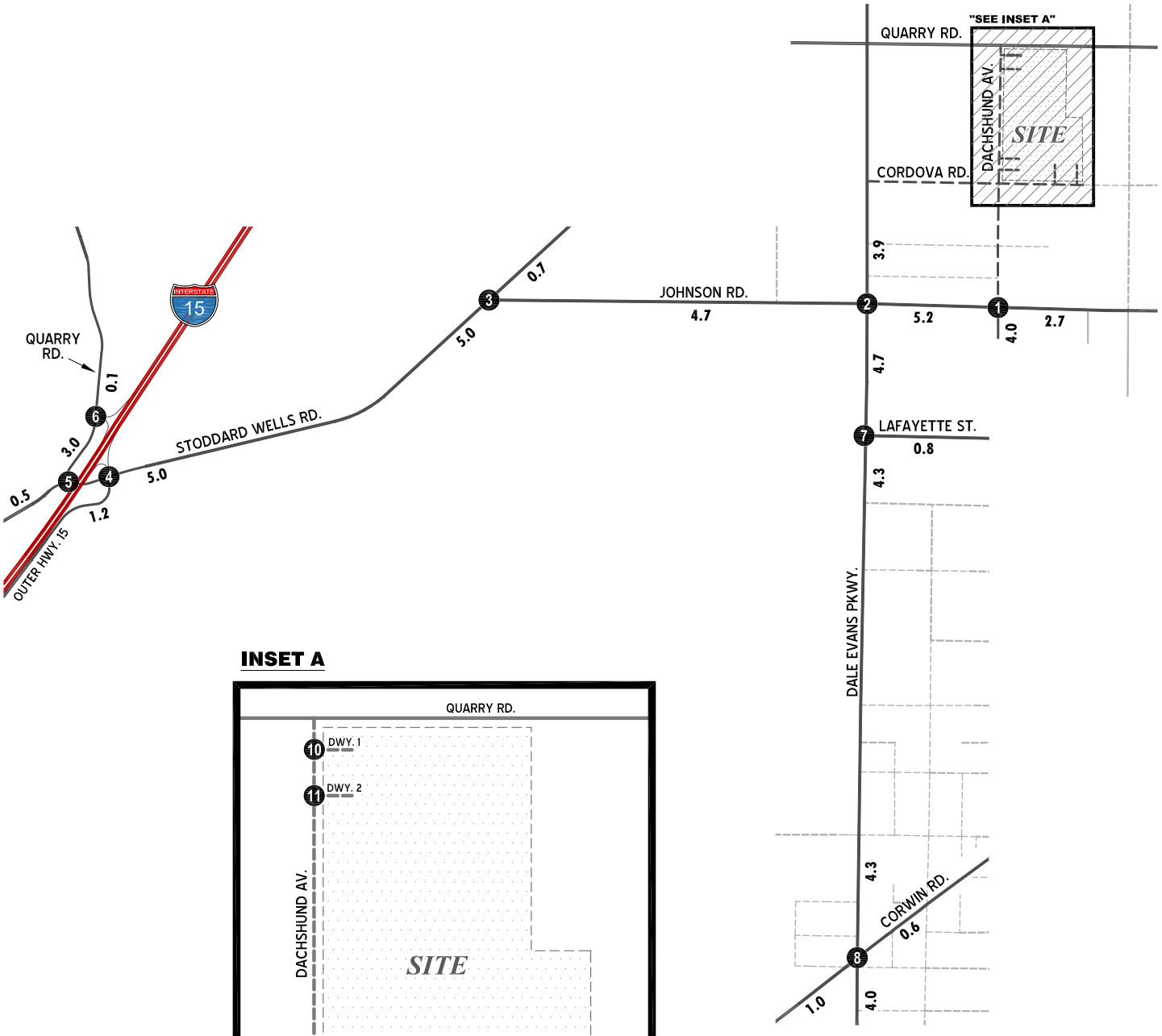


TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2023) CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2]												Delay[3] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Dachshund Av. / Johnson Rd.	CSS	0.5	0.5	1	0	0	0	0	1	0	0.5	0.5	0	10.6	17.8	B	C
2	Dale Evans Pkwy. / Johnson Rd.	AWS	1	1	1	1	1	0	0	1!	0	0.5	0.5	1>>	9.2	18.8	A	C
3	Stoddard Wells Rd. / Johnson Rd.	CSS	0	1	0	0.5	0.5	0	0	0	0	0	1!	0	10.7	14.0	B	B
4	I-15 NB Ramps / Stoddard Wells Rd.	CSS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	13.2	33.8	B	D
5	Quarry Rd. / Stoddard Wells Rd.	CSS	0	0	0	0	1!	0	0.5	0.5	0	0	1	0	9.5	10.4	A	B
6	Quarry Rd. / I-15 SB Ramps	CSS	0	1	0	0.5	0.5	0	0	0	0	0	1!	0	9.3	10.0	A	B
7	Dale Evans Pkwy. / Lafayette St.	CSS	0	1	1	1	1	0	0	0	0	0	1!	0	9.9	10.4	A	B
8	Dale Evans Pkwy. / Corwin Rd.	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	7.8	9.5	A	A
9	Dachshund Av. / Cordova Rd.		Future Intersection															
10	Dachshund Av. / Dwy. 1		Future Intersection															
11	Dachshund Av. / Dwy. 2		Future Intersection															
12	Dachshund Av. / Dwy. 3		Future Intersection															
13	Dachshund Av. / Dwy. 4		Future Intersection															
14	Dwy. 5 / Cordova Rd.		Future Intersection															
15	Dwy. 6 / Cordova Rd.		Future Intersection															

[1] CSS = Cross-Street Stop; AWS = All Way Stop

[2] 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; d = Defacto Right Turn Lane; 0.5 = Shared Lane; 1! = Shared Left/Through/Right lane;
>> = Free-Right Turn

[3] 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.

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Excel\[15504 - Report.xlsx]3-1

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 is proposed to consist of 1,346,270 square feet (sf) of high cube warehouse/distribution use. The Project is evaluated in a single phase. For the purposes of the traffic analysis, trips associated with the Project are determined assuming 1,144,330 square of high cube warehouse floor area (85% of total), and 201,940 square feet of cold storage (15% 0f total). Vehicular access will be provided via four access points along the future Dachshund Avenue and two access points along the future Cordova Road. Regional access to the Project site is available from the I-15 Freeway via Stoddard Wells Road interchange.

4.1 PROJECT TRIP GENERATION

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

In order to develop the traffic characteristics of the high-cube warehouse land use for the Proposed Project, trip-generation statistics published in the TUMF High-Cube Warehouse Trip Generation Study (WSP, January 29, 2019) are used. The purpose of WSP 2019 study was to gather enough data to develop reliable trip generation rates for centers for use in traffic impact studies in the Inland Empire.

In addition, the South Coast Air Quality Management District (SCAQMD) recommends the use of 0.64 truck trips per 1,000 square feet, which would account for variations in the future users.

ITE land use code 157 (High-Cube Cold Storage Warehouse) has been used to derive site specific trip generation estimates for 201,940 square feet (15% of the overall building square footage). 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.

Refinements to the raw trip generation estimates for the high-cube cold storage warehouse have been made to provide a more detailed breakdown of trips by vehicle mix. Data regarding the vehicle mix has been obtained from the High Cube Warehouse Vehicle Trip Generation Analysis (ITE, October 2016). The ITE 2016 vehicle trip generation analysis provides vehicle mix datasets for Cold Storage Warehouse uses, which consists of 32.2% trucks for daily trips, 30.8% trucks for AM peak hour trips and 21.7% trucks for PM peak hour trips. The South Coast Air Quality Management (SCAQMD) recommended truck mix for each axle type is utilized for 2- axle, 3-axle, and 4+-axle trucks for warehouse use with cold storage (2-Axle = 34.7%; 3-Axle = 11.0%; 4+-Axle = 54.3%.).

Passenger car equivalents (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.

Table 4-1 shows the vehicle trip generation rates for the Proposed Project, as well as the vehicle trip generation summary with daily and peak hour trip generation estimates. Table 4-2 presents the passenger-car-equivalent (PCE) trip generation rates for the Proposed Project with the resulting PCE daily and peak hour trip generation estimates. As shown on Table 4-2, Proposed Project is anticipated to generate a total of 4,518 PCE trip-ends per day with 253 AM peak vehicle hour trips and 334 PM peak hour vehicle trips.

4.2 PROJECT TRIP DISTRIBUTION

The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. The trip distribution pattern is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to the regional freeway system. Exhibit 4-1 illustrates the distribution patterns for the Project passenger cars and Exhibit 4-2 illustrates the distribution patterns for the Project trucks.

4.3 MODAL SPLIT

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

4.4 PROJECT TRIP ASSIGNMENT

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

4.5 BACKGROUND TRAFFIC

4.5.1 OPENING YEAR CUMULATIVE CONDITIONS

Future year traffic forecasts have been based upon background (ambient) growth at 2% per year for 2025 traffic conditions. The total ambient growth is 4.04% for 2025 traffic conditions. The ambient growth factor is intended to approximate regional traffic growth. This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in conjunction with 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. A cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the Town of Apple Valley. The cumulative projects listed are those that would generate traffic and would contribute traffic to study area intersections.

TABLE 4-1: PROJECT TRIP GENERATION SUMMARY
ACTUAL VEHICLES

Proposed Project Trip Generation Rates[1]

Land Use	ITE LU Code	Quantity[2]	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
High-Cube Warehouse[3]	-	1,144.330 TSF	0.094	0.028	0.122	0.046	0.119	0.165	2.129
Passenger Cars			0.066	0.020	0.086	0.033	0.082	0.115	1.489
2 to 4-Axle+ Trucks			0.028	0.008	0.036	0.014	0.036	0.050	0.640
High-Cube Cold Storage Warehouse[4,5,6]	157	201.940 TSF	0.085	0.025	0.110	0.034	0.086	0.120	2.12
Passenger Cars (69.2% AM, 78.3% PM, 67.8% Daily)			0.059	0.017	0.076	0.026	0.068	0.094	1.437
2-Axle Trucks (10.69% AM, 7.53% PM, 11.17% Daily)			0.009	0.003	0.012	0.003	0.006	0.009	0.237
3-Axle Trucks (3.39% AM, 2.39% PM, 3.54% Daily)			0.003	0.001	0.004	0.001	0.002	0.003	0.075
4-Axle+ Trucks (16.72% AM, 11.78% PM, 17.49% Daily)			0.014	0.004	0.018	0.004	0.010	0.014	0.371

Proposed Project Trip Generation Results

Land Use	ITE LU Code	Quantity[2]	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
High-Cube Warehouse	-	1,144.330 TSF							
- Passenger Cars			75	23	98	37	94	131	1,704
- Truck Trips (Actual)			32	10	42	16	41	57	732
High Cube Warehouse Subtotal			107	33	140	53	135	188	2,436
High-Cube Cold Storage Warehouse	157	201.940 TSF							
- Passenger Cars			12	4	16	5	14	19	290
- Truck Trips									
2-axle:			*2*	*1*	*3*	*1*	*1*	*2*	*48*
3-axle:			*1*	*0*	*1*	*0*	*0*	*0*	*15*
4+-axle:			*3*	*1*	*4*	*1*	*2*	*3*	*75*
- Net Truck Trips (Actual Vehicles)			6	2	8	2	3	5	138
High Cube Cold Storage Warehouse Subtotal			18	6	24	7	17	24	428
Passenger Cars Subtotal			87	27	114	42	108	150	1,994
Truck Trips Subtotal			38	12	50	18	44	62	870
PROJECT TOTAL TRIPS (ACTUAL VEHICLES)[7]			125	39	164	60	152	212	2,864

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

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

[3] Source: *TUMF High-Cube Warehouse Trip Generation Study*. Prepared by WSP, January 2019.
Passenger and Truck AM/PM peak hour (in/out) splits are estimated from based on ITE peak-to-daily relationship
Truck Daily Rate Source: *Notice of Preparation of a Draft Environmental Impact Report for the Proposed Potrero Logistics Center*.
Prepared by South Coast Air Quality Management District (SCAQMD), June 2020.

[4] Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Handbook, Third Edition (September 2017).

[5] Vehicle Mix Source: Institute of Transportation Engineers (ITE), High-Cube Warehouse Vehicle Trip Generation Analysis (October 2016).

[6] Truck Mix Source: SCAQMD Warehouse Truck Trip Study Data Results and Usage (2014).
With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks

[7] Total Net Trips (Actual Vehicles) = Passenger Cars + Net Truck Trips (Actual Trucks).

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Excel\[15504 - Report.xlsx]15504 TG - Actual

TABLE 4-2: PROJECT TRIP GENERATION SUMMARY
PASSENGER CAR EQUIVALENT (PCE)

Project Trip Generation Rates[1]

Land Use	ITE LU Code	Quantity[2]	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
High-Cube Warehouse[3]	-	1,144.330 TSF	0.150	0.045	0.195	0.075	0.190	0.265	3.409
Passenger Cars			0.066	0.020	0.086	0.033	0.082	0.115	1.489
2 to 4-Axle+ Trucks (PCE = 3.0)			0.084	0.025	0.109	0.042	0.108	0.150	1.920
High-Cube Cold Storage Warehouse[4,5,6]	157	201.940 TSF	0.121	0.036	0.157	0.045	0.111	0.156	3.06
Passenger Cars			0.059	0.017	0.076	0.026	0.068	0.094	1.437
2-Axle Trucks (PCE = 1.5)			0.014	0.005	0.019	0.005	0.009	0.014	0.356
3-Axle Trucks (PCE = 2.0)			0.006	0.002	0.008	0.002	0.004	0.006	0.150
4-Axle+ Trucks (PCE = 3.0)			0.042	0.012	0.054	0.012	0.030	0.042	1.113

Project Trip Generation Results

Land Use	ITE LU Code	Quantity[2]	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
High-Cube Warehouse	-	1,144.330 TSF							
- Passenger Cars			75	23	98	37	94	131	1,704
- Truck Trips (PCE = 3.0)			96	29	125	48	124	172	2,197
High Cube Warehouse Subtotal			171	52	223	85	218	303	3,901
High-Cube Cold Storage Warehouse	157	201.940 TSF							
- Passenger Cars			12	3	15	5	14	19	290
- Truck Trips									
2-axle (PCE = 1.5):			*3*	*1*	*4*	*1*	*2*	*3*	*72*
3-axle (PCE = 2.0):			*1*	*0*	*1*	*0*	*1*	*1*	*30*
4+-axle (3.0):			*8*	*2*	*10*	*2*	*6*	*8*	*225*
- Net Truck Trips (PCE)			12	3	15	3	9	12	327
High Cube Cold Storage Warehouse Subtotal			24	6	30	8	23	31	617
Passenger Cars Subtotal			87	26	113	42	108	150	1,994
Truck Trips Subtotal			108	32	140	51	133	184	2,524
PROJECT TOTAL EXTERNAL TRIPS (PCE)[7]			195	58	253	93	241	334	4,518

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

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

[3] Source: *TUMF High-Cube Warehouse Trip Generation Study* . Prepared by WSP, January 2019.
Passenger and Truck AM/PM peak hour (in/out) splits are estimated from based on ITE peak-to-daily relationship
Truck Daily Rate Source: *Notice of Preparation of a Draft Environmental Impact Report for the Proposed Potrero Logistics Center* .
Prepared by South Coast Air Quality Management District (SCAQMD), June 2020.

[4] Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Handbook, Third Edition (September 2017).

[5] Vehicle Mix Source: Institute of Transportation Engineers (ITE), High-Cube Warehouse Vehicle Trip Generation Analysis (October 2016).

[6] Truck Mix Source: SCAQMD Warehouse Truck Trip Study Data Results and Usage (2014).
With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks

[7] Total Net Trips (PCE) = Passenger Cars + Net Truck Trips (Passenger Car Equivalent).

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Excel\[15504 - Report.xlsx]15504 TG - PCE

EXHIBIT 4-1: PROJECT (TRUCK) TRIP DISTRIBUTION

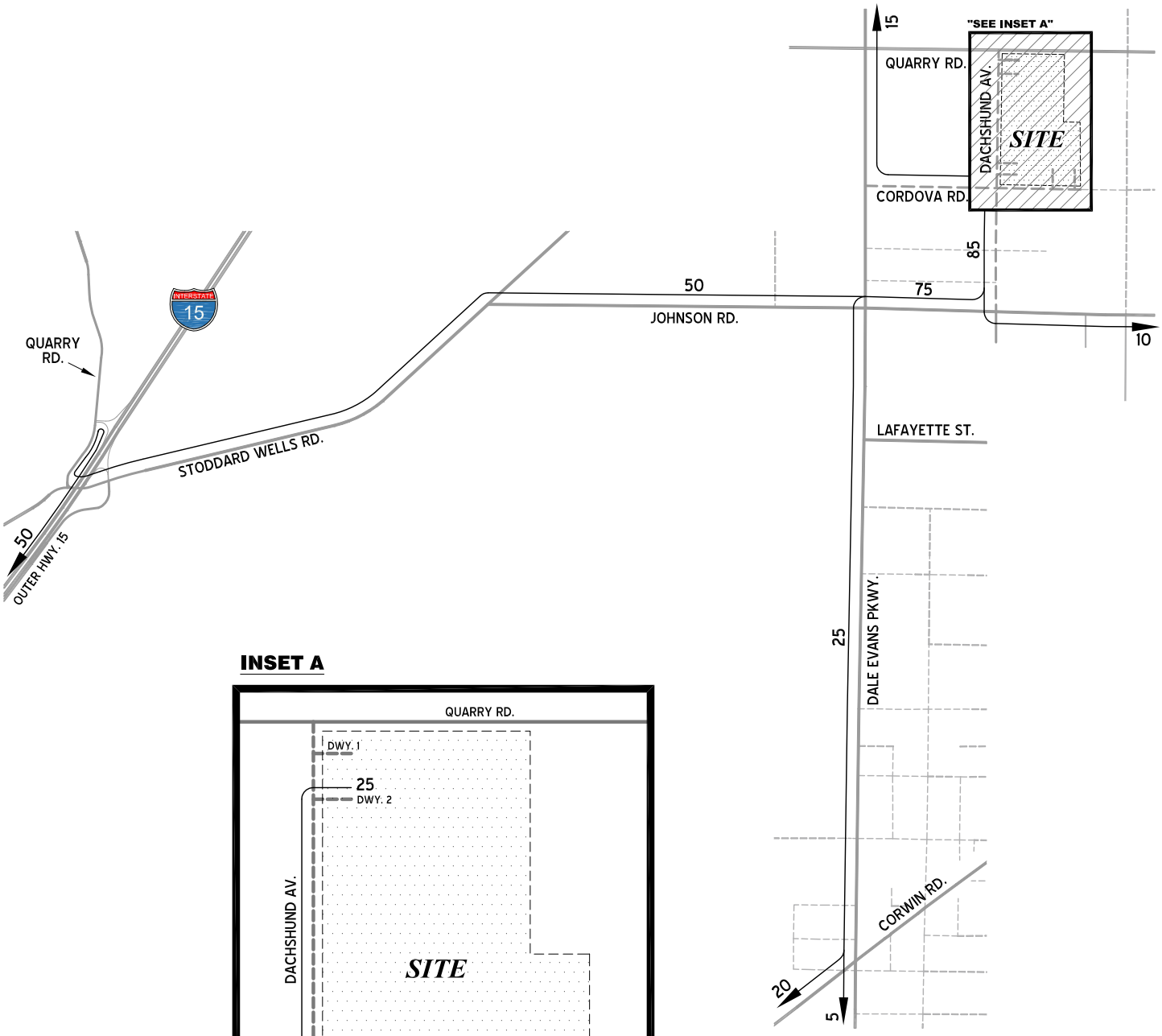
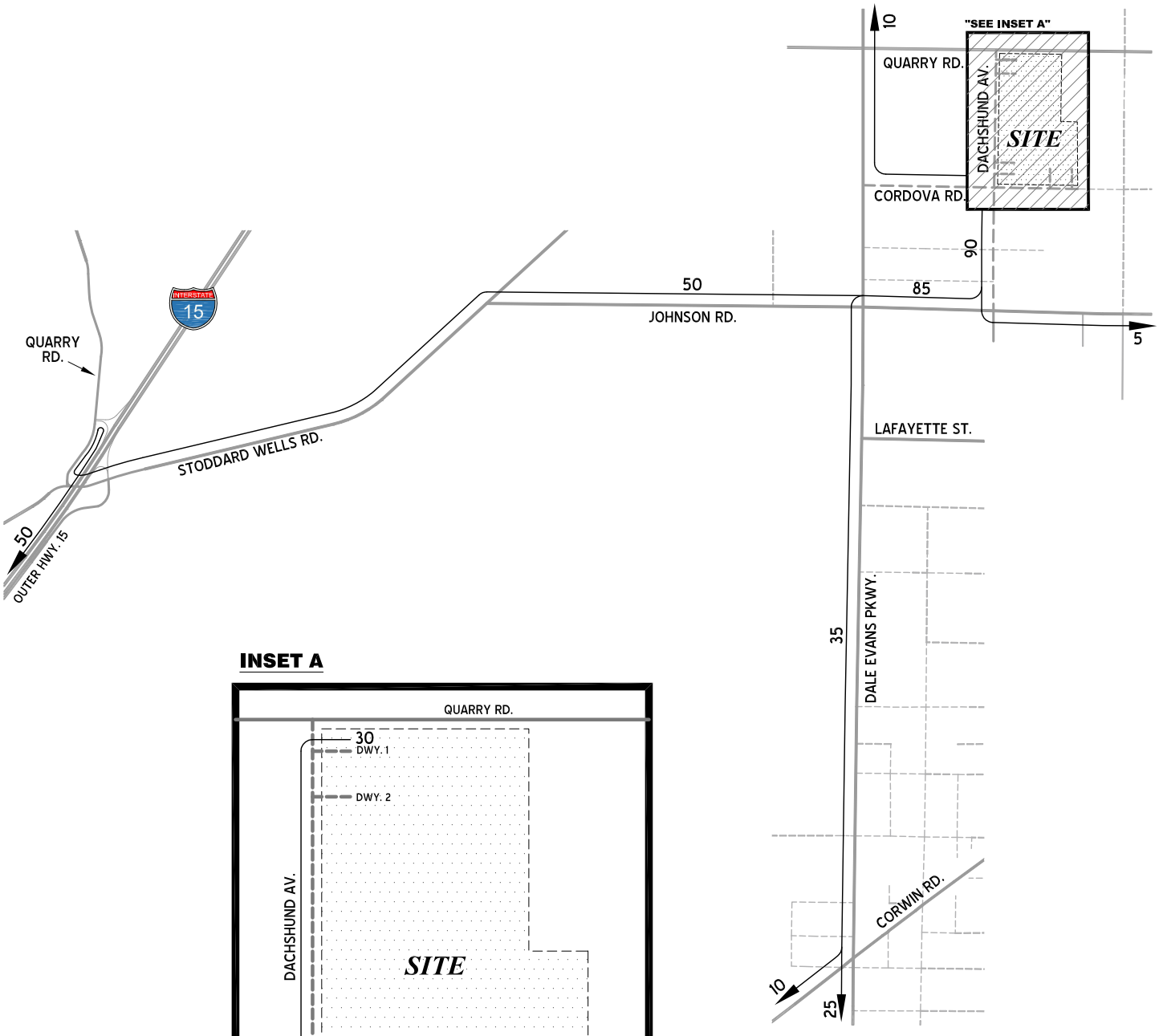
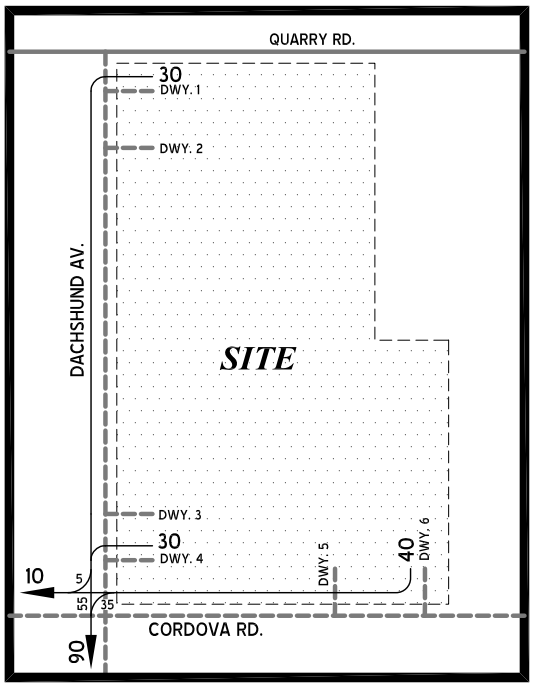


EXHIBIT 4-2: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION



INSET A



LEGEND:

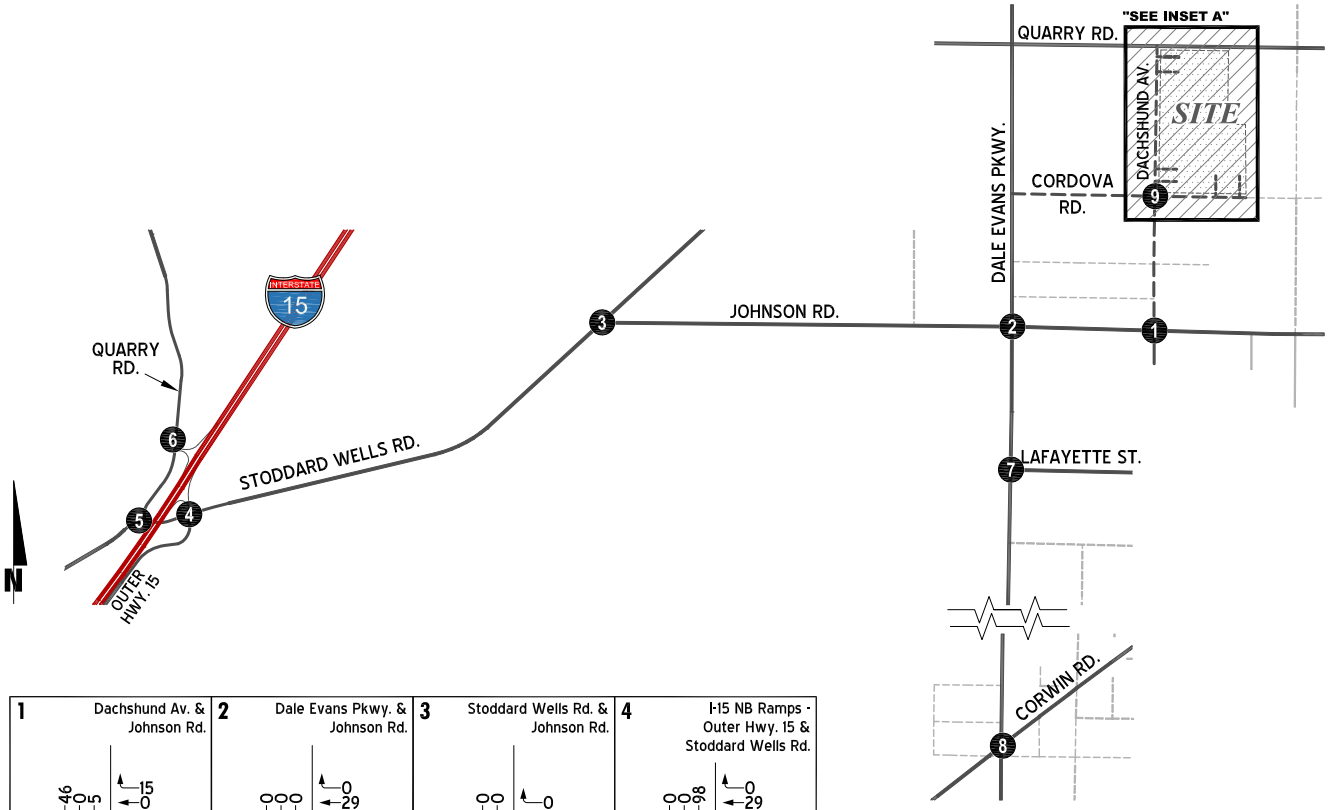
10 = PERCENT TO/FROM PROJECT

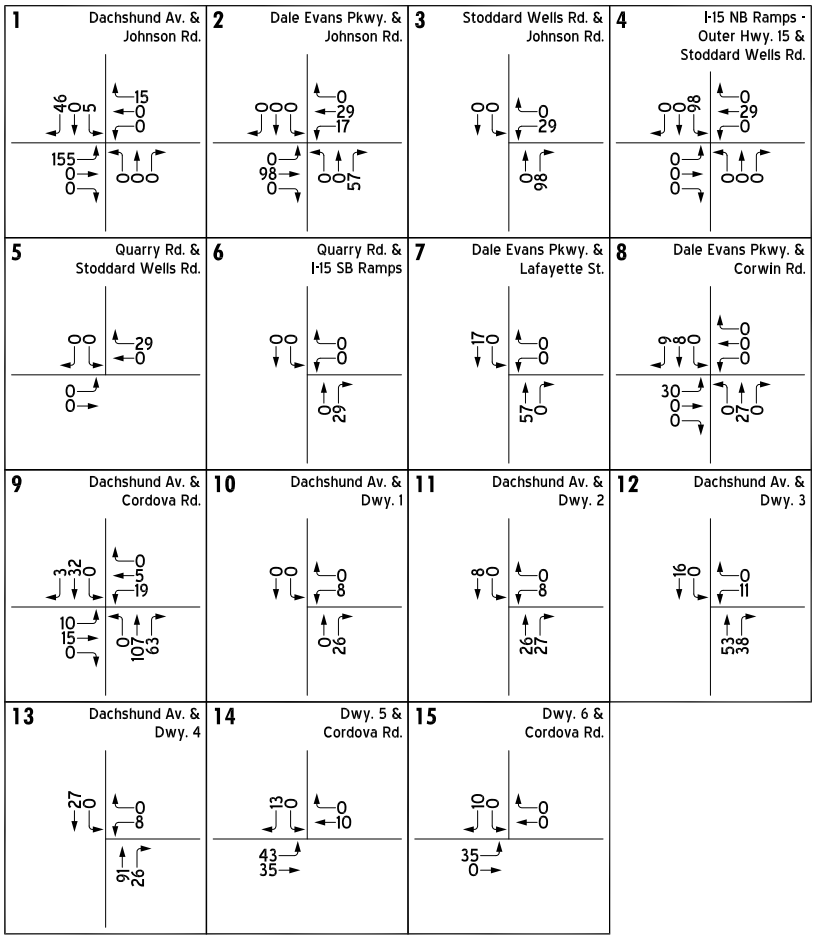
= FUTURE ROADWAY

N

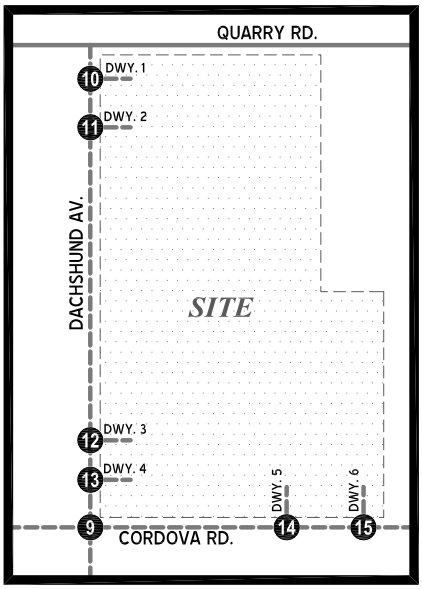
01 - Study Area.dwg

EXHIBIT 4-3: PROJECT ONLY AM PEAK HOUR INTERSECTION PASSENGER CAR EQUIVALENT VOLUMES





INSET A

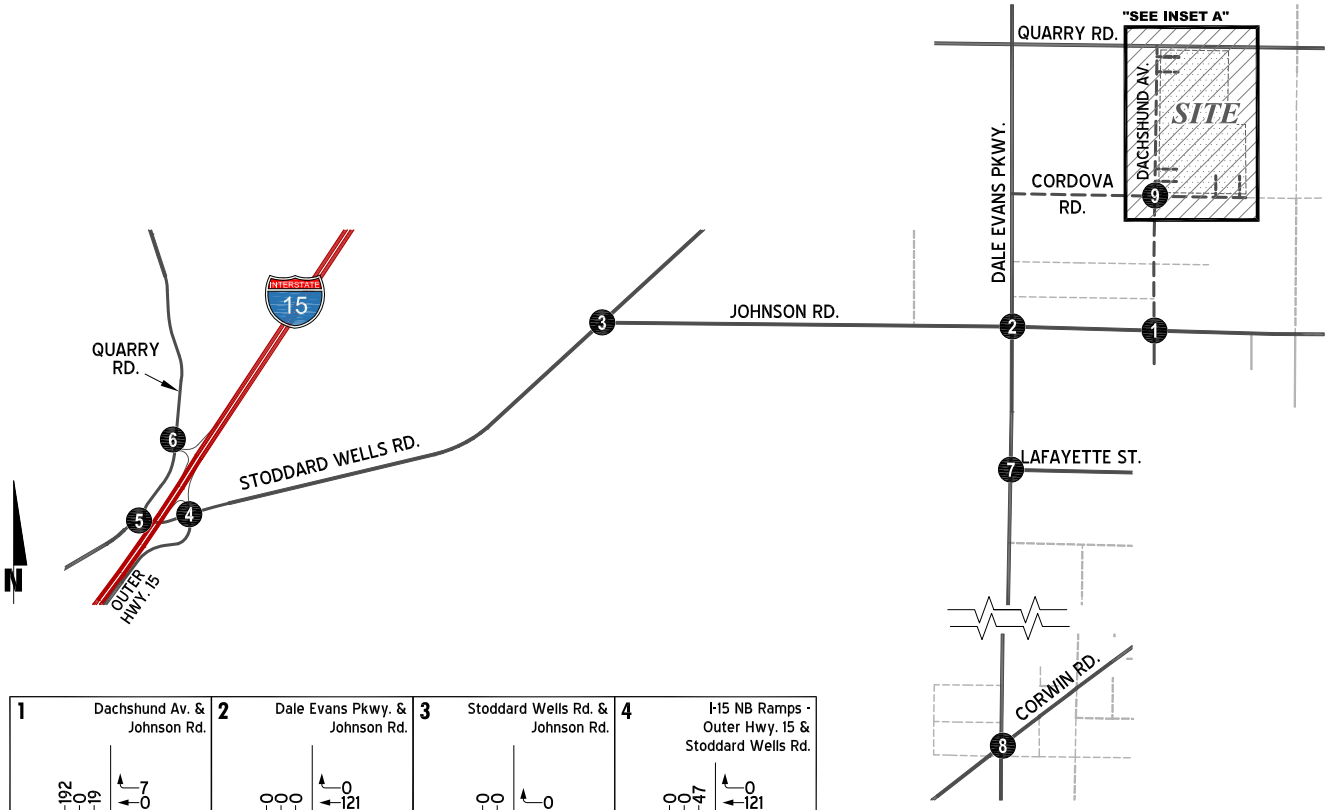


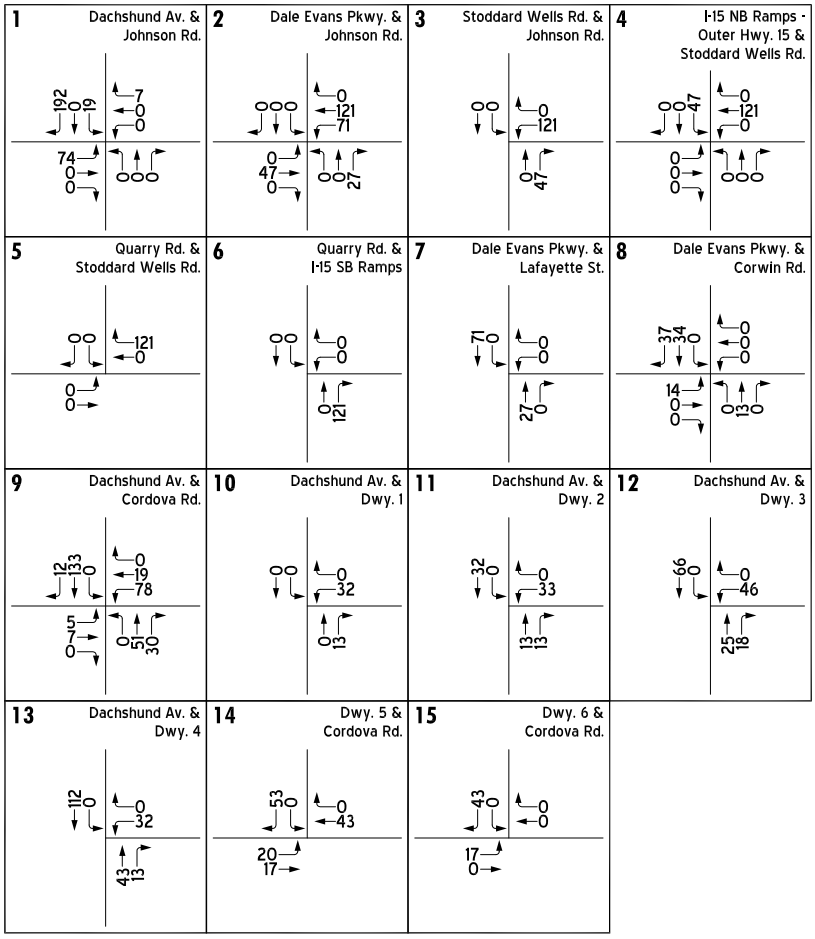
LEGEND:

(#) = INTERSECTION ID

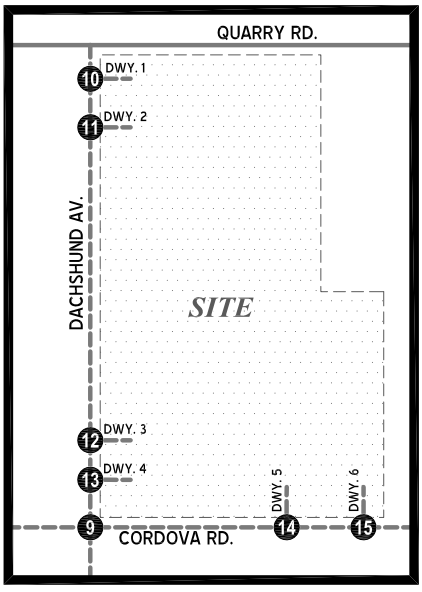
= FUTURE ROADWAY

EXHIBIT 4-4: PROJECT ONLY PM PEAK HOUR INTERSECTION PASSENGER CAR EQUIVALENT VOLUMES





INSET A



LEGEND:

= INTERSECTION ID

= FUTURE ROADWAY

EXHIBIT 4-5: PROJECT ONLY AVERAGE DAILY TRAFFIC (ADT)
PASSENGER CAR EQUIVALENT VOLUMES

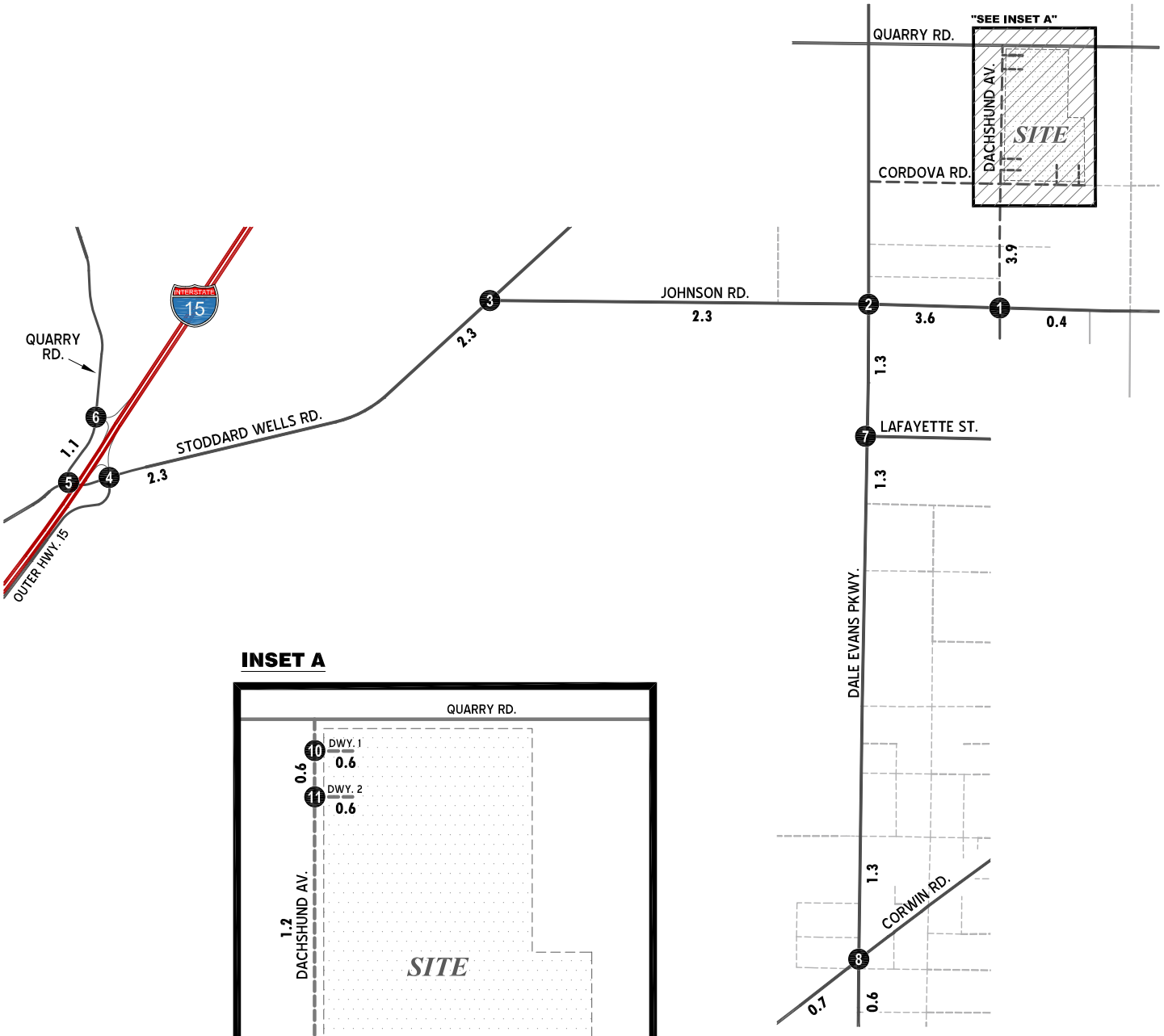


Exhibit 4-4 illustrates the cumulative development location map. A summary of cumulative development projects and their proposed land uses are shown on Table 4-4. If applicable, the traffic generated by individual cumulative projects was manually added to the Opening Year Cumulative forecasts to ensure that traffic generated by the listed cumulative development projects on Table 4-3 are reflected as part of the background traffic.

4.5.2 HORIZON YEAR (2040) CONDITIONS

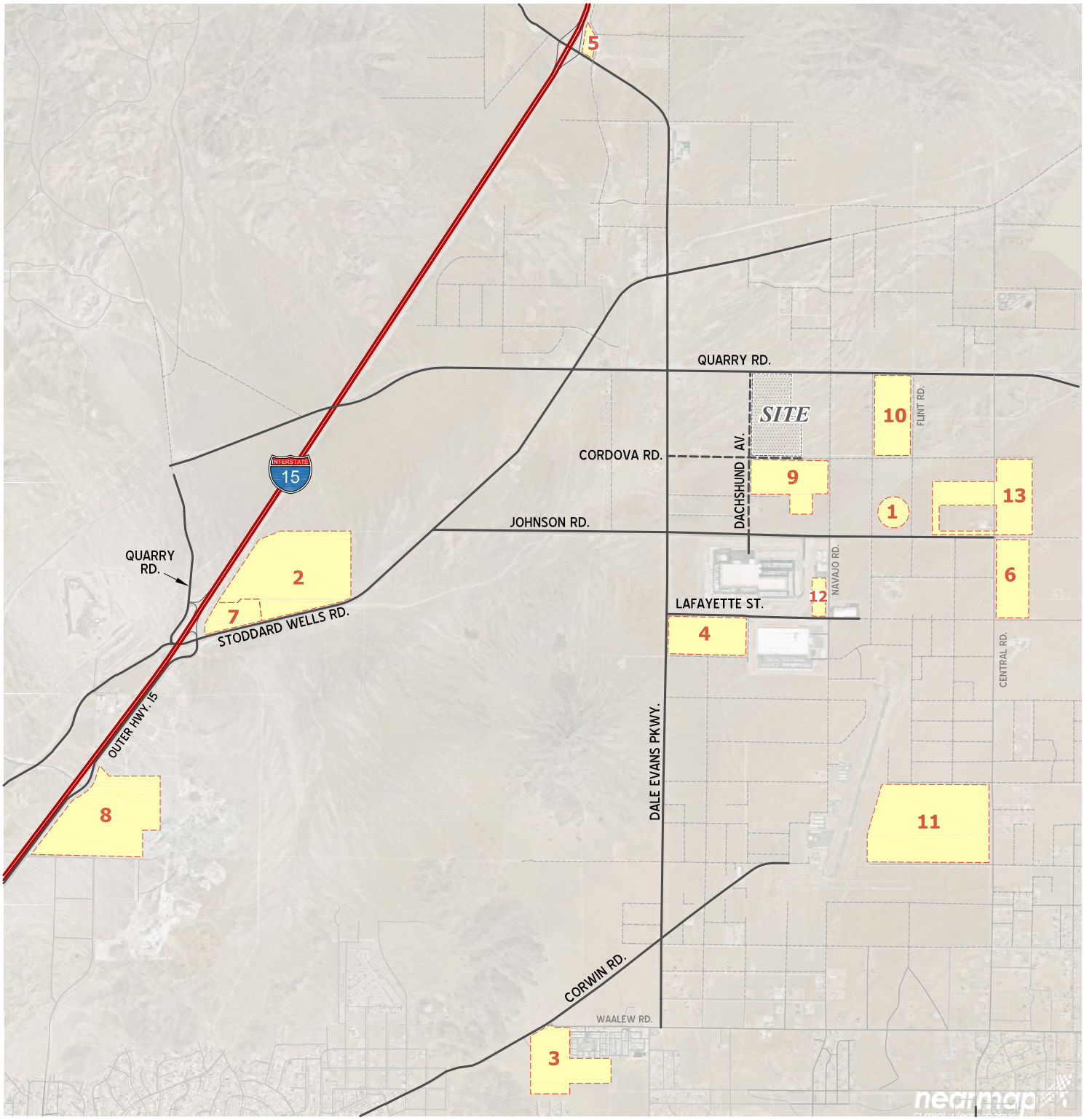
The adopted Southern California Association of Governments (SCAG) Connect SoCal: Demographics and Growth Forecast (adopted September 3, 2020) growth forecasts for the Town of Apple Valley indicates population of 74,300 in 2016 and 101,400 in 2045, or a 36.5% increase over the 29-year period. The change in population is less than a 2.0% growth rate, compounded annually. Similarly, growth in employment over the same 29-year period is projected to increase by 67.8%.

Traffic projections for Horizon Year (2040) without Project conditions were derived based on growth from interim year conditions, known cumulative projects, and from the San Bernardino Transportation Analysis Model (SBTAM). The traffic forecasts reflect the area-wide growth anticipated between Existing (2023) conditions and Horizon Year (2040) traffic conditions.

Horizon Year (2040) turning volumes were compared to Opening Year Cumulative (2025) volumes in order to ensure a minimum growth as a part of the refinement process. The minimum growth includes any additional growth between Opening Year Cumulative (2025) and Horizon Year (2040) traffic conditions that is not accounted for by the traffic generated by cumulative development projects and ambient growth rates assumed between Existing (2023) and Opening Year Cumulative (2025) conditions. Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the Horizon Year (2040) peak hour forecasts.

The future Horizon Year (2040) Without Project peak hour turning movements were then reviewed by Urban Crossroads, Inc. for reasonableness, and in some cases, were adjusted (or "post-processed") to achieve flow conservation, reasonable growth, and reasonable diversion between parallel routes. Flow conservation checks ensure that traffic flow between two closely spaced intersections, such as two adjacent driveway locations, is verified in order to make certain that vehicles leaving one intersection are entering the adjacent intersection and that there is no unexplained loss of vehicles. The result of this traffic forecasting procedure is a series of traffic volumes which are suitable for traffic operations analysis. Project traffic was then added for all With Project traffic conditions.

EXHIBIT 4-6: CUMULATIVE DEVELOPMENT LOCATION MAP



LEGEND:

(#) = CUMULATIVE DEVELOPMENT ID

N

01 - Study Area.dwg

TABLE 4-3: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

TAZ	Project	Land Use	Quantity	Units[1]
1	Dara II Industrial	Warehouse	374.26	TSF
2	Apple Valley 143	Industrial/Warehouse	2,518.50	TSF
3	TTM 20306 (south of Waalew & east of Corwin)	Single Family Residential	160	DU
4	Lafayette Street Logistics (Redwood West)	High-Cube Warehouse	1,026.41	TSF
		High-Cube Cold Storage	181.13	TSF
5	Apple Valley Gateway Center (north of Dale Evans & east of I-15)	Pad A - Hotel	84	RM
		Pad B - Fast-Food Restaurant w/ Drive-Thru	5.769	TSF
		Pad C - Gas Station with C-Store (5 TSF)	16	VFP
		Pad D - Gas Station with C-Store (3.35 TSF)	12	VFP
		Pad E - Fast-Food Restaurant w/ Drive-Thru	4.00	TSF
		Pad F - Fast-Food Restaurant w/ Drive-Thru	4.20	TSF
		Pad G - Restaurant	4.00	TSF
		Pad H - Shops	10.261	TSF
		Pad I - Fast-Food Restaurant w/ Drive-Thru	2.80	TSF
6	1M Warehouse (east of Central Road, between Johnson Road & Lafayette Street)	High Cube Fulfillment Center Warehouse	1,080.125	TSF
7	Apple Valley I-15 Travel Center (Love's Travel Stop - north of Stoddard Wells & east of I-15)	RV Park	80	Spaces
		Gas Station with C-Store (9.66 TSF)	26	VFP
		Fast-Food Restaurant w/ Drive-Thru	3.043	TSF
		Truck Maintenance/Tire Building	13.786	TSF
8	Inland Empire North Logistics Ctr. (north of Falchion Road & east of I-5)	Industrial/Warehouse	2,604.446	TSF
9	Cordova Quarry	High-Cube Cold Storage	1,559.952	TSF
10	Quarry at Pawnee	High-Cube Cold Storage	1,462.342	TSF
11	Apple Valley Logistics Center	General Light Industrial (10%)	348.074	TSF
		High-Cube Cold Storage (10%)	348.074	TSF
		High-Cube Fulfillment (80%)	2,784.588	TSF
12	Green Trucking Solutions	High-Cube Cold Storage	385.004	TSF
13	Apple Valley 3PL Center	Industrial/Warehouse	2,134.000	TSF

[1] DU = Dwelling Units; TSF = Thousand Square Feet; RM = Room; VFP = Vehicle Fueling Positions

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Excel\[15504 - Report.xlsx]15504-C

5 OPENING YEAR CUMULATIVE (2025) TRAFFIC CONDITIONS

This section discusses the methods used to develop Opening Year Cumulative (2025) Without and With Project traffic forecasts, 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 Opening Year Cumulative (2025) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

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

For With Project conditions, Project-adjacent roadways at their ultimate half-section widths in accordance with Town of Apple Valley standards are assumed as follows to provide Project access:

- Construct Dachshund Avenue from Quarry Road to Cordova Road (easterly half-section plus one lane)
- Construct Cordova Road from Dachshund Avenue to the easterly Project boundary (northerly half-section plus one lane)
- Project to implement stop control for egress at Project driveways and construct the necessary ingress and egress lanes at each driveway needed to facilitate site access
- Project Driveways 1, 4, and 6 to be restricted to passenger cars only (no large trucks)

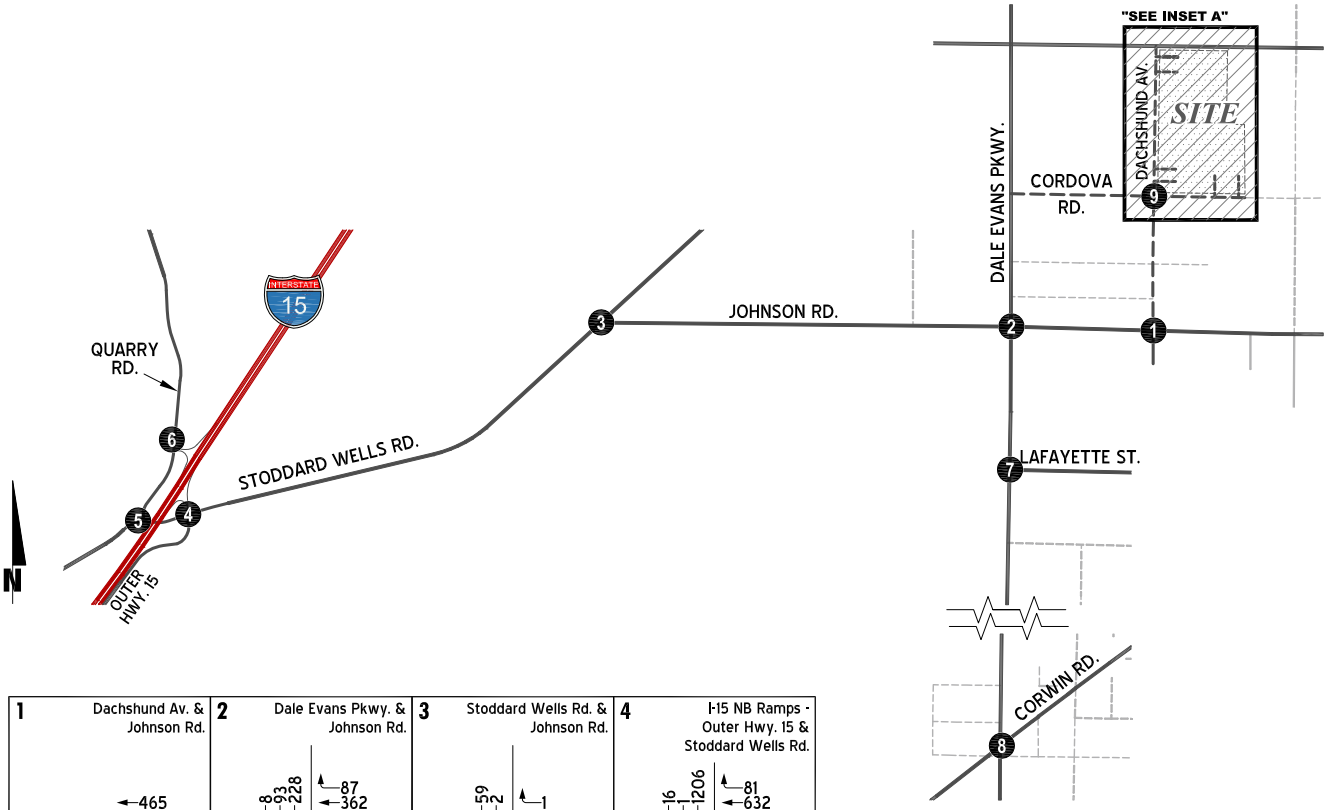
5.2 WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

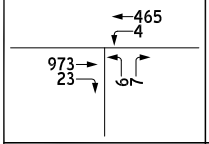
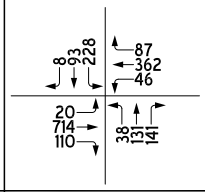
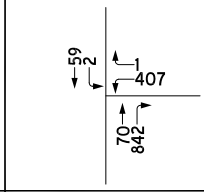
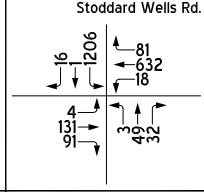
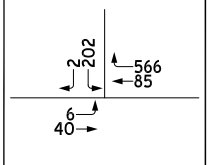
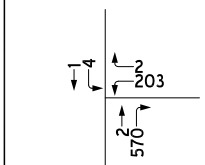
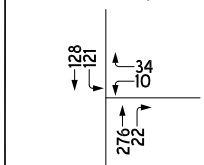
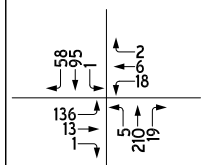
This scenario includes Existing traffic volumes plus an ambient growth factor of 4.04% plus traffic from pending and approved but not yet constructed known development projects in the area. The peak hour intersection volumes and daily traffic volumes which can be expected for Opening Year Cumulative (2025) Without Project traffic conditions are shown on Exhibits 5-1 through 5-3.

5.3 WITH PROJECT TRAFFIC VOLUME FORECASTS

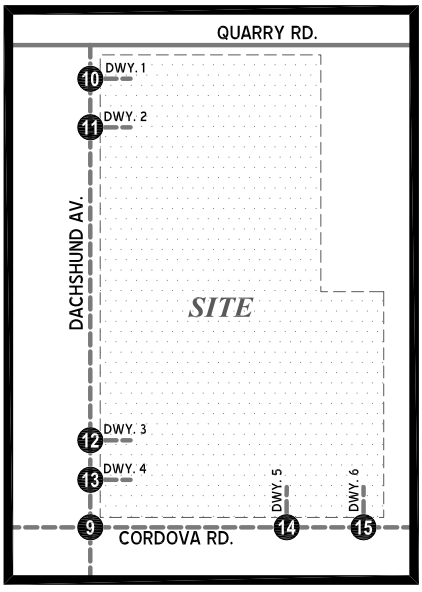
This scenario includes Opening Year Cumulative (2025) Without Project traffic in conjunction with the addition of Project traffic. The peak hour intersection volumes and daily traffic volumes which can be expected for Opening Year Cumulative (2025) With Project traffic conditions are shown on Exhibits 5-4 through 5-6.

EXHIBIT 5-1: OPENING YEAR CUMULATIVE (2025) WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES



1 Dachshund Av. & Johnson Rd. 	2 Dale Evans Pkwy. & Johnson Rd. 	3 Stoddard Wells Rd. & Johnson Rd. 	4 I-15 NB Ramps - Outer Hwy. 15 & Stoddard Wells Rd. 
5 Quarry Rd. & Stoddard Wells Rd. 	6 Quarry Rd. & I-15 SB Ramps 	7 Dale Evans Pkwy. & Lafayette St. 	8 Dale Evans Pkwy. & Corwin Rd. 
9 Dachshund Av. & Cordova Rd. **FUTURE INTERSECTION**	10 Dachshund Av. & Dwy. 1 **FUTURE INTERSECTION**	11 Dachshund Av. & Dwy. 2 **FUTURE INTERSECTION**	12 Dachshund Av. & Dwy. 3 **FUTURE INTERSECTION**
13 Dachshund Av. & Dwy. 4 **FUTURE INTERSECTION**	14 Dwy. 5 & Cordova Rd. **FUTURE INTERSECTION**	15 Dwy. 6 & Cordova Rd. **FUTURE INTERSECTION**	

INSET A

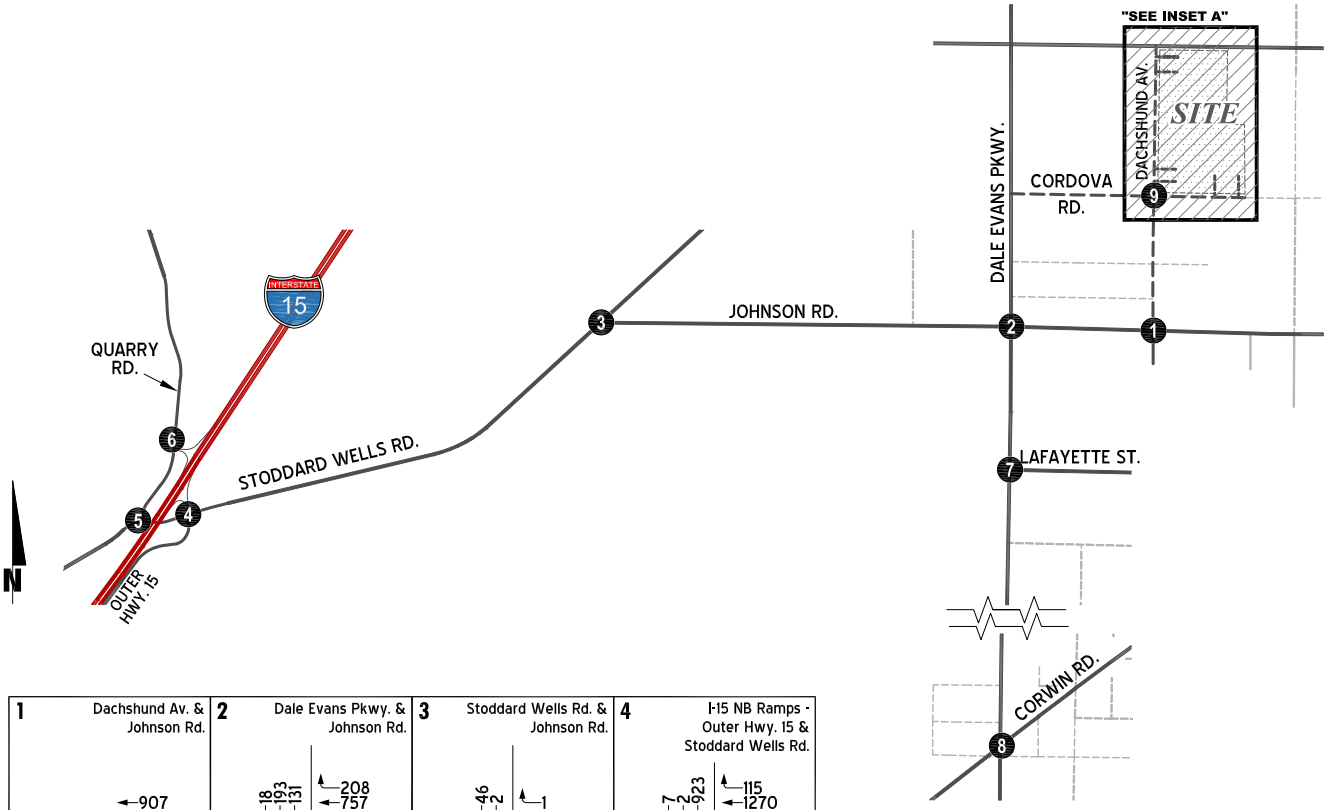


LEGEND:

(#) = INTERSECTION ID

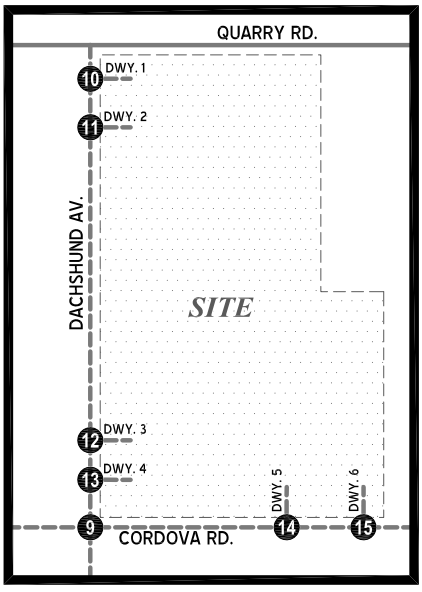
= FUTURE ROADWAY

EXHIBIT 5-2: OPENING YEAR CUMULATIVE (2025) WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES



1 Dachshund Av. & Johnson Rd. 907 30 612 165 158 28	2 Dale Evans Pkwy. & Johnson Rd. 18 193 131 208 757 175 12 575 96 160 114 109	3 Stoddard Wells Rd. & Johnson Rd. 46 2 1 934 22 681	4 I-15 NB Ramps - Outer Hwy. 15 & Stoddard Wells Rd. 7 2 923 115 1270 34 5 118 77 3 77 33
5 Quarry Rd. & Stoddard Wells Rd. 4 177 1212 68 5 24	6 Quarry Rd. & I-15 SB Ramps 0 2 2 181 1 1216	7 Dale Evans Pkwy. & Lafayette St. 386 79 167 22 216 16	8 Dale Evans Pkwy. & Corwin Rd. 151 320 1 2 19 24 79 11 2 3 177 11
9 Dachshund Av. & Cordova Rd. **FUTURE INTERSECTION**	10 Dachshund Av. & Dwy. 1 **FUTURE INTERSECTION**	11 Dachshund Av. & Dwy. 2 **FUTURE INTERSECTION**	12 Dachshund Av. & Dwy. 3 **FUTURE INTERSECTION**
13 Dachshund Av. & Dwy. 4 **FUTURE INTERSECTION**	14 Dwy. 5 & Cordova Rd. **FUTURE INTERSECTION**	15 Dwy. 6 & Cordova Rd. **FUTURE INTERSECTION**	

INSET A



LEGEND:

(#) = INTERSECTION ID

= FUTURE ROADWAY

EXHIBIT 5-3: OPENING YEAR CUMULATIVE (2025) WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)

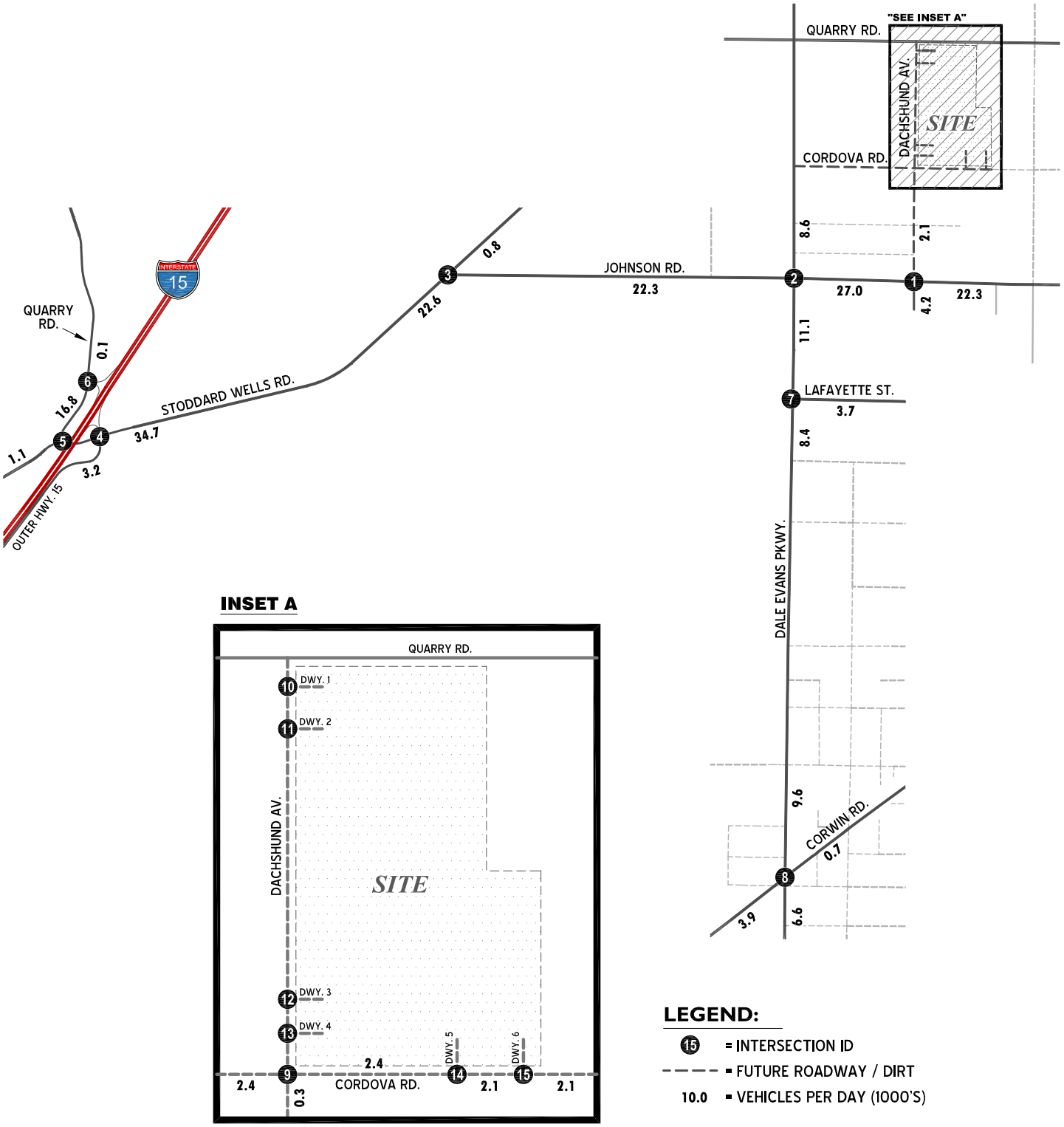
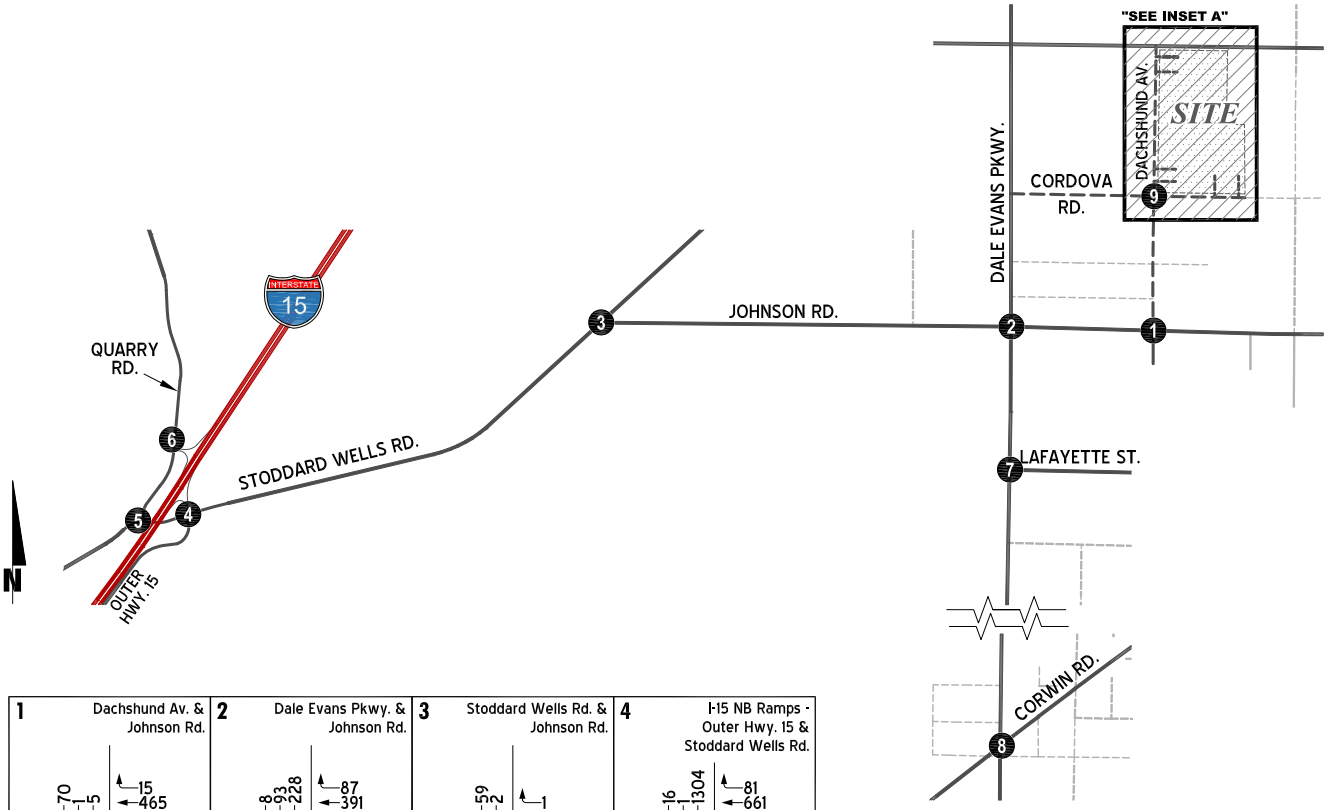
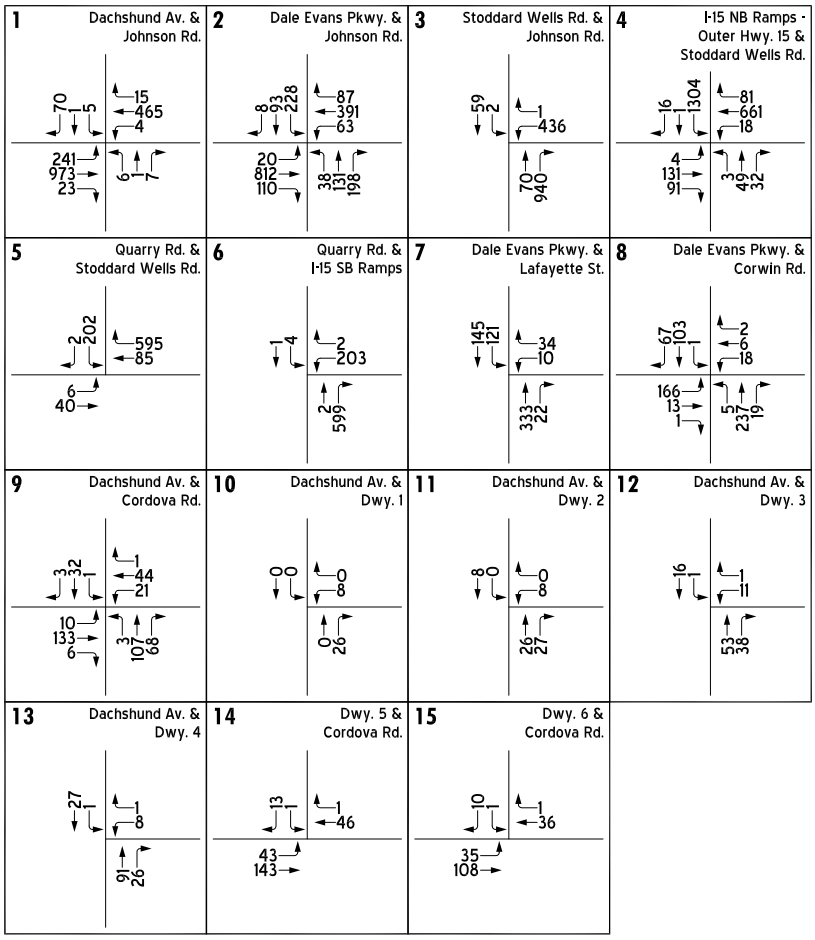
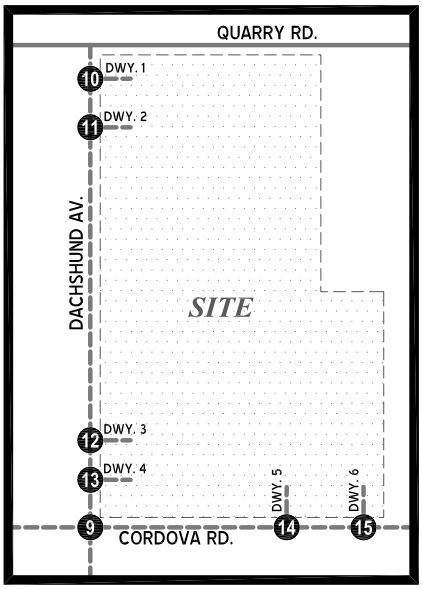


EXHIBIT 5-4: OPENING YEAR CUMULATIVE (2025) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES





INSET A

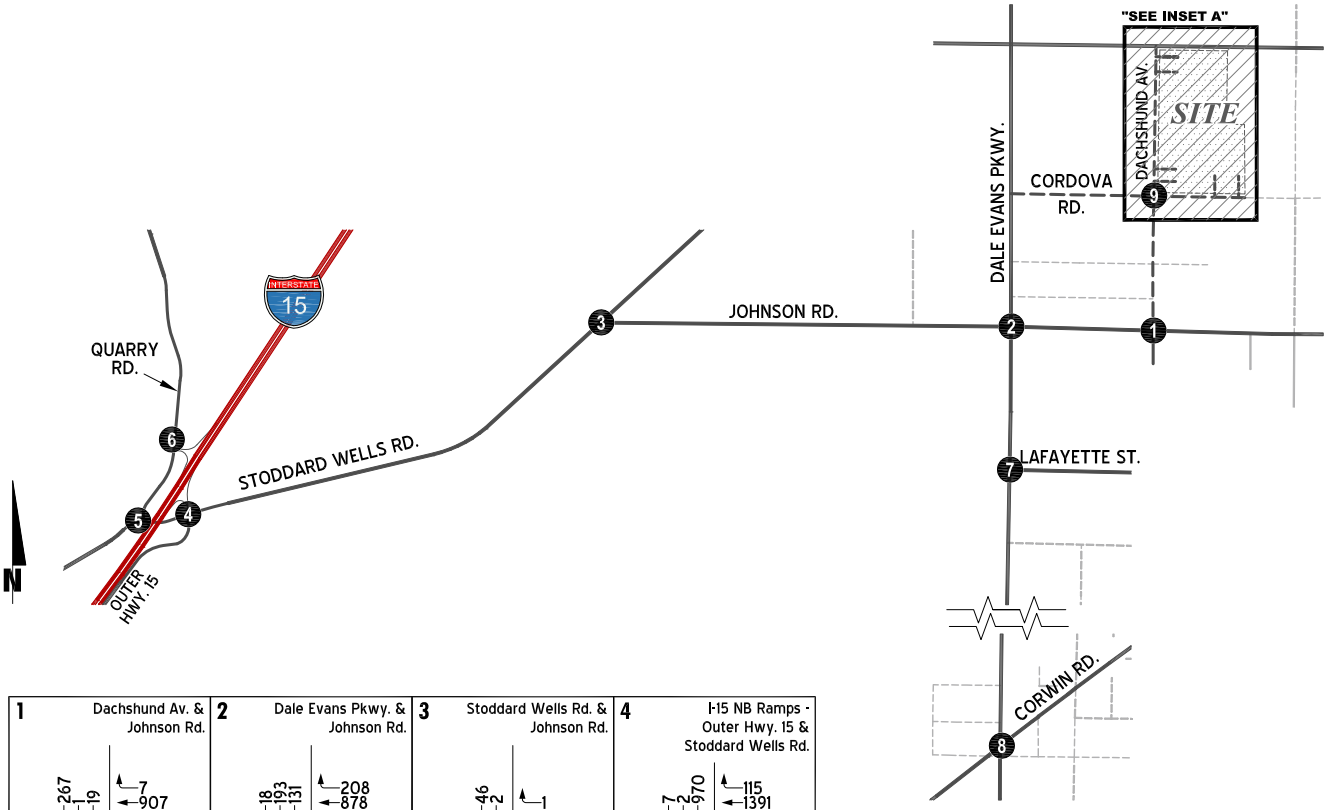


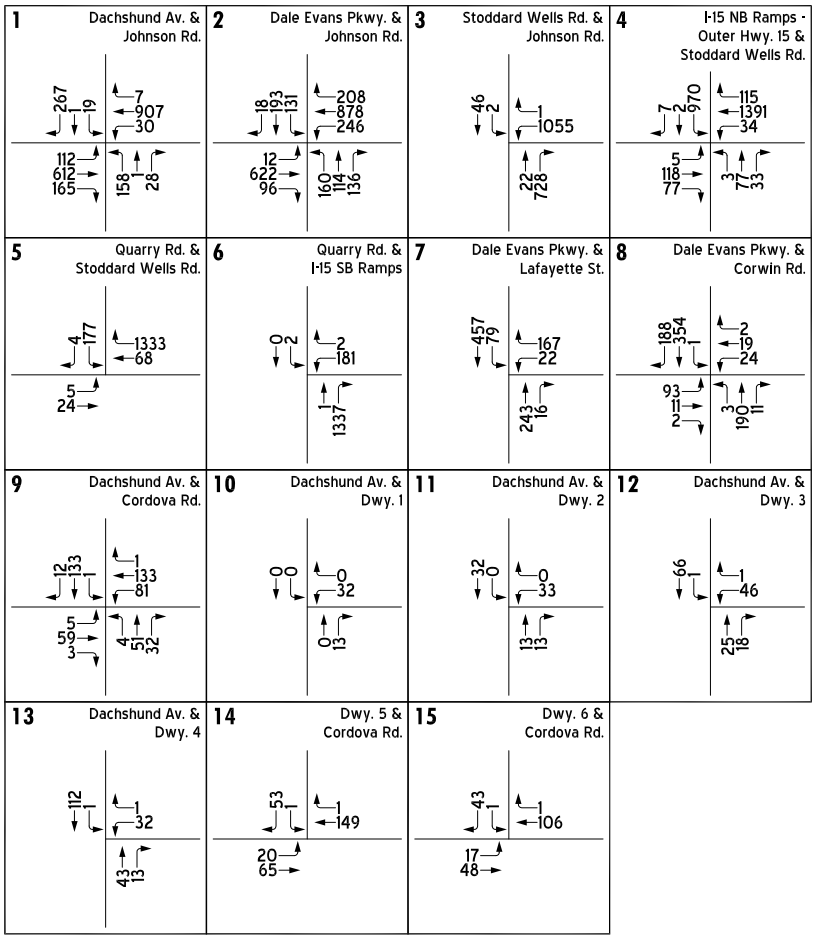
LEGEND:

= INTERSECTION ID

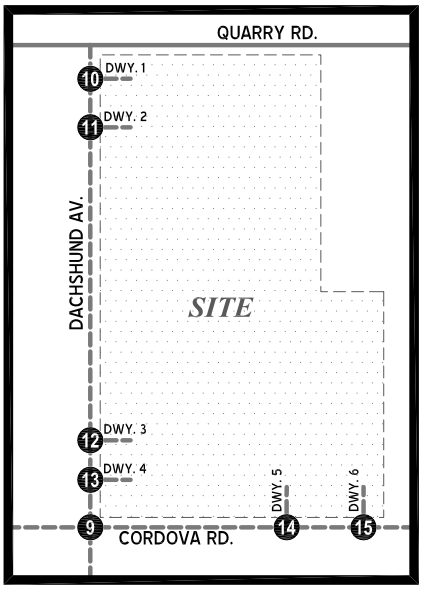
= FUTURE ROADWAY

EXHIBIT 5-5: OPENING YEAR CUMULATIVE (2025) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES





INSET A

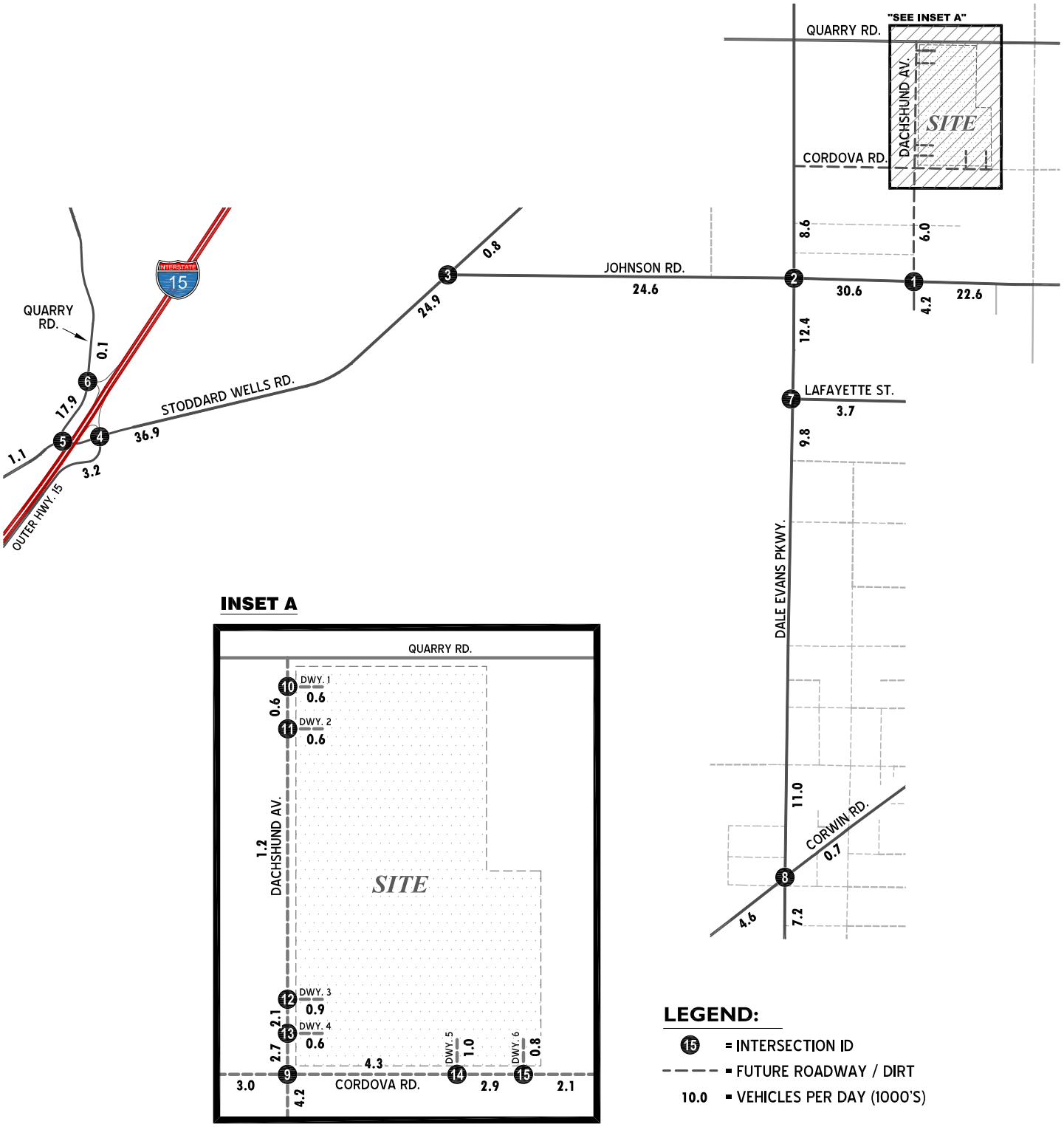


LEGEND:

= INTERSECTION ID

= FUTURE ROADWAY

EXHIBIT 5-6: OPENING YEAR CUMULATIVE (2025) WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



5.4 INTERSECTION OPERATIONS ANALYSIS

5.4.1 OPENING YEAR CUMULATIVE (2025) WITHOUT PROJECT TRAFFIC CONDITIONS

LOS calculations were conducted for the study intersections to evaluate their operations under Opening Year Cumulative (2025) Without Project conditions with roadway and intersection geometrics consistent with Section 6.1 *Roadway Improvements*. As shown on Table 5-1, the following intersections are anticipated to operate at an unacceptable LOS under Opening Year Cumulative (2025) Without Project traffic conditions:

- Dachshund Av. / Johnson Rd. (#1) - LOS F AM and PM peak hours
- Dale Evans Pkwy. / Johnson Rd. (#2) – LOS F AM and PM peak hours
- Stoddard Wells Rd. / Johnson Rd. (#3) – LOS F AM and PM peak hours
- I-15 NB Ramps - Outer Hwy. 15 / Stoddard Wells Rd. (#4) – LOS F AM and PM peak hours
- Quarry Rd. / Stoddard Wells Rd. (#5) – LOS F PM peak hour
- Quarry Rd. / I-15 SB Ramps (#6) – LOS F PM peak hour

The intersection operations analysis worksheets for Opening Year Cumulative (2025) Without Project traffic conditions are included in Appendix 5.1 of this TA.

5.4.2 OPENING YEAR CUMULATIVE (2025) WITH PROJECT TRAFFIC CONDITIONS

As shown on Table 5-1, there are no additional study area intersections anticipated to operate at a deficient LOS during any of the peak hours for Opening Year Cumulative (2025) With Project traffic conditions with the addition of Project traffic.

The intersection operations analysis worksheets for Opening Year Cumulative (2025) With Project traffic conditions are included in Appendix 5.2 of this TA.

5.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis for Opening Year Cumulative (2025) traffic conditions are based on the peak hour volumes or planning level ADT volume-based traffic signal warrants. The following intersections are anticipated to meet peak hour volume warrants for Opening Year Cumulative (2025) Without Project traffic conditions (see Appendix 5.3):

- Dachshund Av. / Johnson Rd. (#1)
- Dale Evans Pkwy. / Johnson Rd. (#2)
- Stoddard Wells Rd. / Johnson Rd. (#3)
- I-15 NB Ramps - Outer Hwy. 15 / Stoddard Wells Rd. (#4)
- Quarry Rd. / Stoddard Wells Rd. (#5)
- Quarry Rd. / I-15 SB Ramps (#6)
- Dale Evans Pkwy. / Lafayette St. (#7)

However, the intersection of Dale Evans Pkwy. / Lafayette St. experiences acceptable LOS operations and a signal may not be required for Opening Year Cumulative conditions. There are no additional study area intersections anticipated to meet traffic signal warrants under Opening Year Cumulative (2025) With Project traffic conditions (see Appendix 5.4).

TABLE 5-1: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2025) CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2]												2025 w/o Project				2025 w/ Project			
			Northbound			Southbound			Eastbound			Westbound			Delay[3] (secs.)		Level of Service		Delay[3] (secs.)		Level of Service	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
1	Dachshund Av. / Johnson Rd.																					
	- With Cross-Street Stop	CSS	1	1	0	**1**	**1**	0	**1**	1	0	**1**	1	0	>80	>80	F	F	>80	>80	F	F
	- With Traffic Signal	**TS**	1	1	0	**1**	**1**	0	**1**	1	0	**1**	1	0	9.3	29.3	A	C	14.6	52.2	B	D
2	Dale Evans Pkwy. / Johnson Rd.																					
	- Without Improvements	AWS	1	1	1	1	1	0	0	1!	0	0.5	0.5	1>>	>80	>80	F	F	>80	>80	F	F
	- With Improvements	**TS**	1	1	1	1	1	0	**1**	1	0	**1**	1	1>>	43.3	38.4	D	D	51.8	52.6	D	D
3	Stoddard Wells Rd. / Johnson Rd.																					
	- Without Improvements	CSS	0	1	0	0.5	0.5	0	0	0	0	0	1!	0	>80	>80	F	F	>80	>80	F	F
	- With Improvements	**TS**	0	1	**1>**	**1**	1	0	0	0	0	**1**	1	0	8.9	26.0	A	C	10.1	52.4	B	D
4	I-15 NB Ramps - Outer Hwy. 15 / Stoddard Wells Rd.																					
	- Without Improvements	CSS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	>80	>80	F	F	>80	>80	F	F
	- With Improvements	**TS**	0	1!	0	**1**	1!	0	**1**	1	0	**1**	**2**	0	41.3	35.5	D	D	45.3	53.7	D	D
5	Quarry Rd. / Stoddard Wells Rd.																					
	- Without Improvements	CSS	0	0	0	0	1!	0	0.5	0.5	0	0	1	0	19.8	>80	C	F	20.5	>80	C	F
	- With Improvements	CSS	0	0	0	0	1!	0	0.5	0.5	0	0	1	**1**	11.6	17.6	B	C	11.8	19.9	B	C
6	Quarry Rd. / I-15 SB Ramps																					
	- Without Improvements	CSS	0	1	0	0.5	0.5	0	0	0	0	0	1!	0	14.3	>80	B	F	14.6	>80	B	F
	- With Improvements	CSS	0	1	**1**	0.5	0.5	0	0	0	0	0	1!	0	9.8	16.3	A	C	9.9	18.4	A	C
7	Dale Evans Pkwy. / Lafayette St.	CSS	0	1	1	1	1	0	0	0	0	0	1!	0	11.9	14.9	B	B	12.7	16.5	B	C
8	Dale Evans Pkwy. / Corwin Rd.	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	9.5	20.1	A	C	10.1	34.0	B	D
9	Dachshund Av. / Cordova Rd.	**CSS**	0	1!	0	0	1!	0	0	1!	0	0	1!	0	9.2	9.3	A	A	12.0	14.9	B	B
10	Dachshund Av. / Dwy. 1	**CSS**	0	**1**	0	**0.5**	**0.5**	0	0	0	0	0	**1!**	0	-	-	-	-	8.6	8.7	A	A
11	Dachshund Av. / Dwy. 2	**CSS**	0	**1**	0	**0.5**	**0.5**	0	0	0	0	0	**1!**	0	-	-	-	-	8.8	8.9	A	A
12	Dachshund Av. / Dwy. 3	**CSS**	0	**1**	0	**0.5**	**0.5**	0	0	0	0	0	**1!**	0	-	-	-	-	9.0	9.3	A	A
13	Dachshund Av. / Dwy. 4	**CSS**	0	**1**	0	**0.5**	**0.5**	0	0	0	0	0	**1!**	0	-	-	-	-	9.2	9.6	A	A
14	Dwy. 5 / Cordova Rd.	**CSS**	0	0	0	0	**1!**	0	**0.5**	**0.5**	0	0	**1**	0	-	-	-	-	8.7	9.4	A	A
15	Dwy. 6 / Cordova Rd.	**CSS**	0	0	0	0	**1!**	0	**0.5**	**0.5**	0	0	**1**	0	-	-	-	-	8.7	9.1	A	A

[1] TS = Traffic Signal; CSS = Cross-Street Stop; AWS = All Way Stop

[2] 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; d = Defacto Right Turn Lane; 0.5 = Shared Lane; 1! = Shared Left/Through/Right lane;
>> = Free-Right Turn; **1** = Improvement

[3] 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.

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Excel\[15504 - Report.xlsx]5-1

6 HORIZON YEAR (2040) TRAFFIC CONDITIONS

This section discusses the methods used to develop Horizon Year (2040) Without and With Project traffic forecasts, and the resulting intersection operations and traffic signal warrant analyses.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Horizon Year (2040) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Horizon Year conditions only (e.g., intersection and roadway improvements along the Project's frontage and driveways).
- If applicable, driveways and those facilities assumed to be constructed by cumulative developments to provide site access are also assumed to be in place for Horizon Year conditions only.
- Other parallel facilities, that although not evaluated for the purposes of this analysis, are anticipated to be in place for Horizon Year traffic conditions and would affect the travel patterns within the study area.

6.2 WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-process volumes obtained from known nearby projects and the SBTAM (see Section 4.7 *Horizon Year (2040) Volume Development* of this TA for a detailed discussion on the post-processing methodology). The peak hour intersection volumes and daily traffic volumes which can be expected for Horizon Year (2040) Without Project traffic conditions are shown on Exhibits 6-1 through 6-3.

6.3 WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined Horizon Year without Project volumes, plus the traffic generated by the proposed Project. The peak hour intersection volumes and daily traffic volumes which can be expected for Horizon Year (2040) With Project traffic conditions are shown on Exhibits 6-4 through 6-6.

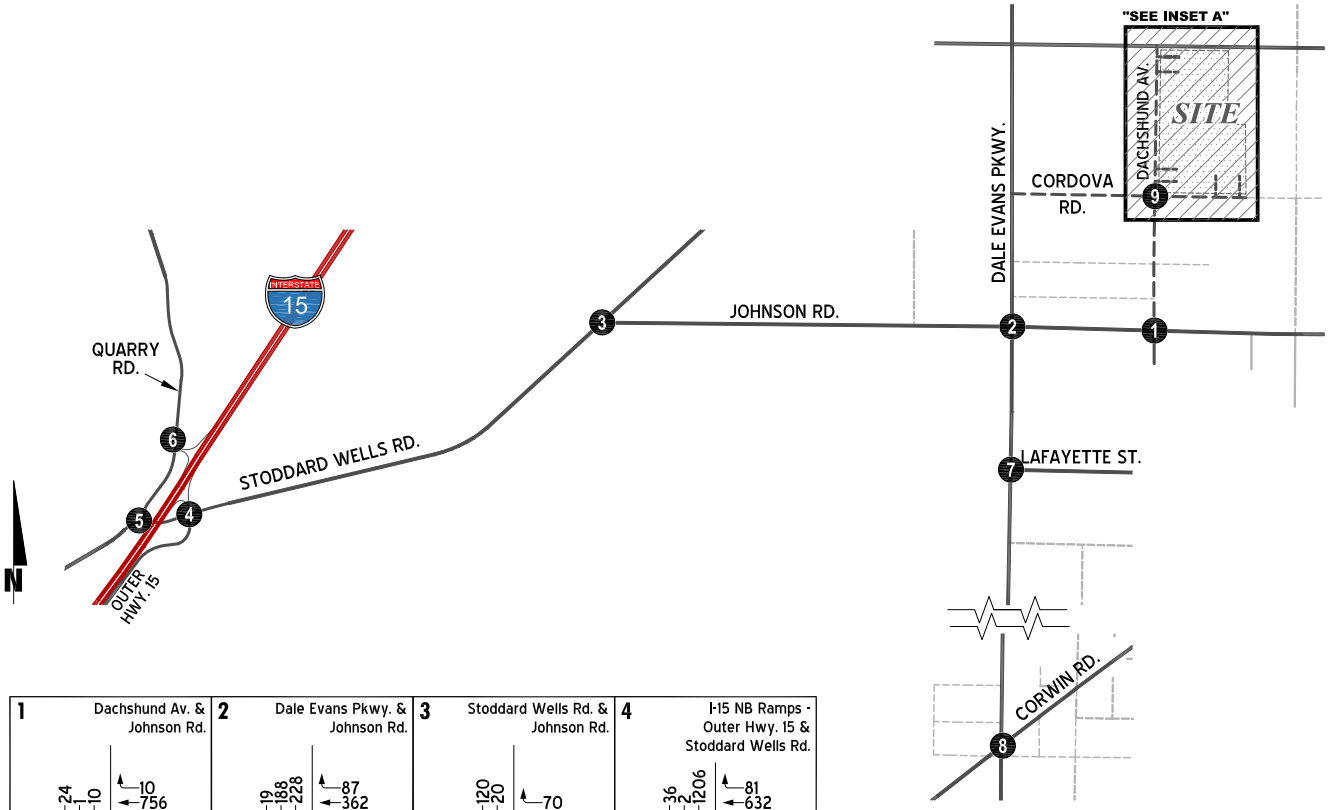
6.4 INTERSECTION OPERATIONS ANALYSIS

6.4.1 HORIZON YEAR (2040) WITHOUT PROJECT TRAFFIC CONDITIONS

LOS calculations were conducted for the study intersections to evaluate their operations under Horizon Year (2040) Without Project conditions. As shown on Table 6-1, 8 study area intersections are anticipated to operate at an unacceptable LOS under Horizon Year (2040) Without Project traffic conditions, without improvements. However, with improvements, acceptable LOS is anticipated at study area intersections.

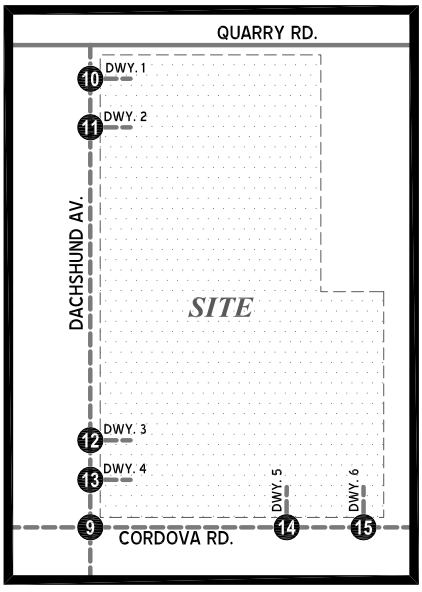
The intersection operations analysis worksheets for Horizon Year (2040) Without Project traffic conditions are included in Appendix 6.1 of this TA.

EXHIBIT 6-1: HORIZON YEAR (2040) WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES



1 Dachshund Av. & Johnson Rd. 24 1 10 → 10 ← 756 ← 4 86 → 1214 → 23 6 ↑ 1 ↑	**2** Dale Evans Pkwy. & Johnson Rd. 19 ↓ 188 ↓ 228 → 87 ← 362 ← 337 23 → 714 → 258 172 ↑ 423 ↑ 381	**3** Stoddard Wells Rd. & Johnson Rd. 120 ↓ 20 → 70 ← 407 400 ↑ 842	**4** I-15 NB Ramps - Outer Hwy. 15 & Stoddard Wells Rd. 36 ↓ 2 ↓ 1206 → 81 ← 632 ← 18 15 → 131 → 91 10 ↑ 69 ↑ 32
5 Quarry Rd. & Stoddard Wells Rd. 8 ↓ 202 → 588 ← 85 33 → 40	**6** Quarry Rd. & I-15 SB Ramps 7 ↓ 8 → 10 ← 203 7 ↑ 614 ↑	**7** Dale Evans Pkwy. & Lafayette St. 402 ↓ 173 → 76 ← 174 553 ↑ 384 ↑	**8** Dale Evans Pkwy. & Corwin Rd. 61 ↓ 296 ↓ 12 → 15 ← 17 ← 18 136 → 25 → 12 11 ↑ 775 ↑ 28 ↑
9 Dachshund Av. & Cordova Rd. **FUTURE INTERSECTION**	**10** Dachshund Av. & Dwy. 1 **FUTURE INTERSECTION**	**11** Dachshund Av. & Dwy. 2 **FUTURE INTERSECTION**	**12** Dachshund Av. & Dwy. 3 **FUTURE INTERSECTION**
13 Dachshund Av. & Dwy. 4 **FUTURE INTERSECTION**	**14** Dwy. 5 & Cordova Rd. **FUTURE INTERSECTION**	**15** Dwy. 6 & Cordova Rd. **FUTURE INTERSECTION**	

INSET A

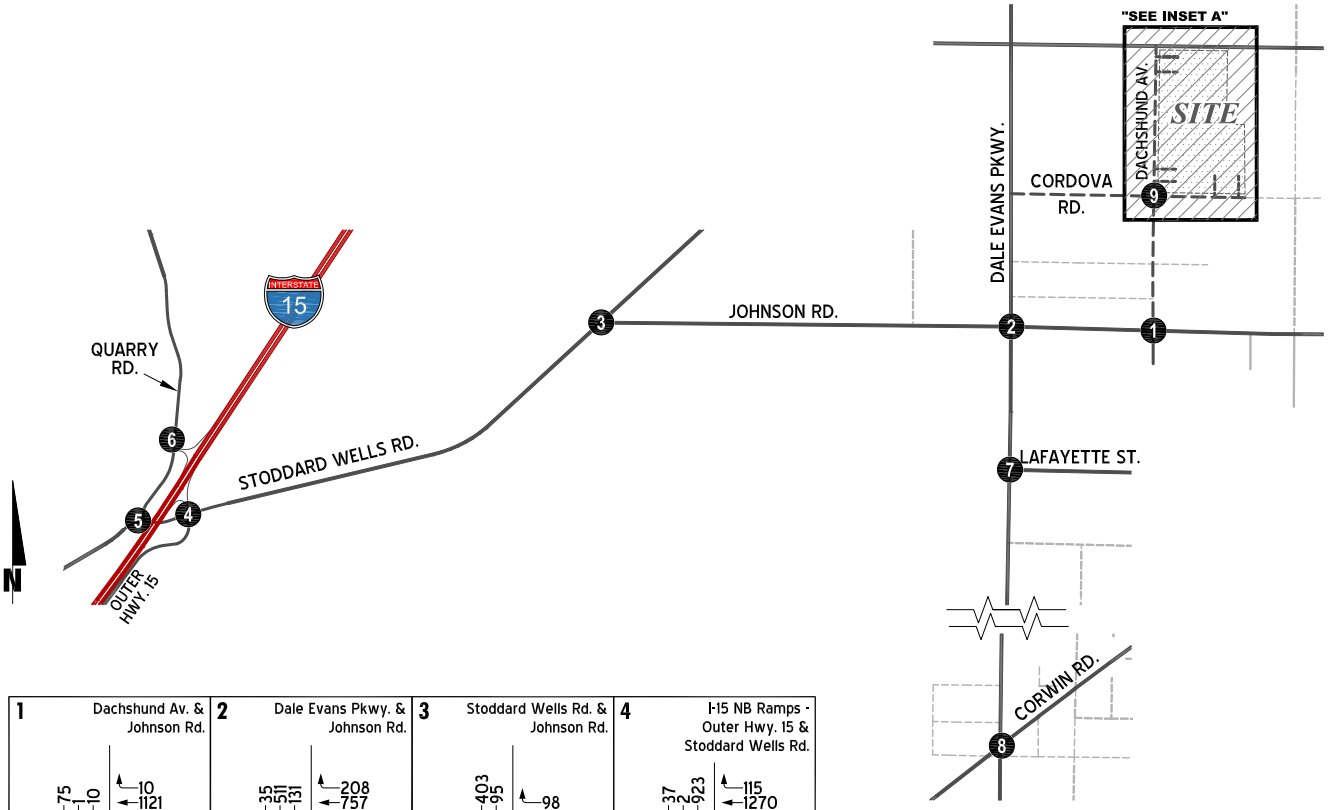


LEGEND:

(#) = INTERSECTION ID

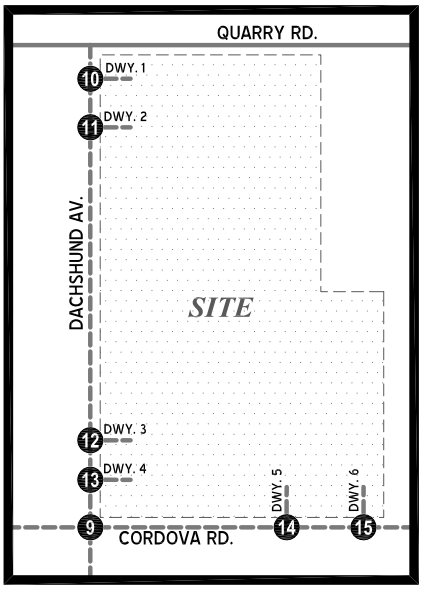
= FUTURE ROADWAY

EXHIBIT 6-2: HORIZON YEAR (2040) WITHOUT PROJECT
PM PEAK HOUR INTERSECTION VOLUMES



1 Dachshund Av. & Johnson Rd. 75 1 10 → 10 1121 30 ← 38 937 165 → 158 ↑ 28	2 Dale Evans Pkwy. & Johnson Rd. 35 511 131 → 208 757 389 ← 18 575 305 → 204 273 434 ↑	3 Stoddard Wells Rd. & Johnson Rd. 403 95 → 98 934 ← 239 681 ↑	4 I-15 NB Ramps - Outer Hwy. 15 & Stoddard Wells Rd. 37 2 923 → 115 1270 34 ← 10 145 77 → 3 ↑ 77 33 ↑
5 Quarry Rd. & Stoddard Wells Rd. 12 177 → 1241 68 ← 25 55 →	6 Quarry Rd. & I-15 SB Ramps 6 6 → 6 183 ← 6 1260 ↑	7 Dale Evans Pkwy. & Lafayette St. 776 161 → 243 216 ← 370 302 ↑	8 Dale Evans Pkwy. & Corwin Rd. 151 709 14 → 13 30 28 ← 83 188 151 → 9 ↑ 543 25 ↑
9 Dachshund Av. & Cordova Rd. **FUTURE INTERSECTION**	10 Dachshund Av. & Dwy. 1 **FUTURE INTERSECTION**	11 Dachshund Av. & Dwy. 2 **FUTURE INTERSECTION**	12 Dachshund Av. & Dwy. 3 **FUTURE INTERSECTION**
13 Dachshund Av. & Dwy. 4 **FUTURE INTERSECTION**	14 Dwy. 5 & Cordova Rd. **FUTURE INTERSECTION**	15 Dwy. 6 & Cordova Rd. **FUTURE INTERSECTION**	

INSET A



LEGEND:

= INTERSECTION ID

= FUTURE ROADWAY

EXHIBIT 6-3: HORIZON YEAR (2040) WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)

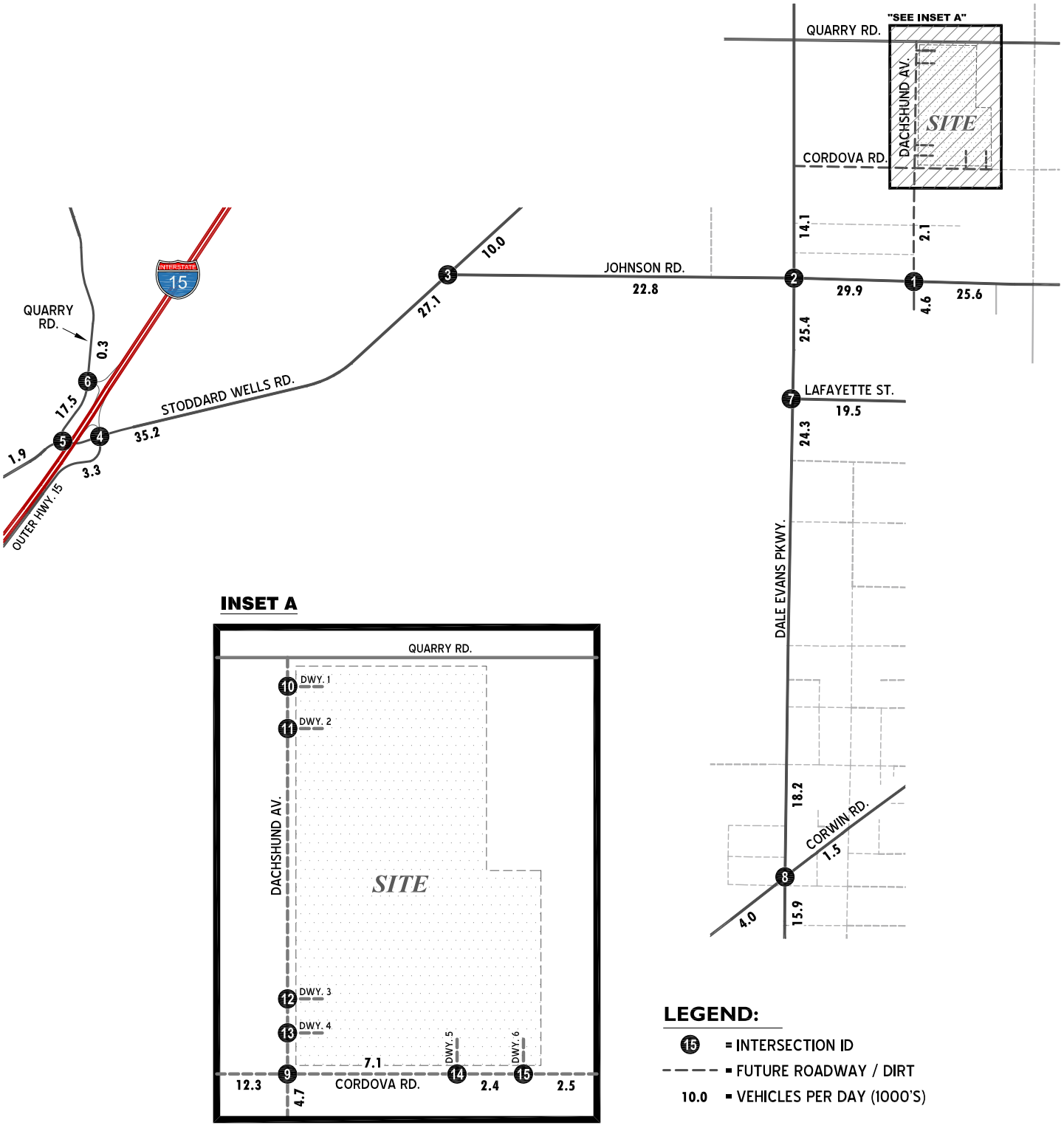
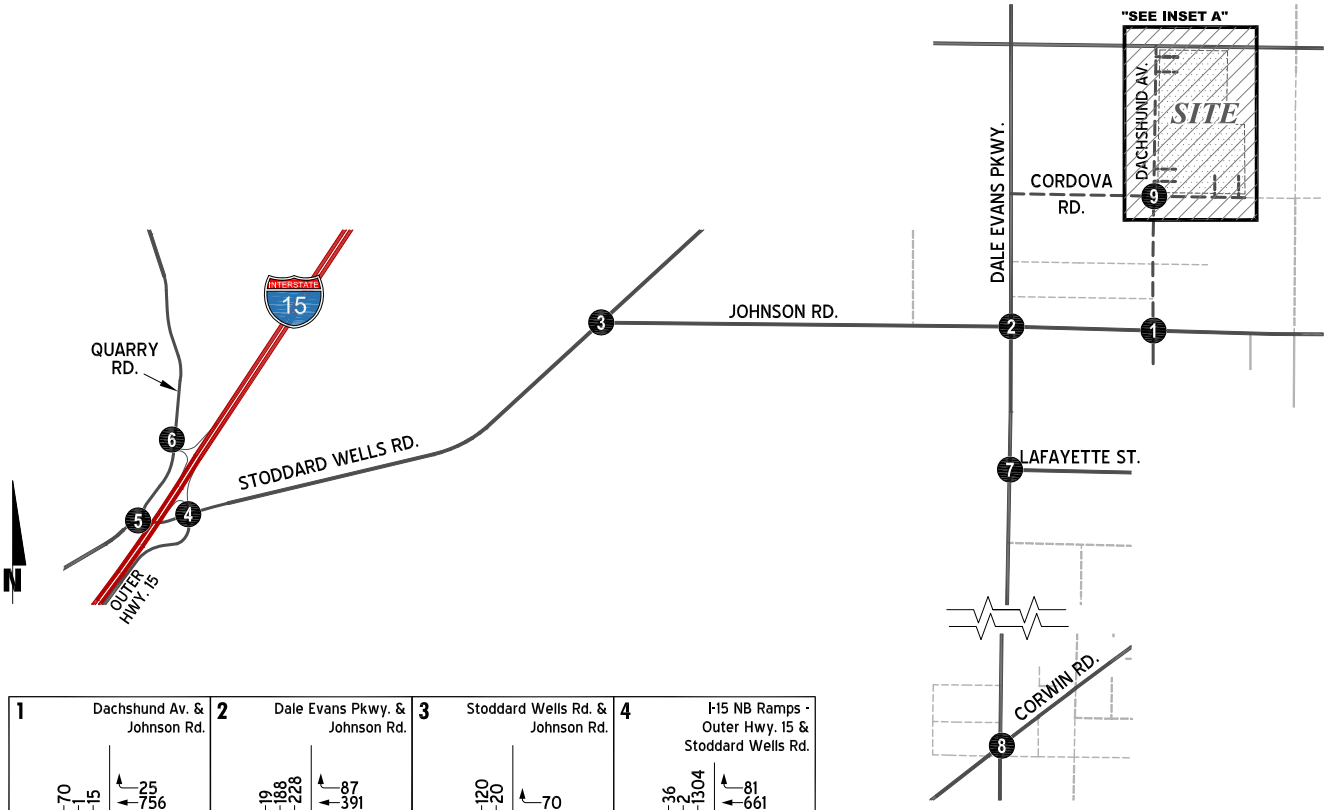
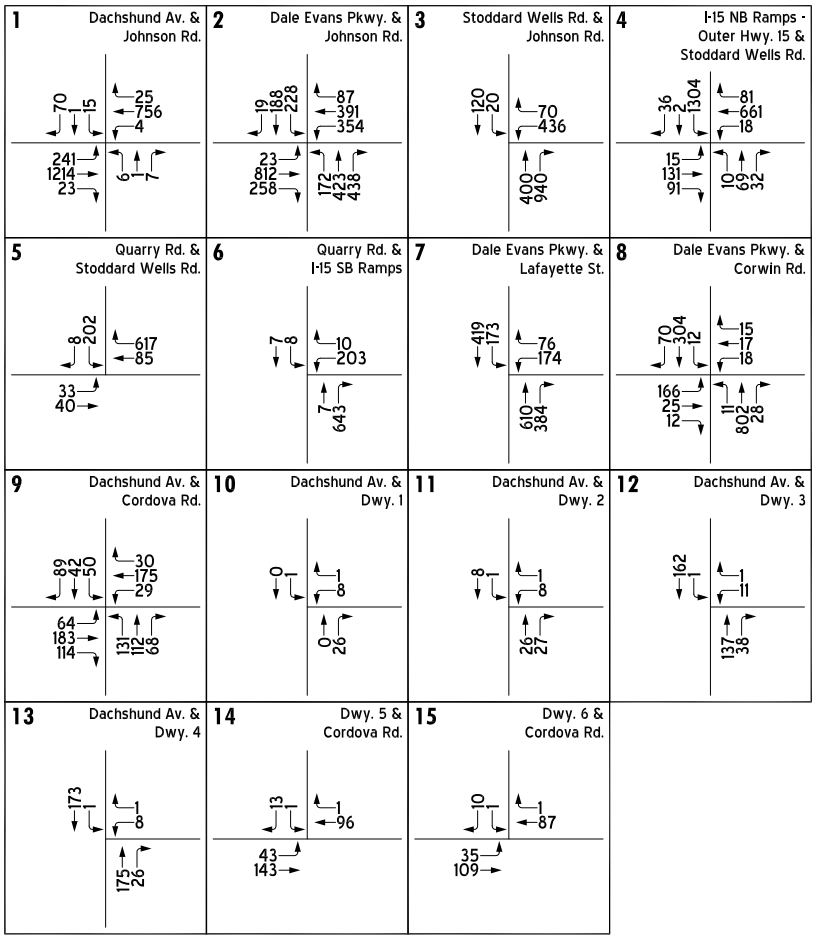
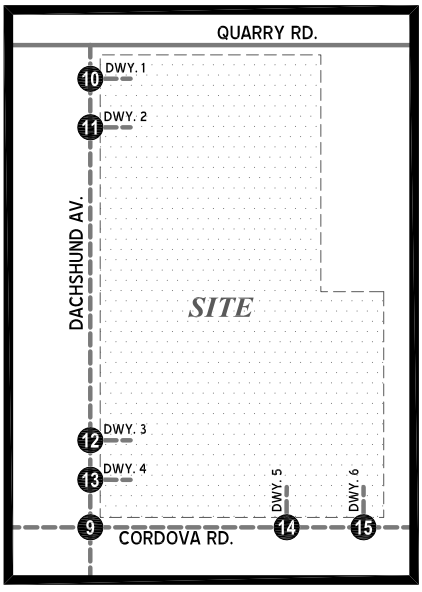


EXHIBIT 6-4: HORIZON YEAR (2040) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES





INSET A

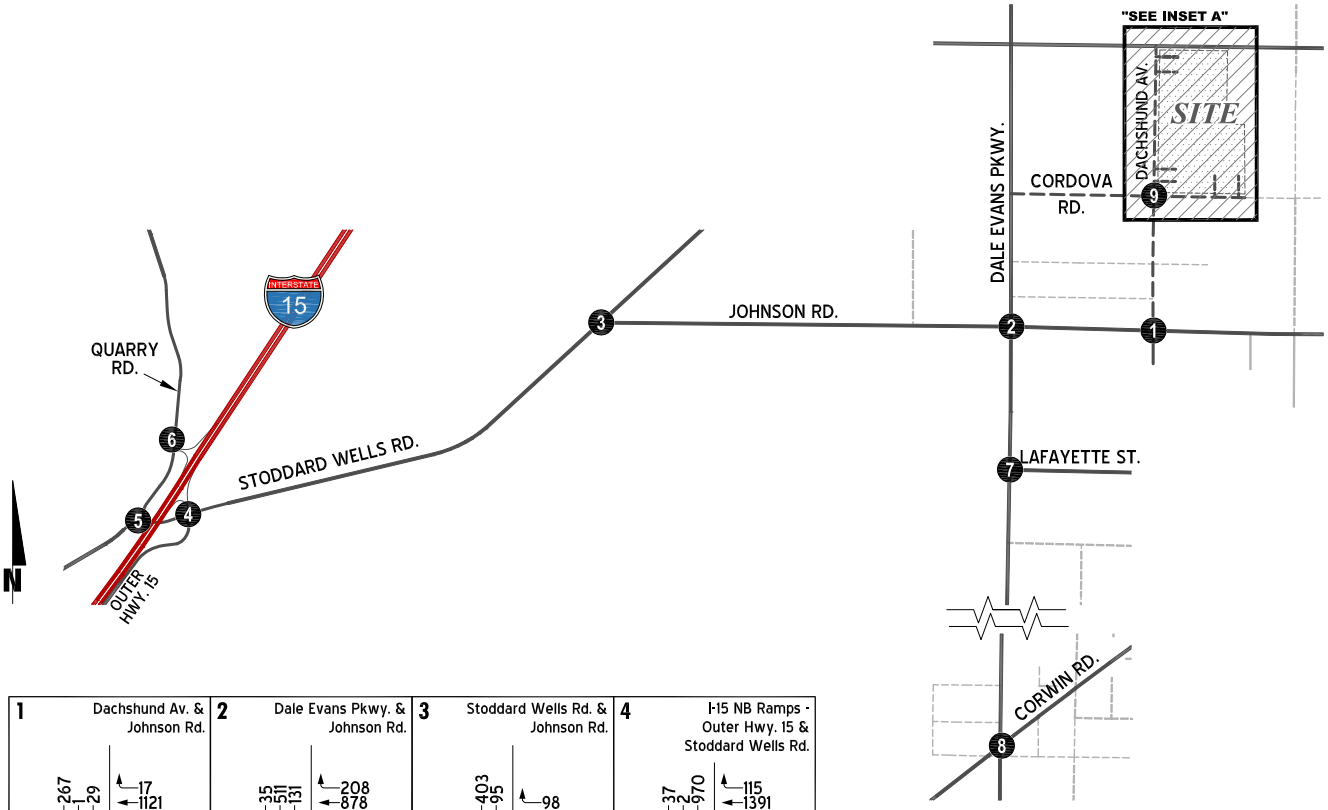


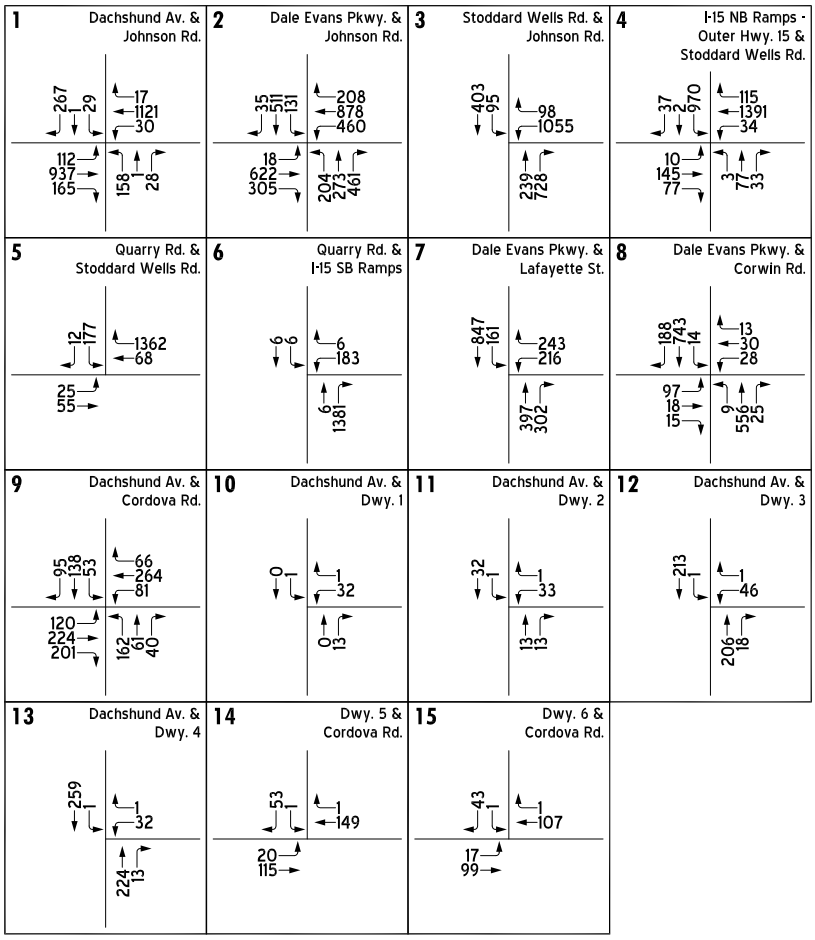
LEGEND:

= INTERSECTION ID

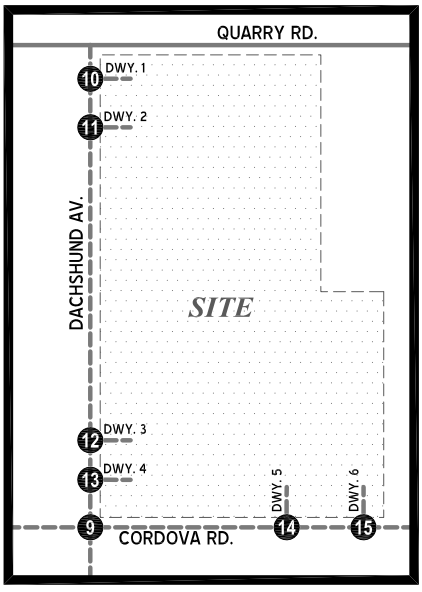
= FUTURE ROADWAY

EXHIBIT 6-5: HORIZON YEAR (2040) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES





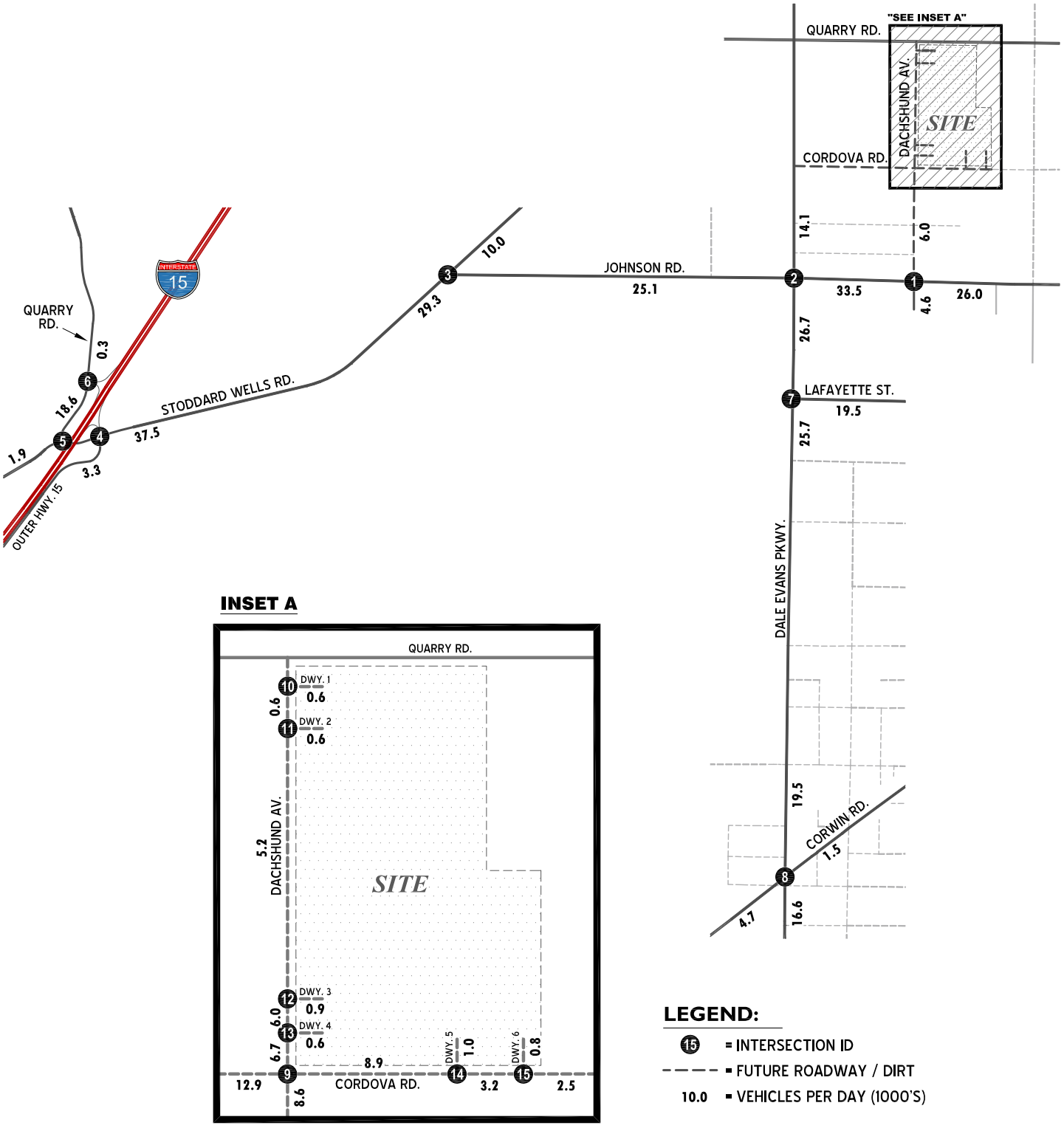
INSET A



LEGEND:

- # = INTERSECTION ID
- = FUTURE ROADWAY

EXHIBIT 6-6: HORIZON YEAR (2040) WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)



6.4.2 HORIZON YEAR (2040) WITH PROJECT TRAFFIC CONDITIONS

With the addition of Project traffic, as shown on Table 6-1, there are no additional study area intersections anticipated to operate at an unacceptable LOS during the peak hours for Horizon Year (2040) With Project traffic conditions. The intersection operations analysis worksheets for Horizon Year (2040) With Project traffic conditions are included in Appendix 6.2 of this TA.

The recommended General Plan traffic control improvements and intersection lane configurations are shown on Exhibit 1-6.

6.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

The traffic signal warrant analysis for Horizon Year (2040) traffic conditions are based on the peak hour volumes or planning level ADT volume-based traffic signal warrants. The following intersections are anticipated to meet a traffic signal warrant under Horizon Year (2040) traffic conditions, with or without the Project, beyond the locations previously identified for opening year cumulative conditions (see Appendix 6.3):

- Dale Evans Pkwy. / Lafayette St. (#7)
- Dale Evans Pkwy. / Corwin Rd. (#8)
- Dachshund Av. / Cordova Rd. (#9)

6.6 QUEUING ANALYSIS

Pursuant to the Town approved scoping agreement, a queuing analysis was performed for Project access intersections. Queuing analysis findings are presented in Table 6-2. Adjacent to the Project site, the following left turn pockets are recommended to be implemented in conjunction with site development:

- Dachshund Avenue & Cordova Road (#9)
    - Northbound Left – 200'
    - Southbound Left – 200'
    - Eastbound Left – 200'
    - Westbound Left – 200'

Horizon Year (2040) With Project traffic conditions, with improvements, queuing analysis worksheets are provided in Appendix 6.4.

TABLE 6-1: INTERSECTION ANALYSIS FOR HORIZON YEAR (2040) CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2]												2040 w/o Project				2040 w/ Project			
			Northbound			Southbound			Eastbound			Westbound			Delay[3] (secs.)		Level of Service		Delay[3] (secs.)		Level of Service	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
1	Dachshund Av. / Johnson Rd.																					
	- With Cross-Street Stop	CSS	1	1	0	**1**	**1**	0	**1**	1	0	**1**	1	0	>80	>80	F	F	>80	>80	F	F
	- With Traffic Signal	**TS**	1	1	0	**1**	**1**	0	**1**	**2**	0	**1**	**1**	0	11.7	31.1	B	C	12.8	38.2	B	D
2	Dale Evans Pkwy. / Johnson Rd.																					
	- Without Improvements	AWS	1	1	1	1	1	0	0	1!	0	0.5	0.5	1>>	>80	>80	F	F	>80	>80	F	F
	- With Improvements	**TS**	1	**2**	**1>**	1	**2**	0	**1**	**2**	0	**1**	**2**	1>>	50.0	48.8	D	D	54.1	54.3	D	D
3	Stoddard Wells Rd. / Johnson Rd.																					
	- Without Improvements	CSS	0	1	0	0.5	0.5	0	0	0	0	0	1!	0	>80	>80	F	F	>80	>80	F	F
	- With Improvements	**TS**	0	**2**	**1>**	**1**	**2**	0	0	0	0	**1**	1	0	15.6	22.4	B	C	16.0	24.3	B	C
4	I-15 NB Ramps - Outer Hwy. 15 / Stoddard Wells Rd.																					
	- Without Improvements	CSS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	>80	>80	F	F	>80	>80	F	F
	- With Improvements	**TS**	**1**	1	0	**1**	1!	0	**1**	**2**	0	**1**	**2**	0	35.4	37.1	D	D	37.3	38.7	D	D
5	Quarry Rd. / Stoddard Wells Rd.																					
	- Without Improvements	CSS	0	0	0	0	1!	0	0.5	0.5	0	0	1	0	25.0	>80	C	F	26.3	>80	D	F
	- With Improvements	CSS	0	0	0	0	1!	0	0.5	**1.5**	0	0	**2**	**1**	12.0	13.1	B	B	12.0	14.1	B	B
6	Quarry Rd. / I-15 SB Ramps																					
	- Without Improvements	CSS	0	1	0	0.5	0.5	0	0	0	0	0	1!	0	15.8	>80	C	F	16.2	>80	C	F
	- With Improvements	CSS	0	1	**1**	0.5	0.5	0	0	0	0	0	1!	0	10.2	17.4	B	C	10.2	19.7	B	C
7	Dale Evans Pkwy. / Lafayette St.																					
	- With Cross-Street Stop	CSS	**1**	1	0	1	1	0	0	**1!**	0	0	1!	0	>80	>80	F	F	>80	>80	F	F
	- With Traffic Signal	**TS**	**1**	**2**	0	1	**2**	0	**1**	**2**	0	**1**	**2**	0	51.4	52.9	D	D	52.0	54.0	D	D
8	Dale Evans Pkwy. / Corwin Rd.																					
	- Without Improvements	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	>80	>80	F	F	>80	>80	F	F
	- With Improvements	**TS**	**1**	**2**	0	**1**	**2**	0	**1**	**2**	0	**1**	**2**	0	17.8	14.5	B	B	19.2	15.2	B	B
9	Dachshund Av. / Cordova Rd.																					
	- With Cross-Street Stop	**CSS**	0	**1!**	0	0	**1!**	0	0	**1!**	0	0	**1!**	0	23.3	>80	C	F	77.1	>80	F	F
	- With Traffic Signal	**TS**	**1**	**1**	0	**1**	**1**	0	**1**	**1**	0	**1**	**1**	0	17.2	18.9	B	B	7.4	42.4	A	D
10	Dachshund Av. / Dwy. 1	**CSS**	0	**1**	0	**0.5**	**0.5**	0	0	0	0	0	**1!**	0	-	-	-	-	8.6	8.7	A	A
11	Dachshund Av. / Dwy. 2	**CSS**	0	**1**	0	**0.5**	**0.5**	0	0	0	0	0	**1!**	0	-	-	-	-	8.8	8.9	A	A
12	Dachshund Av. / Dwy. 3	**CSS**	0	**1**	0	**0.5**	**0.5**	0	0	0	0	0	**1!**	0	-	-	-	-	10.5	12.1	B	B
13	Dachshund Av. / Dwy. 4	**CSS**	0	**1**	0	**0.5**	**0.5**	0	0	0	0	0	**1!**	0	-	-	-	-	10.8	12.6	B	B
14	Dwy. 5 / Cordova Rd.	**CSS**	0	0	0	0	**1!**	0	**0.5**	**0.5**	0	0	**1**	0	-	-	-	-	9.0	9.4	A	A
15	Dwy. 6 / Cordova Rd.	**CSS**	0	0	0	0	**1!**	0	**0.5**	**0.5**	0	0	**1**	0	-	-	-	-	8.9	9.1	A	A

[1] TS = Traffic Signal; CSS = Cross-Street Stop; AWS = All Way Stop

[2] 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; d = Defacto Right Turn Lane; 0.5 = Shared Lane; 1! = Shared Left/Through/Right lane; >> = Free-Right Turn; **1** = Improvement

[3] 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.

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Excel\[15504 - Report.xlsx]6-1

TABLE 6-2: PROJECT ACCESS QUEUEING ANALYSIS FOR HORIZON YEAR (2040) CONDITIONS WITH IMPROVEMENTS

ID	Intersection	Movement	# of Lanes	2040 With Project				Storage Length[2] (ft.)	95th Percentile Queue Length (ft.)[1,3]	
				AM	PM	Peak	Volume		AM	PM
9	Dachshund Av. / Cordova Rd.									
		NBL	1	131	162	PM	162	**200**	170	183
		SBL	1	50	53	PM	53	**200**	60	155
		EBL	1	64	120	PM	120	**200**	62	167
		WBL	1	29	81	PM	81	**200**	71	188
10	Dachshund Av. / Dwy. 1									
		WBL/R	1	9	33	PM	33	**>50**	31	48
11	Dachshund Av. / Dwy. 2									
		WBL/R	1	9	34	PM	34	**>50**	26	61
12	Dachshund Av. / Dwy. 3									
		WBL/R	1	12	47	PM	47	**>50**	34	57
13	Dachshund Av. / Dwy. 4									
		WBL/R	1	9	33	PM	33	**>50**	35	61
14	Dwy. 5 / Cordova Rd.									
		SBL/R	1	14	54	PM	54	**>50**	33	45
		EBL/T	1	186	135	AM	186	**>100**	31	18
15	Dwy. 6 / Cordova Rd.									
		SBL/R	1	11	44	PM	44	**>50**	34	48
		EBL/T	1	144	116	AM	144	**>100**	23	17

[1] Queue length calculated using SimTraffic.

[2] 1 = Existing storage length; **1** = Proposed storage length

[3] NOM = Nominal, less than 5 feet.

[4] Review of SimTraffic simulation results indicate that the turn lane queue is anticipated to clear in a timely manner and that the provided pocket length is adequate to accommodate the 95th percentile queue.

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Excel\[15504 - Report.xlsx]6-2

7 LOCAL AND REGIONAL FUNDING MECHANISMS

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

7.1 TOWN OF APPLE VALLEY DEVELOPMENT IMPACT FEE PROGRAM

The Town of Apple Valley has created its own local DIF program to impose and collect fees from new residential, commercial, and industrial development for the purpose of funding roadways and intersections necessary to accommodate Town growth as identified in the Town's General Plan Circulation Element.

Under the Town's DIF program, the Town may grant to developers a credit against specific components of fees when those developers construct certain facilities and landscaped medians identified in the list of improvements funded by the DIF program. The timing to use the DIF fees is established through periodic capital improvement programs which are overseen by the Town's Public Works Department.

7.2 MEASURE "I" FUNDS

In 2004, the voters of San Bernardino County approved the 30-year extension of Measure "I", a one-half of one percent sales tax on retail transactions, through the year 2040, for transportation projects including, but not limited to, infrastructure improvements, commuter rail, public transit, and other identified improvements. The Measure "I" extension requires that a regional traffic impact fee be created to ensure development is paying its fair share. A regional Nexus study was prepared by the San Bernardino County Transportation Authority (SBCTA) and concluded that each jurisdiction should include a regional fee component in their local programs in order to meet the Measure "I" requirement. The regional component assigns specific facilities and cost sharing formulas to each jurisdiction and was most recently updated in March 2021. Revenues collected through these programs are used in tandem with Measure "I" funds to deliver projects identified in the Nexus Study. While Measure "I" is a self-executing sales tax administered by SBCTA, it bears discussion here because the funds raised through Measure "I" have funded in the past and will continue to fund new transportation facilities in San Bernardino County.

7.3 FAIR SHARE CONTRIBUTION

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

When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution toward future improvements.

Detailed fair share calculations for each peak hour, have been provided in Table 7-1 for the applicable deficient intersections shown previously in Table 1-2. Improvements included in a defined program and constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate.

TABLE 7-1: FAIR SHARE CALCULATIONS

#	Intersection	Existing (2023) Traffic	HY (2040) w/ Project Traffic	Project Only Traffic	Total New Traffic[1]	Project Fair Share (%)[2]
1	Dachshund Av. / Johnson Rd.					
	• AM Peak Hour	510	2,324	145	1,814	8.0%
	• PM Peak Hour	771	3,023	189	2,252	**8.4%**
2	Dale Evans Pkwy. / Johnson Rd.					
	• AM Peak Hour	268	3,429	144	3,161	4.6%
	• PM Peak Hour	411	3,659	189	3,248	**5.8%**
3	Stoddard Wells Rd. / Johnson Rd.					
	• AM Peak Hour	288	1,424	66	1,136	5.8%
	• PM Peak Hour	426	1,692	89	1,266	**7.0%**
4	I-15 NB Ramps - Outer Hwy. 15 / Stoddard Wells Rd.					
	• AM Peak Hour	277	1,184	115	907	**12.7%**
	• PM Peak Hour	406	1,632	150	1,226	12.2%
5	Quarry Rd. / Stoddard Wells Rd.					
	• AM Peak Hour	317	1,069	115	752	15.3%
	• PM Peak Hour	477	1,322	150	845	**17.8%**
6	Quarry Rd. / I-15 SB Ramps					
	• AM Peak Hour	182	427	27	245	11.0%
	• PM Peak Hour	258	841	108	583	**18.5%**
8	Dale Evans Pkwy. / Corwin Rd.					
	• AM Peak Hour	130	1,756	18	1,626	1.1%
	• PM Peak Hour	197	1,819	24	1,622	**1.5%**
9	Dachshund Av. / Cordova Rd.					
	• AM Peak Hour	68	1,558	18	1,490	1.2%
	• PM Peak Hour	121	1,432	24	1,311	**1.8%**

[1] Total New Traffic = (Horizon Year 2040 with Project - Existing Traffic)

[2] Project Fair Share % = (Project Only Traffic / Total New Traffic)

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Excel\[15504 - Report.xlsx]7-1

This Page Intentionally Left Blank

8 REFERENCES

1. **County of San Bernardino.** *County of San Bernardino Transportation Impact Study Guidelines.* County of San Bernardino : s.n., July 2019.
2. **San Bernardino Associated Governments.** *Congestion Management Program for County of San Bernardino.* County of San Bernardino : s.n., Updated June 2016.
3. **Transportation Research Board.** *Highway Capacity Manual (HCM).* 6th Edition. s.l. : National Academy of Sciences, 2016.
4. **California Department of Transportation.** California Manual on Uniform Traffic Control Devices (CA MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CA MUTCD).* 2014, Updated March 30, 2021 (Revision 6).
5. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.
6. **Southern California Association of Governments.** *Demographics and Gorwth Forecast Technical Report.* SCAG : s.n., Adopted on September 3, 2020.

This page intentionally left blank

APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT

This Page Intentionally Left Blank

October 25, 2023

Mr. Richard Pederson
Town of Apple Valley
14955 Dale Evans Pkwy.
Apple Valley, CA 92307

CORDOVA ROAD LOGISTICS FACILITY LEVEL OF SERVICE (LOS) AND VEHICLE MILES TRAVELED (VMT) SCOPING AGREEMENT

Dear Mr. Richard Pederson:

Urban Crossroads, Inc. is pleased to submit this scoping letter to the Town of Apple Valley regarding the Level of Service (LOS) and Vehicle Miles Traveled (VMT)to be prepared for the proposed Cordova Road Logistics Facility development ("Project"), which is located south of Quarry Road and east of Dachshund Rd. in the Town of Apple Valley. It is our understanding that the Project is to consist of 1,346,270 square feet (sf) of high cube warehouse/distribution.

The remainder of this letter describes the proposed analysis methodology, Project trip generation, trip distribution, and Project traffic assignment/project trips on the surrounding roadway network. The following scoping assumptions have been prepared in accordance with the County of San Bernardino's Transportation Impact Study Guideline (July 9, 2019) as the Town of Apple Valley utilizes the County guidelines.

A preliminary site plan the proposed Project is shown on Exhibit 1. Exhibit 2 depicts the location of the proposed project in relation to the existing roadway network. It is anticipated that the Project would be occupied by year 2025. Project will have four full access points along the future Dachshund Road and two full access points along the future Cordova Road.

TRIP GENERATION

For purposes of this analysis, the Project is assumed to consist of 1,144,330 square of high cube warehouse floor area (85% of total), and 201,940 square feet of cold storage (15% 0f total). In order to develop the traffic characteristics of the high-cube warehouse land use for the Proposed Project, trip-generation statistics published in the TUMF High-Cube Warehouse Trip Generation Study (WSP, January 29, 2019) are used. The purpose of WSP 2019 study was to gather enough data to develop reliable trip generation rates for centers for use in traffic impact studies in the Inland Empire.

In addition, the South Coast Air Quality Management District (SCAQMD) recommends the use of 0.64 truck trips per 1,000 square feet, which would account for variations in the future users.

For the remaining high-cube cold storage portion of the Proposed Project, the trip generation rates published by the Institute of Transportation Engineers (ITE) as provided in their Trip Generation Manual, 11th Edition (2021) have been utilized.

Refinements to the raw trip generation estimates for the high-cube cold storage warehouse have been made to provide a more detailed breakdown of trips by vehicle mix. Data regarding the vehicle mix has been obtained from the High Cube Warehouse Vehicle Trip Generation Analysis (ITE, October 2016). The ITE 2016 vehicle trip generation analysis provides vehicle mix datasets for Cold Storage Warehouse uses, which consists of 32.2% trucks for daily trips, 30.8% trucks for AM peak hour trips and 21.7% trucks for PM peak hour trips. The South Coast Air Quality Management (SCAQMD) recommended truck mix for each axle type is utilized for 2- axle, 3-axle, and 4+-axle trucks for warehouse use with cold storage.

Passenger car equivalents (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.

Table 1 shows the vehicle trip generation rates for the Proposed Project, as well as the vehicle trip generation summary with daily and peak hour trip generation estimates. Table 2 presents the passenger-car-equivalent (PCE) trip generation rates for the Proposed Project with the resulting PCE daily and peak hour trip generation estimates. As shown on Table 2, Proposed Project is anticipated to generate a total of 4,518 PCE trip-ends per day with 253 AM peak vehicle hour trips and 334 PM peak hour vehicle trips.

TRIP DISTRIBUTION AND TRIP ASSIGNMENT

The trip distribution pattern is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to the regional freeway system. Exhibits 3 and 4 presents the Project distribution patterns for passenger cars and trucks, respectively.

Based on the identified Project traffic generation and trip distribution patterns, Project peak hour intersection turning movement volumes are shown on Exhibits 5 and 6. Per conversation with City staff, access to Quarry Road is not anticipated.

ANALYSIS SCENARIOS

Consistent with Town of Apple Valley and County LOS guidelines, intersection analysis will be provided for the following analysis scenarios:

- Existing (2023) Conditions
- Background Without and With Project (2025)
- Cumulative Without and With Project (2040)

Exhibit 7 shows the Town of Apple Valley General Plan Street System and Exhibit 8 illustrates the Town of Apple Valley General Plan roadway cross-sections. As shown on Exhibit 7, Cordova Road, Dachshund Road, and Quarry Road are classified as Secondary Roadway within the study area. It should be noted however that the classification of the roadways adjacent to the site may change.

The Town of Apple Valley Truck Routes are presented on Exhibit 9.

STUDY AREA

Consistent with the Town of Apple Valley and County LOS guidelines, study area intersections have been identified for the Project based on the contribution of 50 or more peak hour trips. Based on this criterion, anticipated trip generation and trip distribution, the following intersections will be evaluated:

#	Intersection	#	Intersection
1	Dachshund Av. / Johnson Rd.	9	Dachshund Av. / Cordova Rd.
2	Dale Evans Pkwy. / Johnson Rd.	10	Dachshund Av. / Dwy. 1
3	Stoddard Wells Rd. / Johnson Rd.	11	Dachshund Av. / Dwy. 2
4	I-15 NB Ramps - Outer Hwy. 15 / Stoddard Wells Rd.	12	Dachshund Av. / Dwy. 3
5	Quarry Rd. / Stoddard Wells Rd.	13	Dachshund Av. / Dwy. 4
6	Quarry Rd. / I-15 SB Ramps	14	Dwy. 5 / Cordova Rd.
7	Dale Evans Pkwy. / Lafayette St.	15	Dwy. 6 / Cordova Rd.
8	Dale Evans Pkwy. / Corwin Rd.		

Exhibit 2 identifies the proposed study area intersection analysis locations.

LEVEL OF SERVICE (LOS) CRITERIA

Per the Town of Apple Valley General Plan, roadway segments and intersections should generally operate at level of Service C or better, wherever feasible, and that all intersections maintain a Level of Service D or better during both morning and evening peak hours.

PREFERRED ANALYSIS METHODOLOGY

For the purposes of this analysis, signalized intersection operations analysis will be based on the methodology described in the Highway Capacity Manual (6th Edition). Intersection LOS operations are based on an intersection's average control delay. Unsignalized intersections will be evaluated using the methodology described in the HCM 6th Edition.

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

EXISTING 2023 VOLUMES

For the existing study area intersections, new traffic counts will be collected in November 2023 during the following timeframes: 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM.

CUMULATIVE DEVELOPMENT TRAFFIC

It is requested that Town staff review the list of cumulative development projects (shown on Exhibit 10 and listed on Table 3) for inclusion in the traffic study. Consistent with other studies performed in the area, an ambient growth rate of 2% per year will be utilized as a minimum if necessary. The rate will be compounded over a 2-year period (i.e., 1.02^{2years} = 1.0404 or 4.04%) for Interim Year (2025) conditions.

Where available, mitigation measures from the traffic studies prepared for nearby cumulative developments will be reviewed for consistency with the findings of this Project traffic analysis.

SPECIAL ISSUES

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

Traffic Signal Warrant Analysis: Signal warrant analysis will be prepared for all unsignalized study area intersections that allow for full access (no traffic signal warrants to be performed for restricted access locations due to infeasibility of installing a signal at these types of locations).

Queueing: Queuing analysis will be performed at Project access points to determine pocket storage lengths needed to accommodate 95th percentile queues.

Improvements: Based on the traffic analysis results, the TA will indicate new improvement requirements and fair share contribution for the proposed Project.

Vehicle Miles Traveled (VMT): VMT analysis will be conducted in accordance with Town guidelines.

VEHICLE MILES TRAVELED (VMT) SCREENING

The VMT screening assessment will be prepared under separate cover. The California Environmental Quality Act (CEQA) procedures for determination of transportation impacts have recently changed to an evaluation of Vehicle Miles Traveled (VMT) rather than vehicle delay or level of service, due to Senate Bill 743 (SB 743).

County of San Bernardino VMT screening guidelines will be applied to the project, unless otherwise directed by Town staff. To estimate Baseline Plus Project Conditions, adjustments to socio-economic data (i.e., number of employees) are to be made for the Project's traffic analysis zone (TAZ) or a separate TAZ in the San Bernardino Transportation Analysis Model (SBTAM) base year model (i.e., 2016).

CONCLUSION

Urban Crossroads, Inc. is pleased to submit this letter documenting the Project trip generation, trip distribution and assignment, analysis scenarios and the recommended intersection analysis locations for the Cordova Road Logistics Facility Level of Service (LOS) and Vehicle Miles Traveled (VMT).

Please review this scoping agreement let us know if it is acceptable, or if the Town requests any changes to this proposed scope of work. If you have any questions, please contact John Kain at (949) 375-2435 or Marlie Whiteman (714) 585-0574.

Respectfully submitted,

URBAN CROSSROADS, INC.

John Kain
Principal

Marlie Whiteman, P.E.
Senior Associate

Attachments

EXHIBIT 1: SITE PLAN

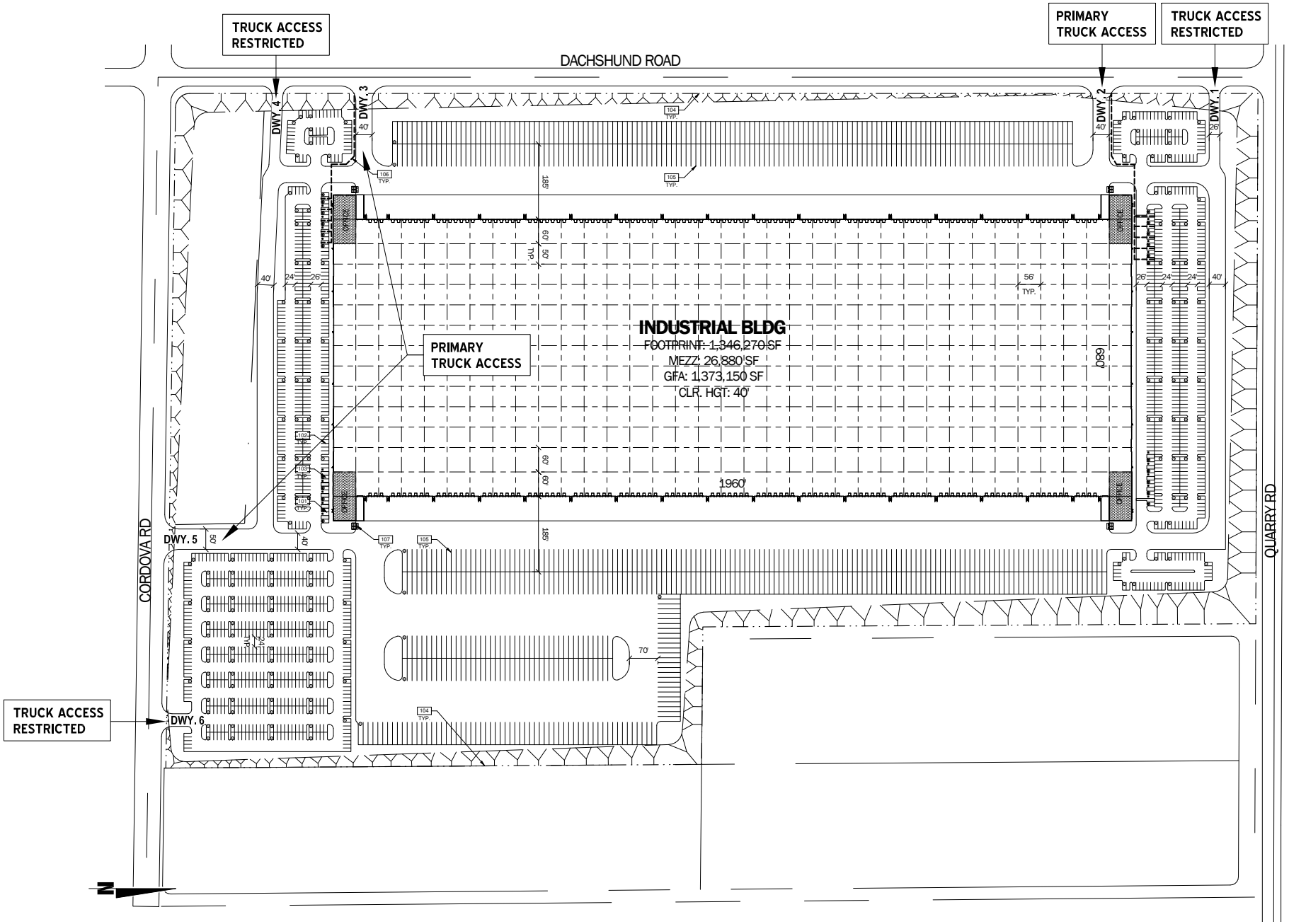
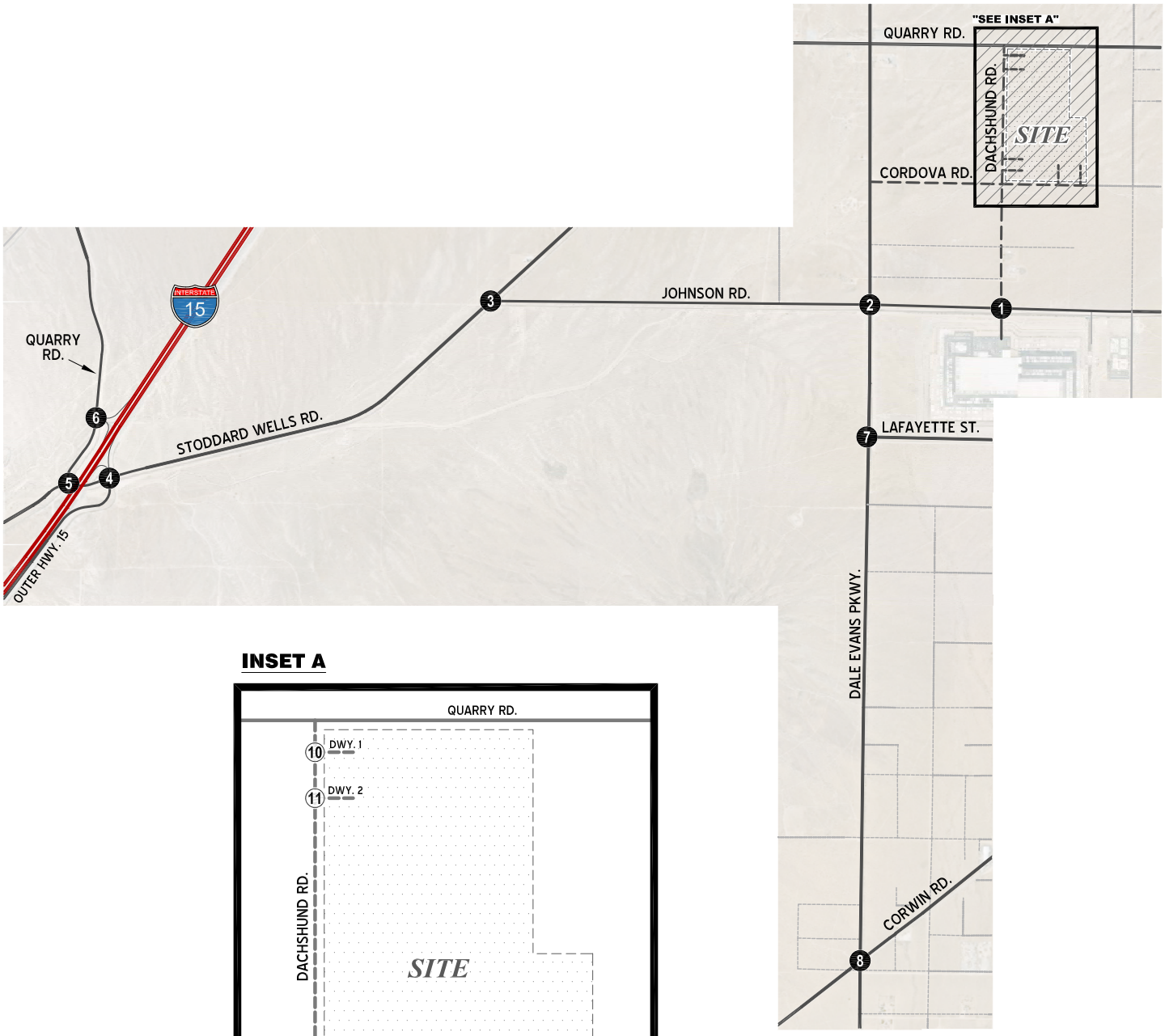
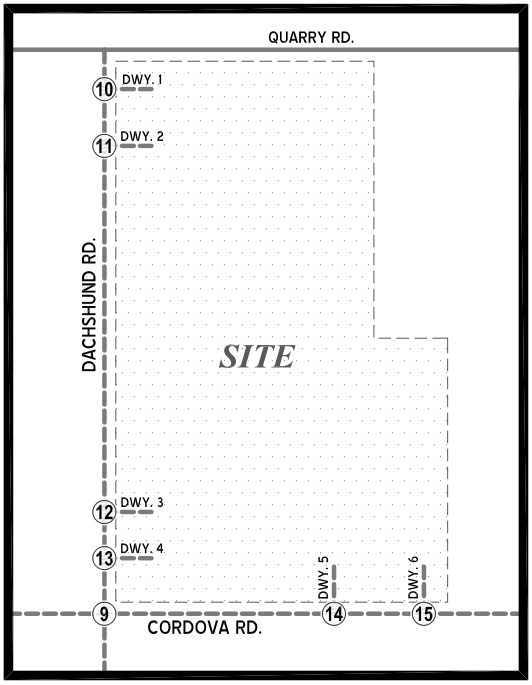


EXHIBIT 2: TRAFFIC ANALYSIS STUDY AREA



INSET A



LEGEND:

- 9 = EXISTING ANALYSIS LOCATION
- (7) = FUTURE ANALYSIS LOCATION
- = FUTURE ROADWAY

N

TABLE 1: PROJECT TRIP GENERATION SUMMARY
ACTUAL VEHICLES

Proposed Project Trip Generation Rates[1]

Land Use	ITE LU Code	Quantity[2]	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
High-Cube Warehouse[3]	-	1,144.330 TSF	0.094	0.028	0.122	0.046	0.119	0.165	2.129
Passenger Cars			0.066	0.020	0.086	0.033	0.082	0.115	1.489
2 to 4-Axle+ Trucks			0.028	0.008	0.036	0.014	0.036	0.050	0.640
High-Cube Cold Storage Warehouse[4,5,6]	157	201.940 TSF	0.085	0.025	0.110	0.034	0.086	0.120	2.12
Passenger Cars (69.2% AM, 78.3% PM, 67.8% Daily)			0.059	0.017	0.076	0.026	0.068	0.094	1.437
2-Axle Trucks (10.69% AM, 7.53% PM, 11.17% Daily)			0.009	0.003	0.012	0.003	0.006	0.009	0.237
3-Axle Trucks (3.39% AM, 2.39% PM, 3.54% Daily)			0.003	0.001	0.004	0.001	0.002	0.003	0.075
4-Axle+ Trucks (16.72% AM, 11.78% PM, 17.49% Daily)			0.014	0.004	0.018	0.004	0.010	0.014	0.371

Proposed Project Trip Generation Results

Land Use	ITE LU Code	Quantity[2]	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
High-Cube Warehouse	-	1,144.330 TSF							
- Passenger Cars			75	23	98	37	94	131	1,704
- Truck Trips (Actual)			32	10	42	16	41	57	732
High Cube Warehouse Subtotal			107	33	140	53	135	188	2,436
High-Cube Cold Storage Warehouse	157	201.940 TSF							
- Passenger Cars			12	4	16	5	14	19	290
- Truck Trips									
2-axle:			*2*	*1*	*3*	*1*	*1*	*2*	*48*
3-axle:			*1*	*0*	*1*	*0*	*0*	*0*	*15*
4+-axle:			*3*	*1*	*4*	*1*	*2*	*3*	*75*
- Net Truck Trips (Actual Vehicles)			6	2	8	2	3	5	138
High Cube Cold Storage Warehouse Subtotal			18	6	24	7	17	24	428
Passenger Cars Subtotal			87	27	114	42	108	150	1,994
Truck Trips Subtotal			38	12	50	18	44	62	870
PROJECT TOTAL TRIPS (ACTUAL VEHICLES)[7]			125	39	164	60	152	212	2,864

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

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

[3] Source: *TUMF High-Cube Warehouse Trip Generation Study* . Prepared by WSP, January 2019.
Passenger and Truck AM/PM peak hour (in/out) splits are estimated from based on ITE peak-to-daily relationship
Truck Daily Rate Source: *Notice of Preparation of a Draft Environmental Impact Report for the Proposed Potrero Logistics Center* .
Prepared by South Coast Air Quality Management District (SCAQMD), June 2020.

[4] Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Handbook, Third Edition (September 2017).

[5] Vehicle Mix Source: Institute of Transportation Engineers (ITE), High-Cube Warehouse Vehicle Trip Generation Analysis (October 2016).

[6] Truck Mix Source: SCAQMD Warehouse Truck Trip Study Data Results and Usage (2014).
With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks

[7] Total Net Trips (Actual Vehicles) = Passenger Cars + Net Truck Trips (Actual Trucks).

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Excel\[15504 - Scope.xlsx]15504 TG - Actual

TABLE 2: PROJECT TRIP GENERATION SUMMARY
PASSENGER CAR EQUIVALENT (PCE)

Project Trip Generation Rates[1]

Land Use	ITE LU Code	Quantity[2]	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
High-Cube Warehouse[3]	-	1,144.330 TSF	0.150	0.045	0.195	0.075	0.190	0.265	3.409
Passenger Cars			0.066	0.020	0.086	0.033	0.082	0.115	1.489
2 to 4-Axle+ Trucks (PCE = 3.0)			0.084	0.025	0.109	0.042	0.108	0.150	1.920
High-Cube Cold Storage Warehouse[4,5,6]	157	201.940 TSF	0.121	0.036	0.157	0.045	0.111	0.156	3.06
Passenger Cars			0.059	0.017	0.076	0.026	0.068	0.094	1.437
2-Axle Trucks (PCE = 1.5)			0.014	0.005	0.019	0.005	0.009	0.014	0.356
3-Axle Trucks (PCE = 2.0)			0.006	0.002	0.008	0.002	0.004	0.006	0.150
4-Axle+ Trucks (PCE = 3.0)			0.042	0.012	0.054	0.012	0.030	0.042	1.113

Project Trip Generation Results

Land Use	ITE LU Code	Quantity[2]	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
High-Cube Warehouse	-	1,144.330 TSF							
- Passenger Cars			75	23	98	37	94	131	1,704
- Truck Trips (PCE = 3.0)			96	29	125	48	124	172	2,197
High Cube Warehouse Subtotal			171	52	223	85	218	303	3,901
High-Cube Cold Storage Warehouse	157	201.940 TSF							
- Passenger Cars			12	3	15	5	14	19	290
- Truck Trips									
2-axle (PCE = 1.5):			*3*	*1*	*4*	*1*	*2*	*3*	*72*
3-axle (PCE = 2.0):			*1*	*0*	*1*	*0*	*1*	*1*	*30*
4+-axle (3.0):			*8*	*2*	*10*	*2*	*6*	*8*	*225*
- Net Truck Trips (PCE)			12	3	15	3	9	12	327
High Cube Cold Storage Warehouse Subtotal			24	6	30	8	23	31	617
Passenger Cars Subtotal			87	26	113	42	108	150	1,994
Truck Trips Subtotal			108	32	140	51	133	184	2,524
PROJECT TOTAL EXTERNAL TRIPS (PCE)[7]			195	58	253	93	241	334	4,518

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

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

[3] Source: *TUMF High-Cube Warehouse Trip Generation Study* . Prepared by WSP, January 2019.
Passenger and Truck AM/PM peak hour (in/out) splits are estimated from based on ITE peak-to-daily relationship
Truck Daily Rate Source: *Notice of Preparation of a Draft Environmental Impact Report for the Proposed Potrero Logistics Center* .
Prepared by South Coast Air Quality Management District (SCAQMD), June 2020.

[4] Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Handbook, Third Edition (September 2017).

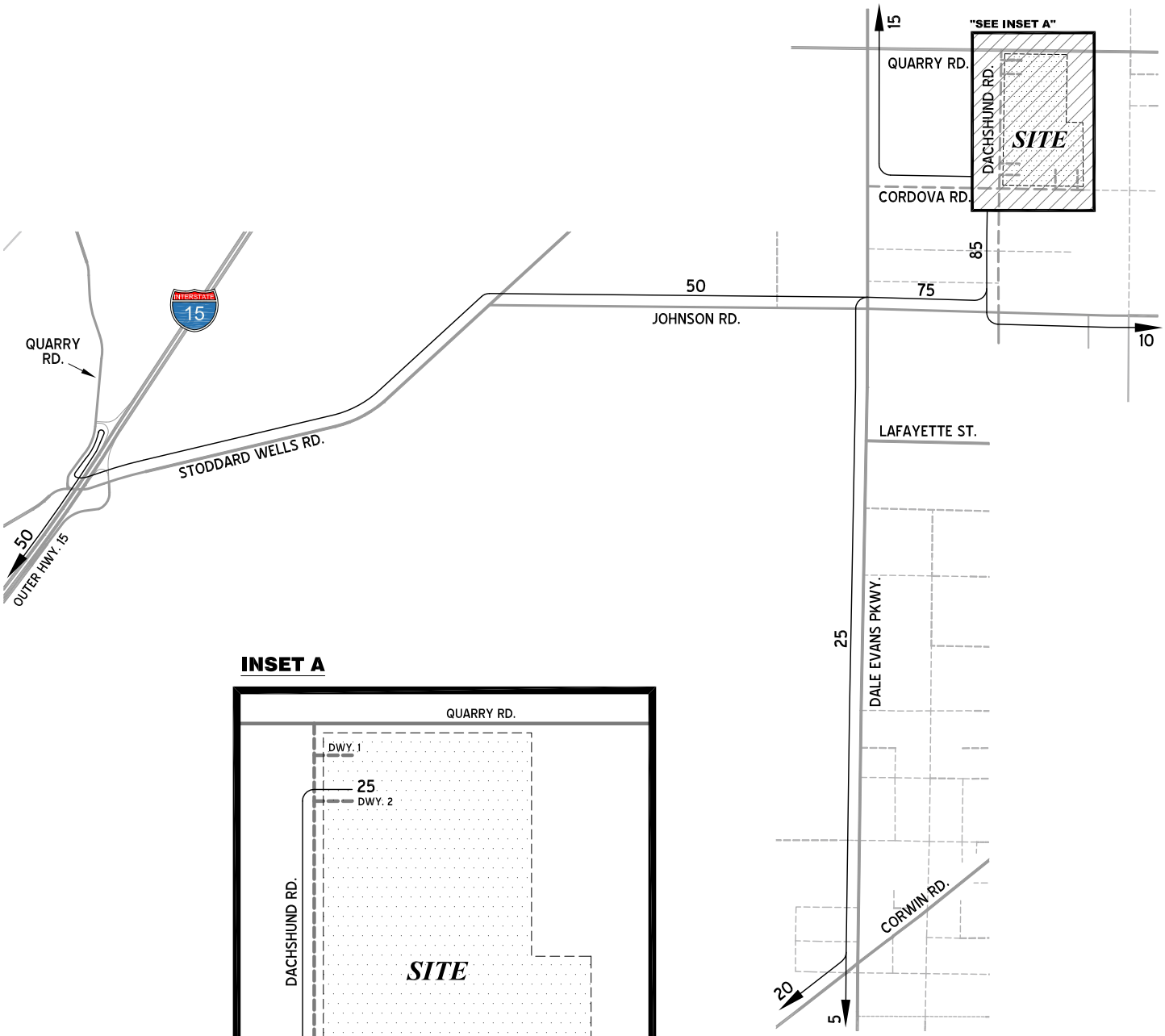
[5] Vehicle Mix Source: Institute of Transportation Engineers (ITE), High-Cube Warehouse Vehicle Trip Generation Analysis (October 2016).

[6] Truck Mix Source: SCAQMD Warehouse Truck Trip Study Data Results and Usage (2014).
With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks

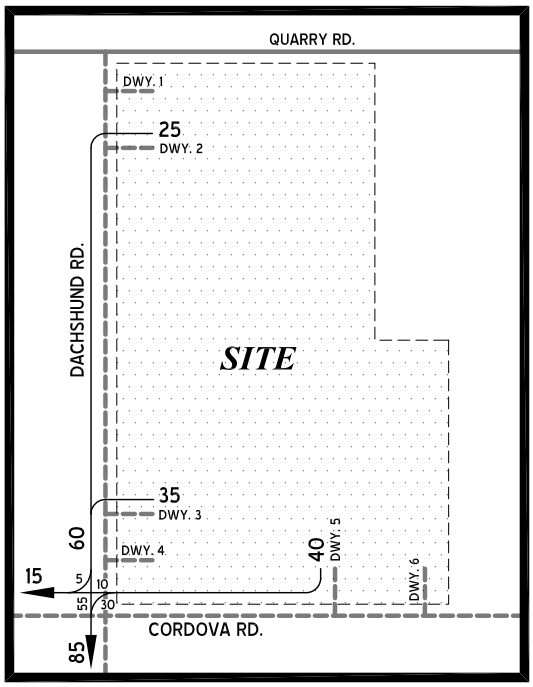
[7] Total Net Trips (PCE) = Passenger Cars + Net Truck Trips (Passenger Car Equivalent).

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Excel\[15504 - Scope.xlsx]15504 TG - PCE

EXHIBIT 3: PROJECT (TRUCK) TRIP DISTRIBUTION



INSET A



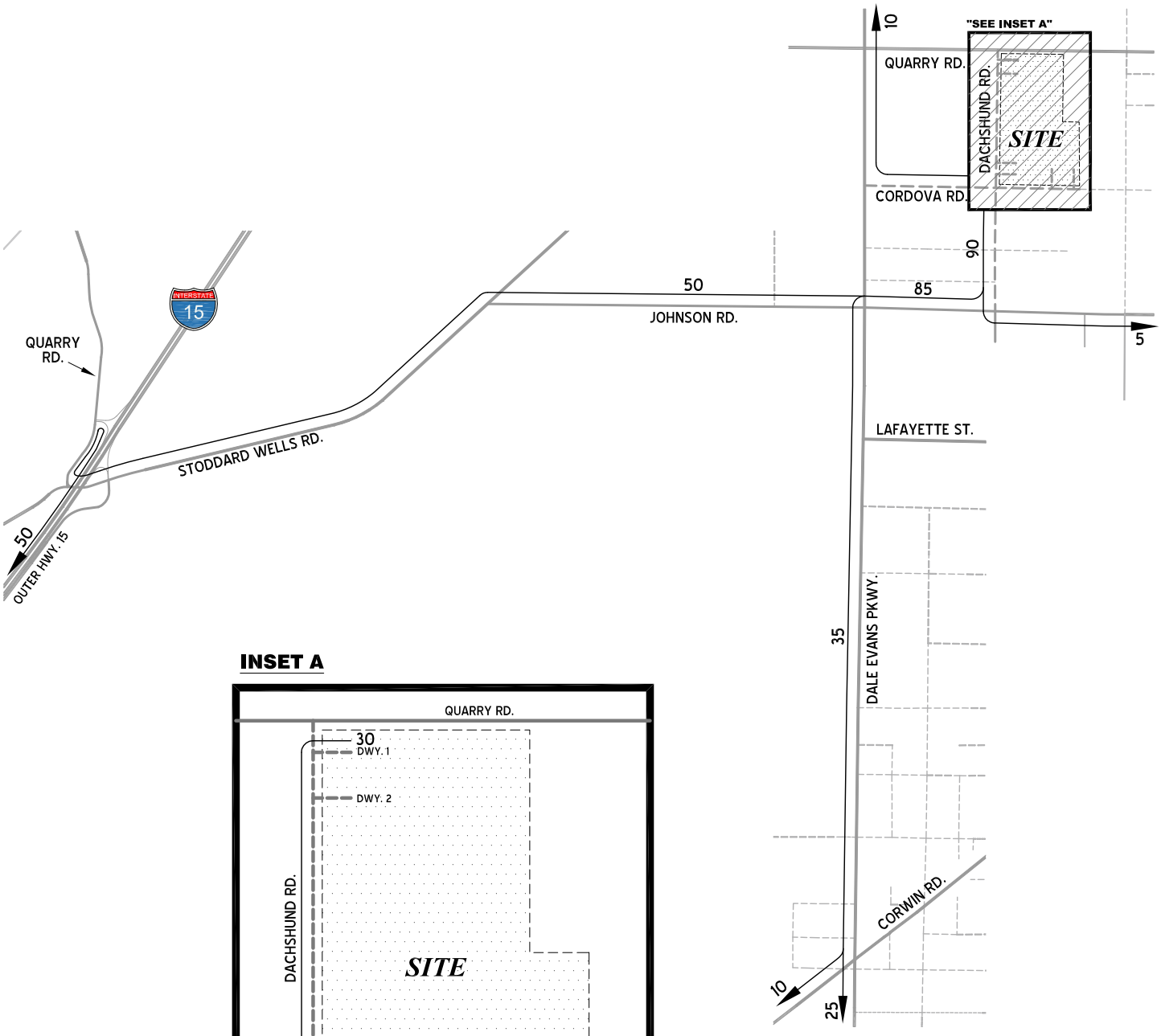
LEGEND:

10 = PERCENT TO/FROM PROJECT

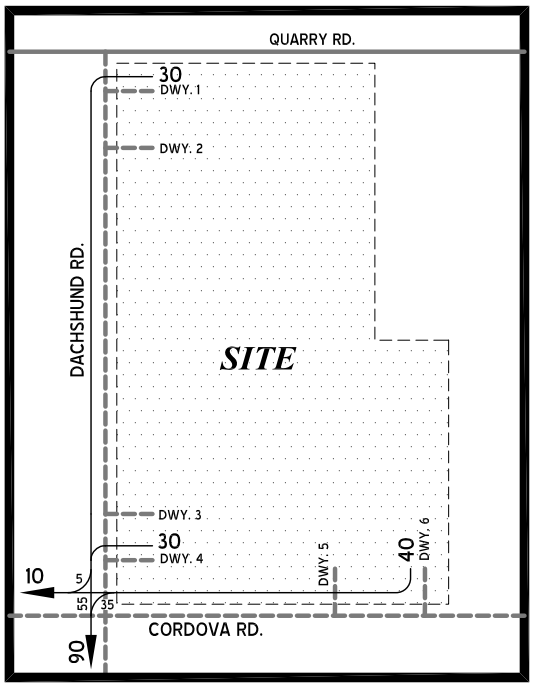
= FUTURE ROADWAY

N

EXHIBIT 4: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION



INSET A



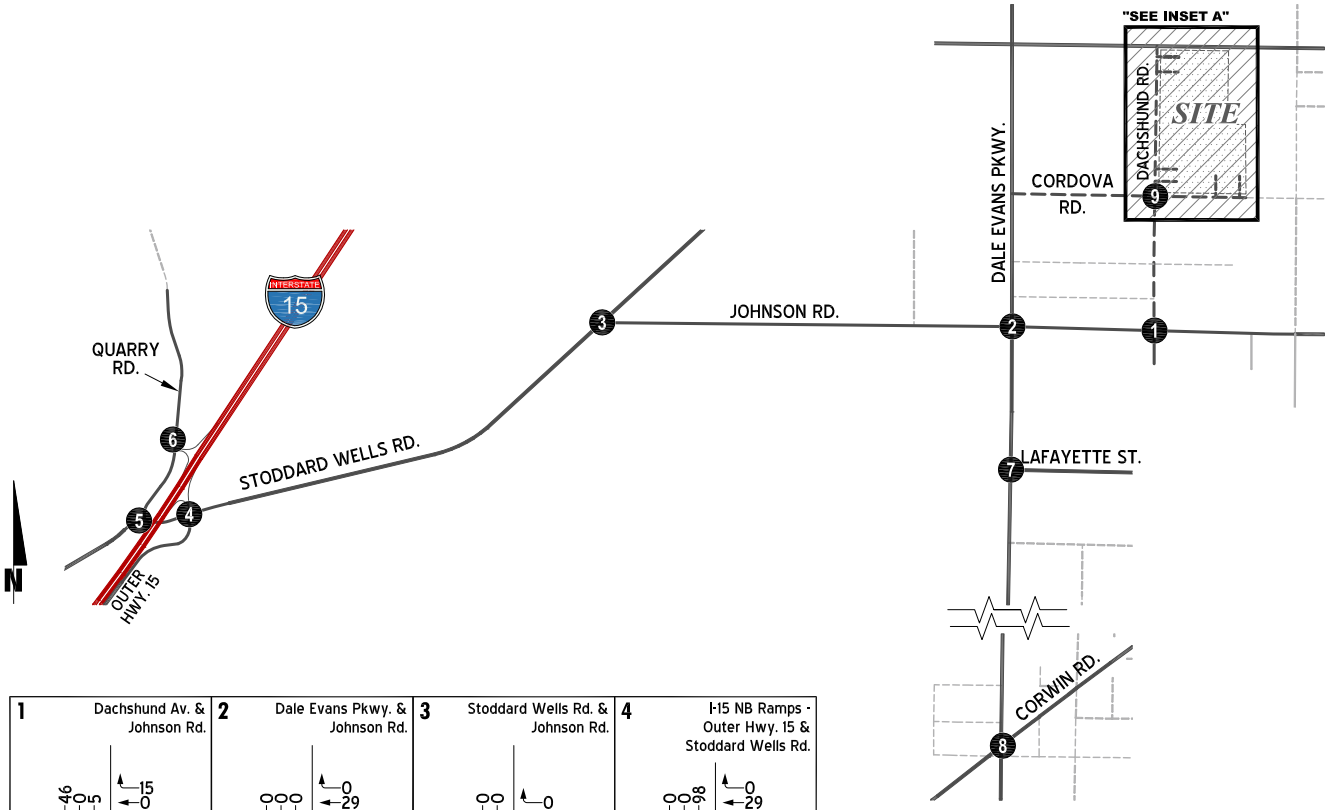
LEGEND:

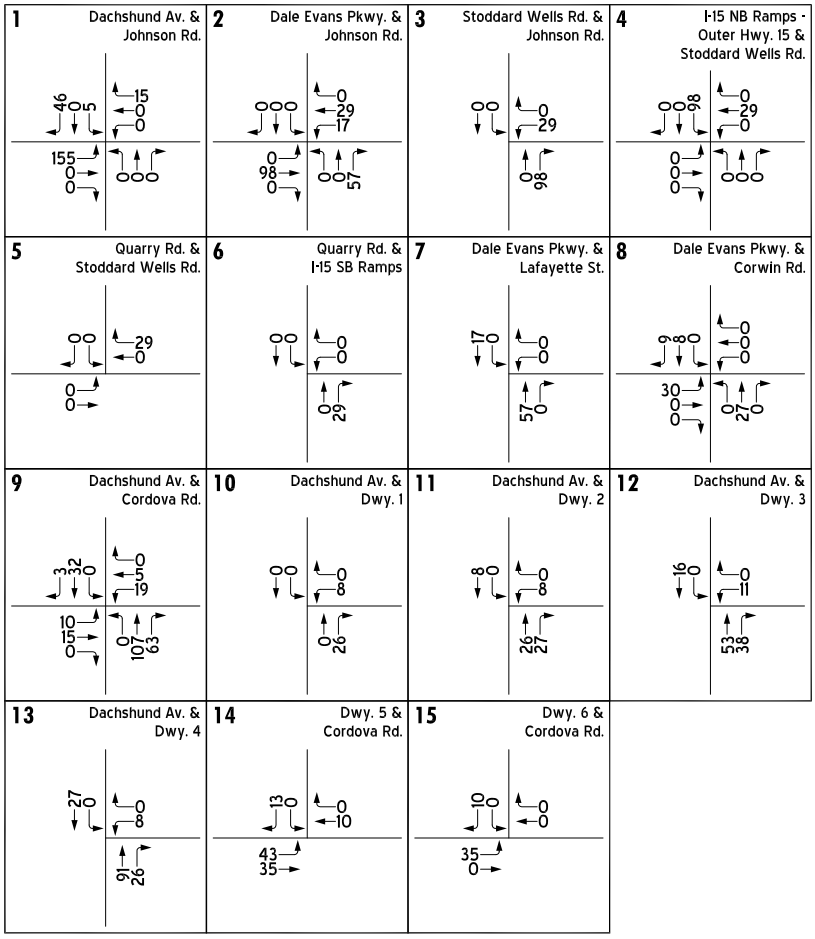
10 = PERCENT TO/FROM PROJECT

= FUTURE ROADWAY

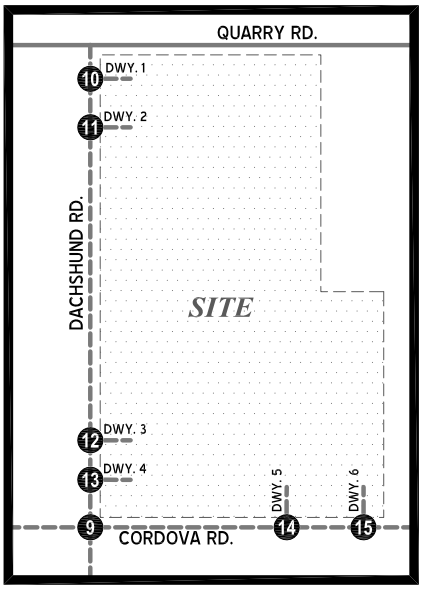
N

EXHIBIT 5: PROJECT ONLY AM PEAK HOUR
INTERSECTION PASSENGER CAR EQUIVALENT VOLUMES





INSET A

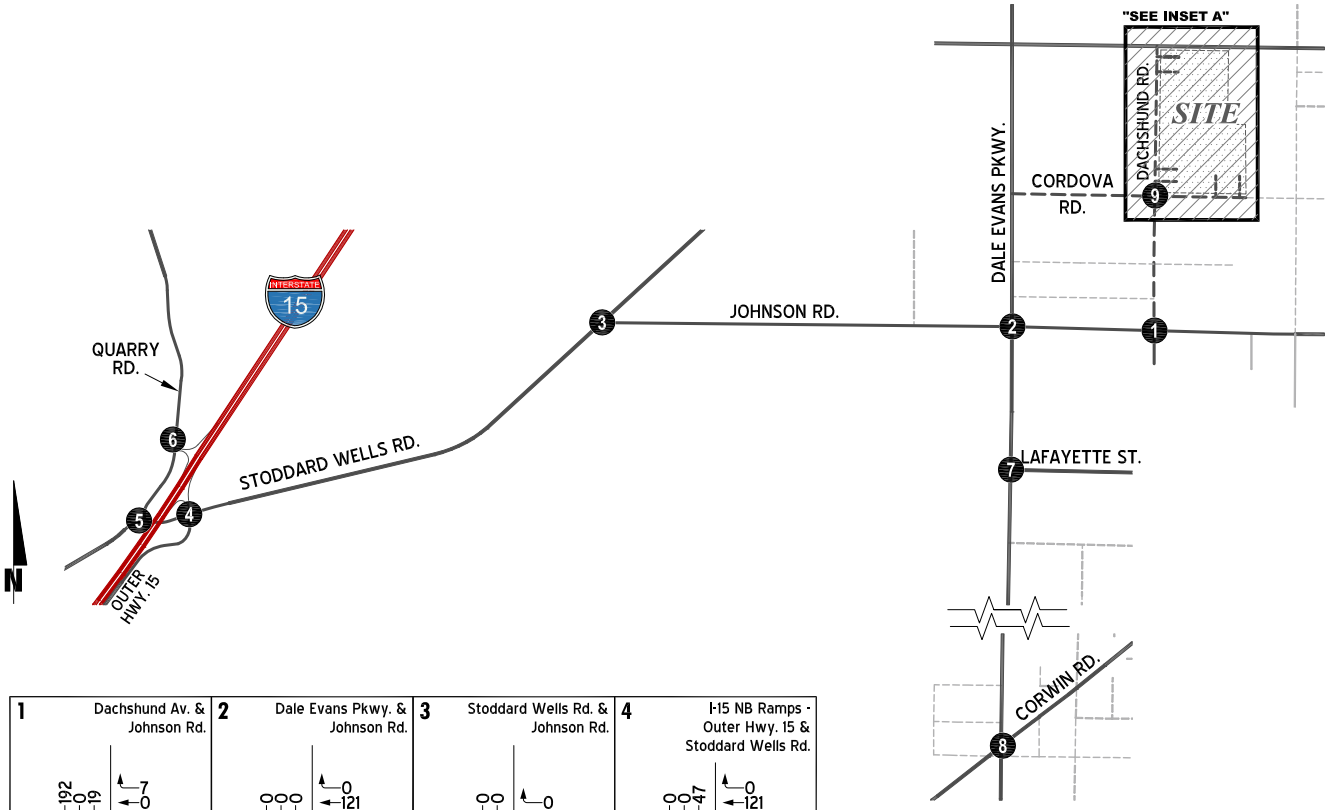


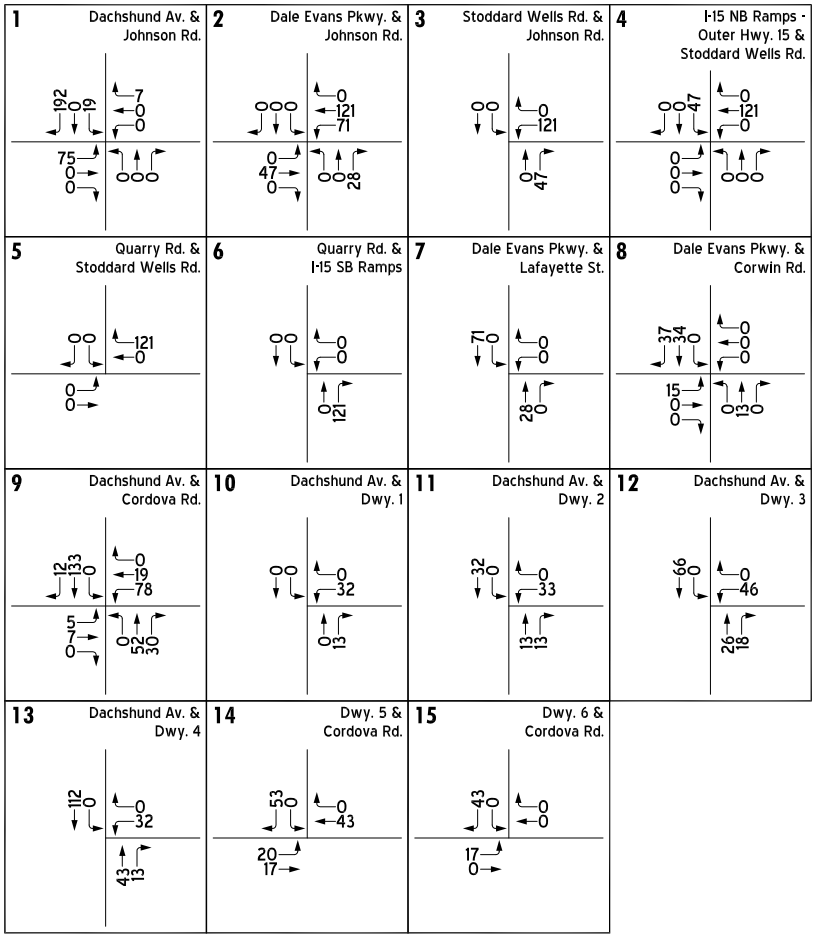
LEGEND:

(#) = INTERSECTION ID

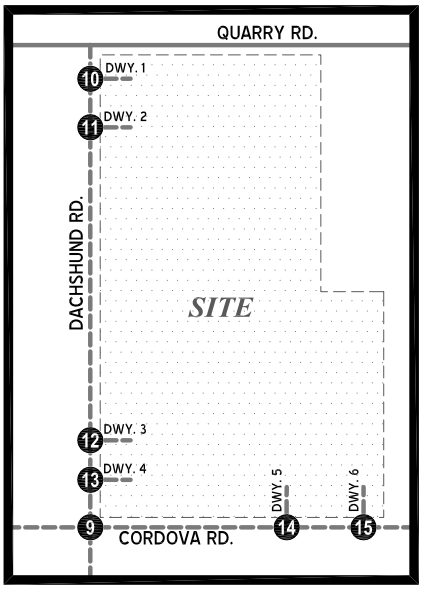
= FUTURE ROADWAY

EXHIBIT 6: PROJECT ONLY PM PEAK HOUR INTERSECTION PASSENGER CAR EQUIVALENT VOLUMES





INSET A



LEGEND:

(#) = INTERSECTION ID

= FUTURE ROADWAY

EXHIBIT 7: TOWN OF APPLE VALLEY GENERAL PLAN STREET SYSTEM

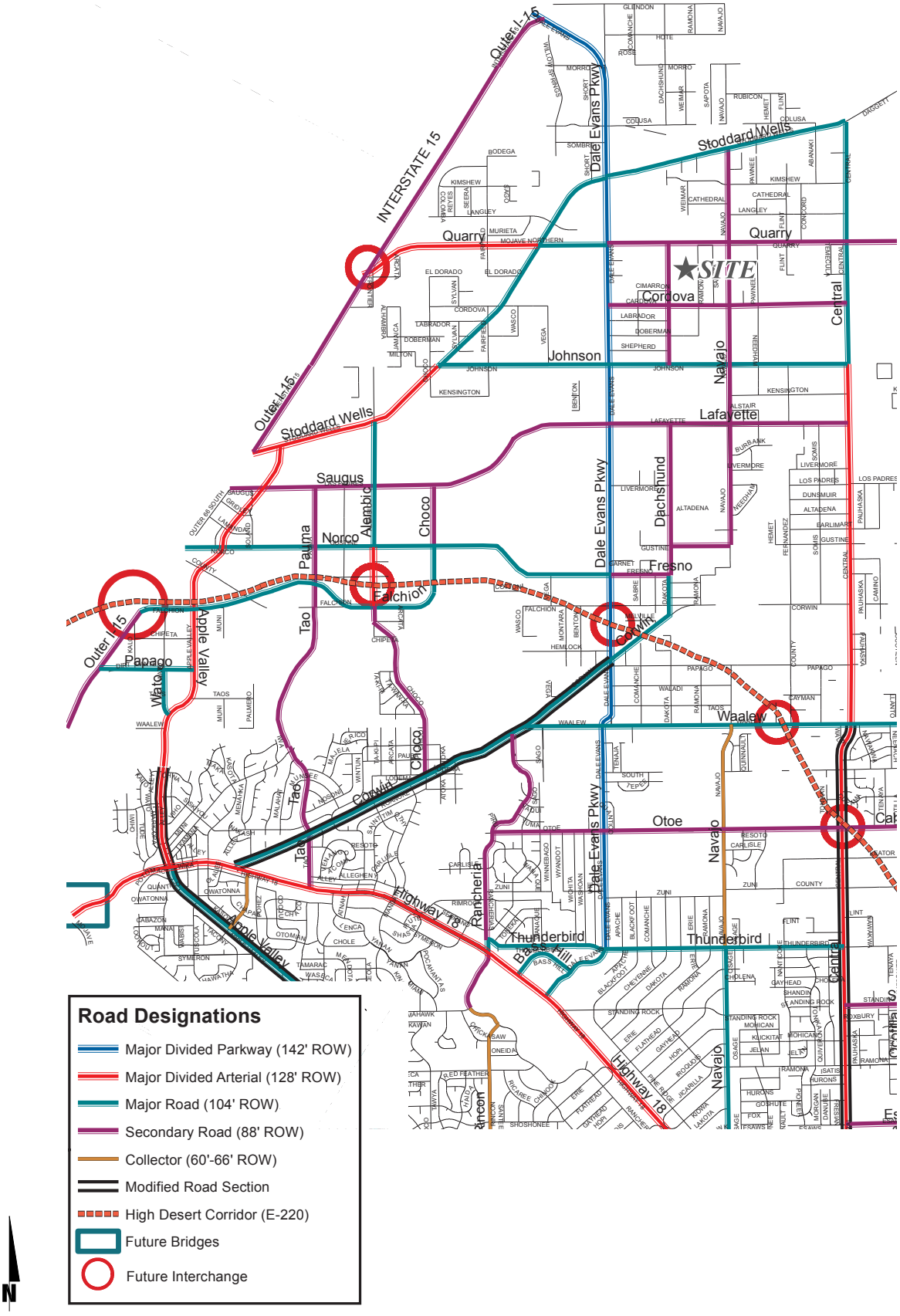
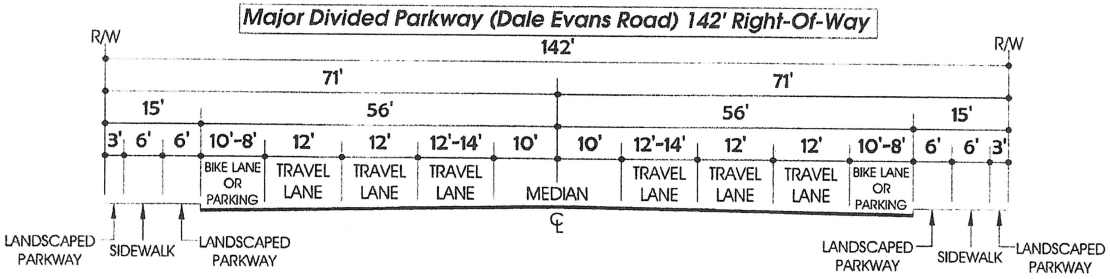
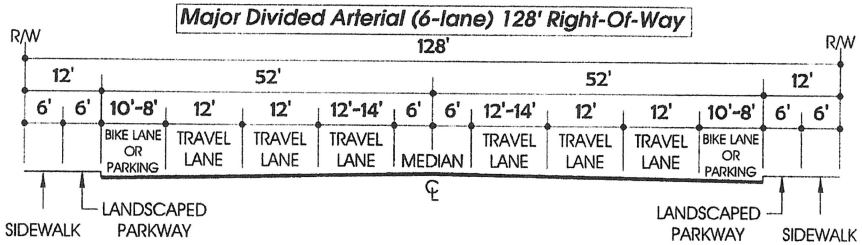
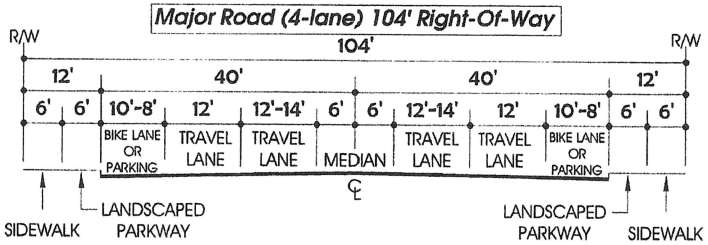
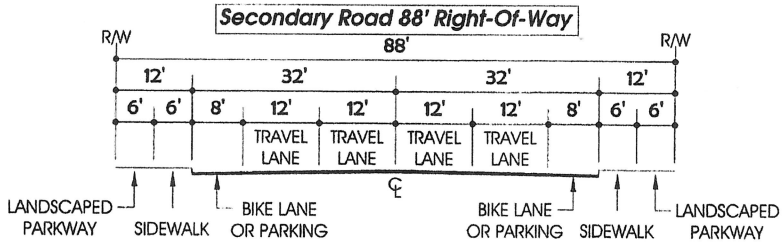


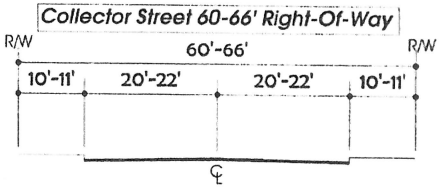
EXHIBIT 8: TOWN OF APPLE VALLEY GENERAL PLAN ROADWAY CROSS-SECTIONS

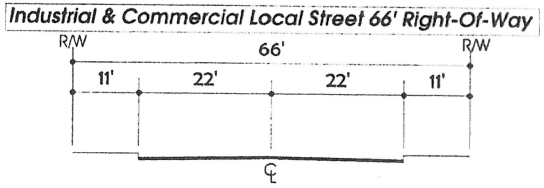


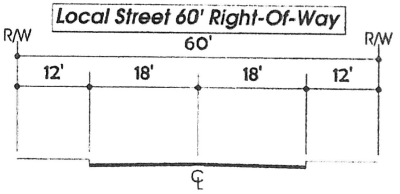


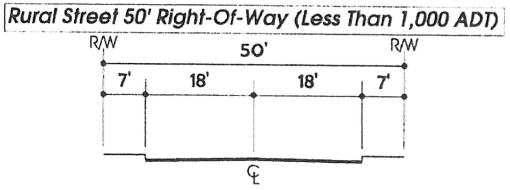












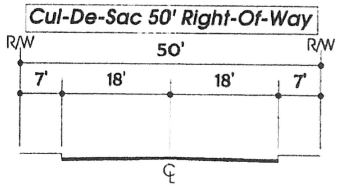


EXHIBIT 9: TOWN OF APPLE VALLEY TRUCK ROUTES

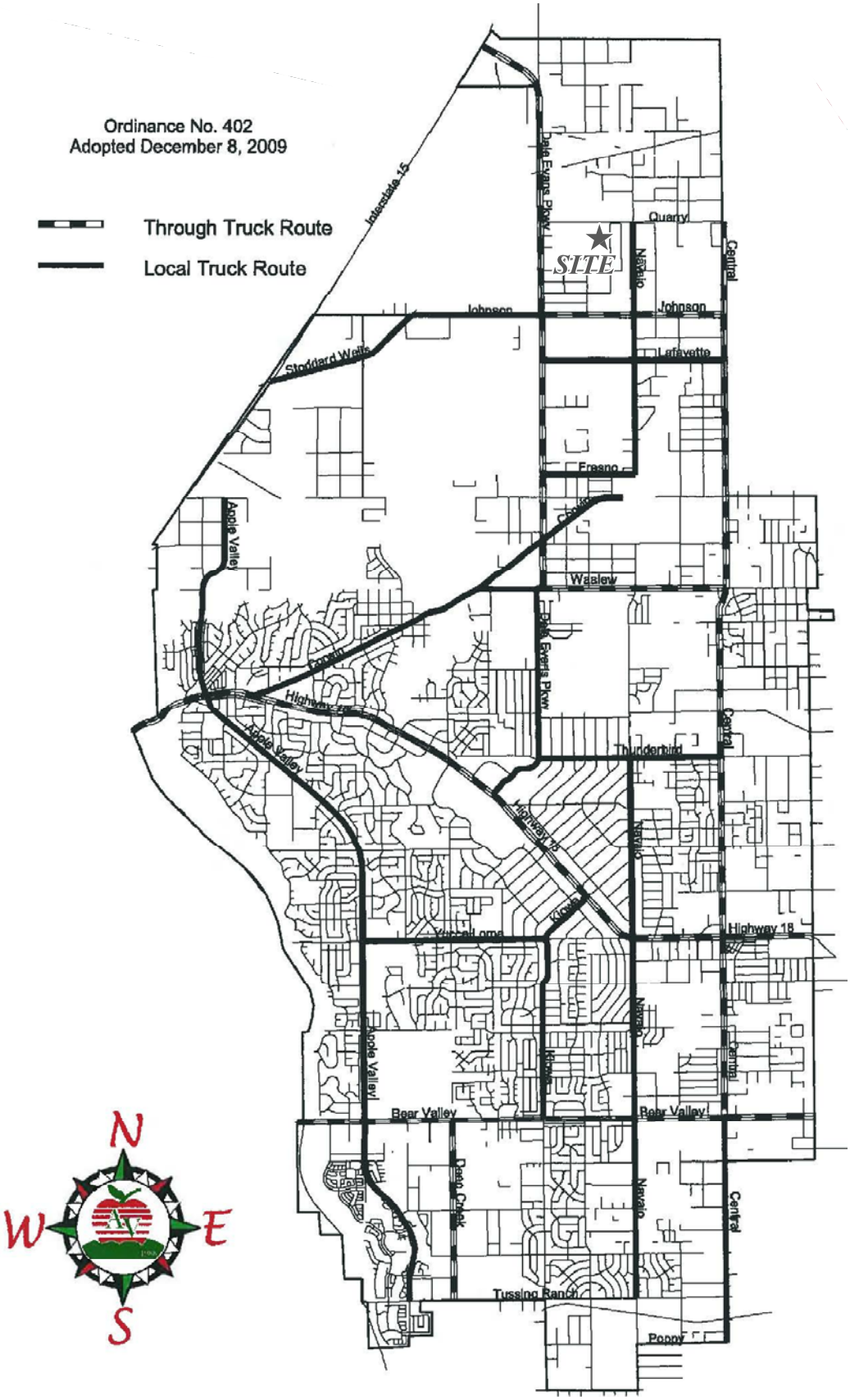


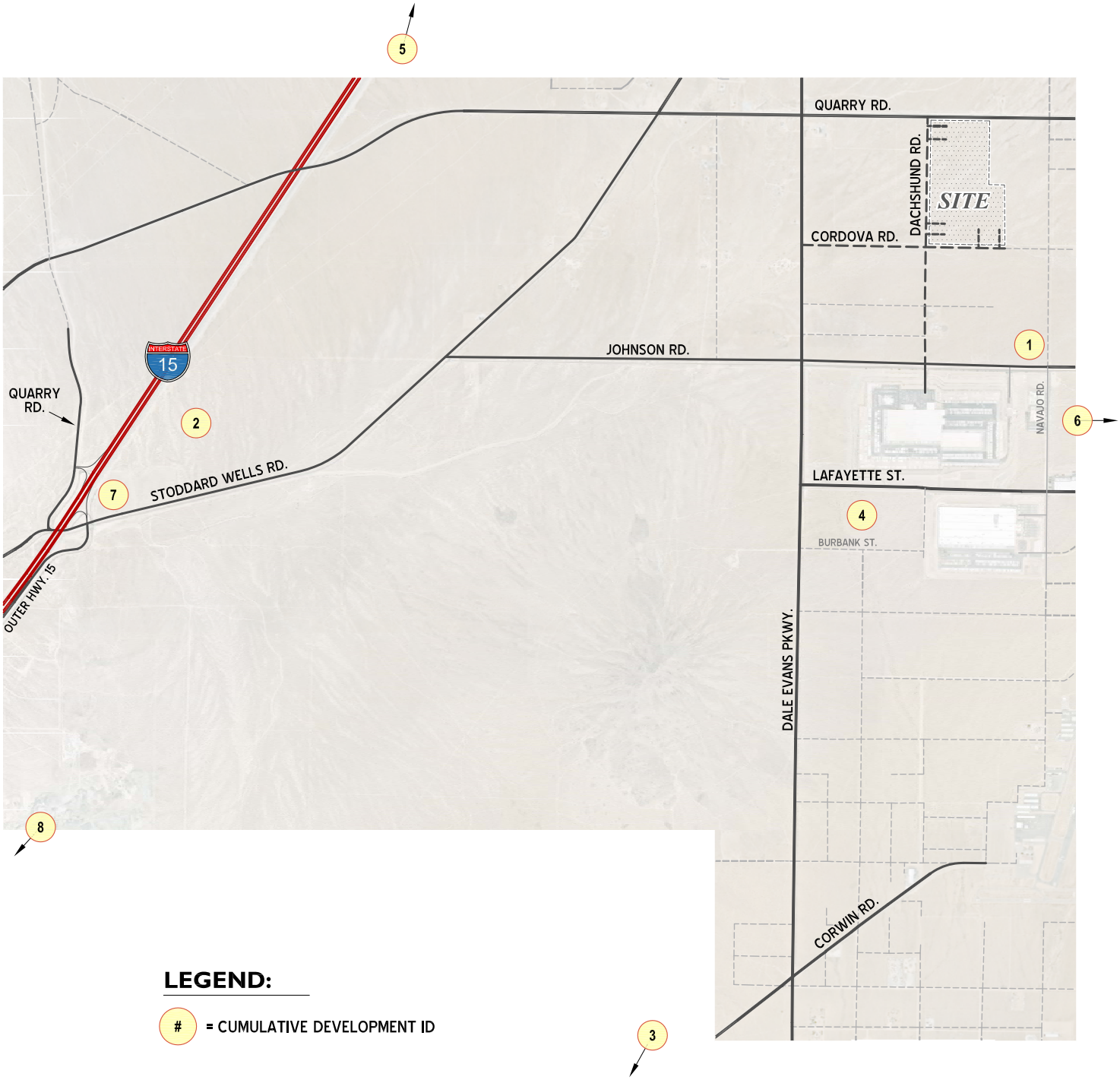
TABLE 3: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

TAZ	Project	Land Use	Quantity	Units[1]
1	Dara II Industrial	Warehouse	374.26	TSF
2	Apple Valley 143	Industrial/Warehouse	2,628.00	TSF
3	TTM 20306 (south of Waalew & east of Corwin)	Single Family Residential	160	DU
4	Lafayette Street Logistics (Redwood West)	High-Cube Warehouse	1,026.41	TSF
		High-Cube Cold Storage	181.13	TSF
5	Apple Valley Gateway Center (north of Dale Evans & east of I-15)	Pad A - Hotel	84	RM
		Pad B - Fast-Food Restaurant w/ Drive-Thru	5.769	TSF
		Pad C - Gas Station with C-Store (5 TSF)	16	VFP
		Pad D - Gas Station with C-Store (3.35 TSF)	12	VFP
		Pad E - Fast-Food Restaurant w/ Drive-Thru	4.00	TSF
		Pad F - Fast-Food Restaurant w/ Drive-Thru	4.20	TSF
		Pad G - Restaurant	4.00	TSF
		Pad H - Shops	10.261	TSF
		Pad I - Fast-Food Restaurant w/ Drive-Thru	2.80	TSF
6	1M Warehouse (east of Central Road, between Johnson Road & Lafayette Street)	High Cube Fulfillment Center Warehouse	1,080.125	TSF
7	Apple Valley I-15 Travel Center (north of Stoddard Wells & east of I-15)	RV Park	80	Spaces
		Gas Station with C-Store (9.66 TSF)	16	VFP
		Fast-Food Restaurant w/ Drive-Thru	3.043	TSF
		Truck Maintenance/Tire Building	13.786	TSF
8	Inland Empire North Logistics Ctr. (north of Falchion Road & east of I-5)	Industrial/Warehouse	2,604.446	TSF

[1] DU = Dwelling Units; TSF = Thousand Square Feet; RM = Room; VFP = Vehicle Fueling Positions

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Excel\[15504 - Scope.xlsx]15504-C

EXHIBIT 10: CUMULATIVE DEVELOPMENT LOCATION MAP



APPENDIX 3.1: TRAFFIC COUNTS – NOVEMBER 2023

This Page Intentionally Left Blank

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

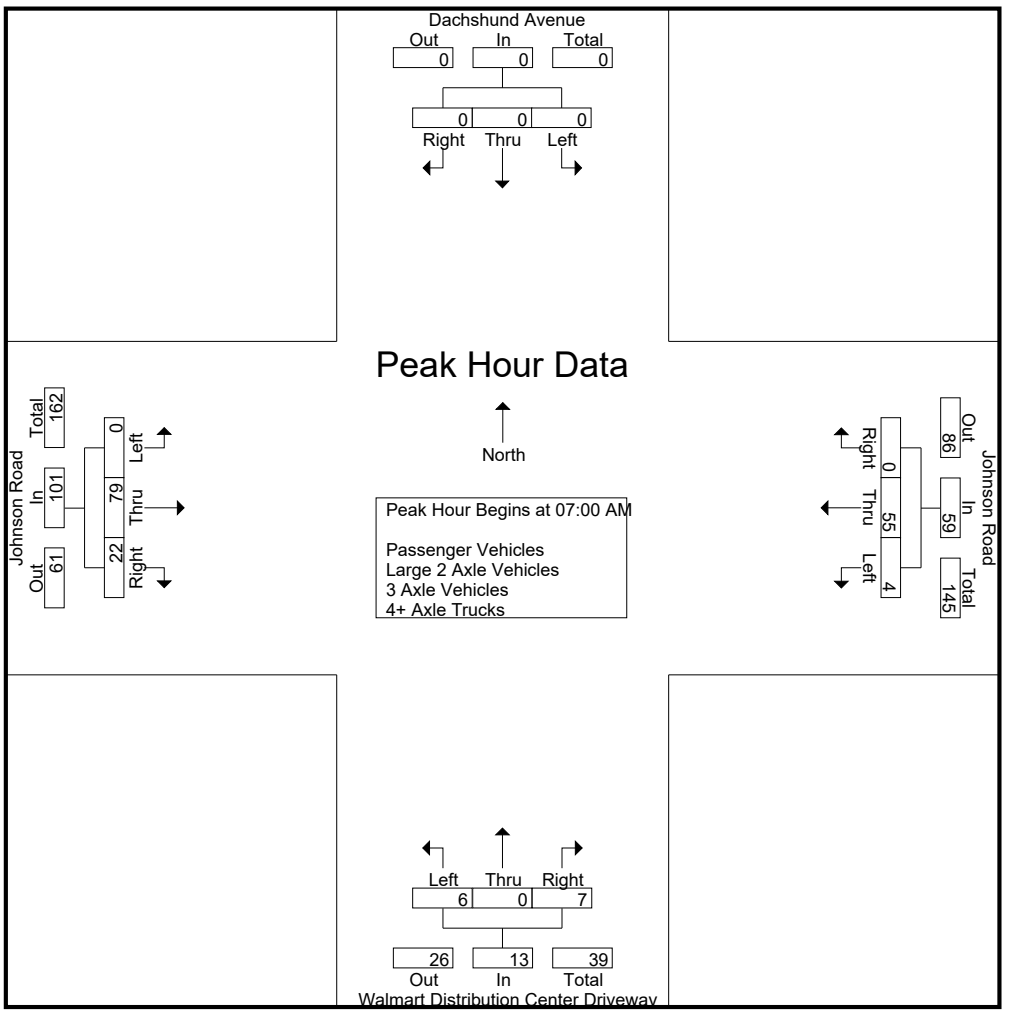
	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	2	13	0	15	2	0	1	3	0	10	3	13	31
07:15 AM	0	0	0	0	1	12	0	13	1	0	1	2	0	17	9	26	41
07:30 AM	0	0	0	0	0	14	0	14	2	0	4	6	0	22	5	27	47
07:45 AM	0	0	0	0	1	16	0	17	1	0	1	2	0	30	5	35	54
Total	0	0	0	0	4	55	0	59	6	0	7	13	0	79	22	101	173
08:00 AM	0	0	0	0	0	14	0	14	0	0	1	1	0	10	5	15	30
08:15 AM	0	0	0	0	0	6	0	6	2	0	0	2	0	20	3	23	31
08:30 AM	0	0	0	0	3	13	0	16	0	0	3	3	0	21	2	23	42
08:45 AM	0	0	0	0	6	12	0	18	1	0	0	1	0	21	5	26	45
Total	0	0	0	0	9	45	0	54	3	0	4	7	0	72	15	87	148
Grand Total	0	0	0	0	13	100	0	113	9	0	11	20	0	151	37	188	321
Apprch %	0	0	0		11.5	88.5	0		45	0	55		0	80.3	19.7		
Total %	0	0	0	0	4	31.2	0	35.2	2.8	0	3.4	6.2	0	47	11.5	58.6	
Passenger Vehicles	0	0	0	0	13	44	0	57	8	0	10	18	0	91	37	128	203
% Passenger Vehicles	0	0	0	0	100	44	0	50.4	88.9	0	90.9	90	0	60.3	100	68.1	63.2
Large 2 Axle Vehicles	0	0	0	0	0	5	0	5	1	0	1	2	0	4	0	4	11
% Large 2 Axle Vehicles	0	0	0	0	0	5	0	4.4	11.1	0	9.1	10	0	2.6	0	2.1	3.4
3 Axle Vehicles	0	0	0	0	0	7	0	7	0	0	0	0	0	8	0	8	15
% 3 Axle Vehicles	0	0	0	0	0	7	0	6.2	0	0	0	0	0	5.3	0	4.3	4.7
4+ Axle Trucks	0	0	0	0	0	44	0	44	0	0	0	0	0	48	0	48	92
% 4+ Axle Trucks	0	0	0	0	0	44	0	38.9	0	0	0	0	0	31.8	0	25.5	28.7

	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	**2**	13	0	15	**2**	0	1	3	0	10	3	13	31
07:15 AM	0	0	0	0	1	12	0	13	1	0	1	2	0	17	**9**	26	41
07:30 AM	0	0	0	0	0	14	0	14	2	0	**4**	**6**	0	22	5	27	47
07:45 AM	0	0	0	0	1	**16**	0	**17**	1	0	1	2	0	**30**	5	**35**	**54**
Total Volume	0	0	0	0	4	55	0	59	6	0	7	13	0	79	22	101	173
% App. Total	0	0	0		6.8	93.2	0		46.2	0	53.8		0	78.2	21.8		
PHF	.000	.000	.000	.000	.500	.859	.000	.868	.750	.000	.438	.542	.000	.658	.611	.721	.801

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:15 AM			
+0 mins.	0	0	0	0	**2**	13	0	15	**2**	0	1	3	0	17	**9**	26
+15 mins.	0	0	0	0	1	12	0	13	1	0	1	2	0	22	5	27
+30 mins.	0	0	0	0	0	14	0	14	2	0	**4**	**6**	0	**30**	5	**35**
+45 mins.	0	0	0	0	1	**16**	0	**17**	1	0	1	2	0	10	5	15
Total Volume	0	0	0	0	4	55	0	59	6	0	7	13	0	79	24	103
% App. Total	0	0	0		6.8	93.2	0		46.2	0	53.8		0	76.7	23.3	
PHF	.000	.000	.000	.000	.500	.859	.000	.868	.750	.000	.438	.542	.000	.658	.667	.736

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

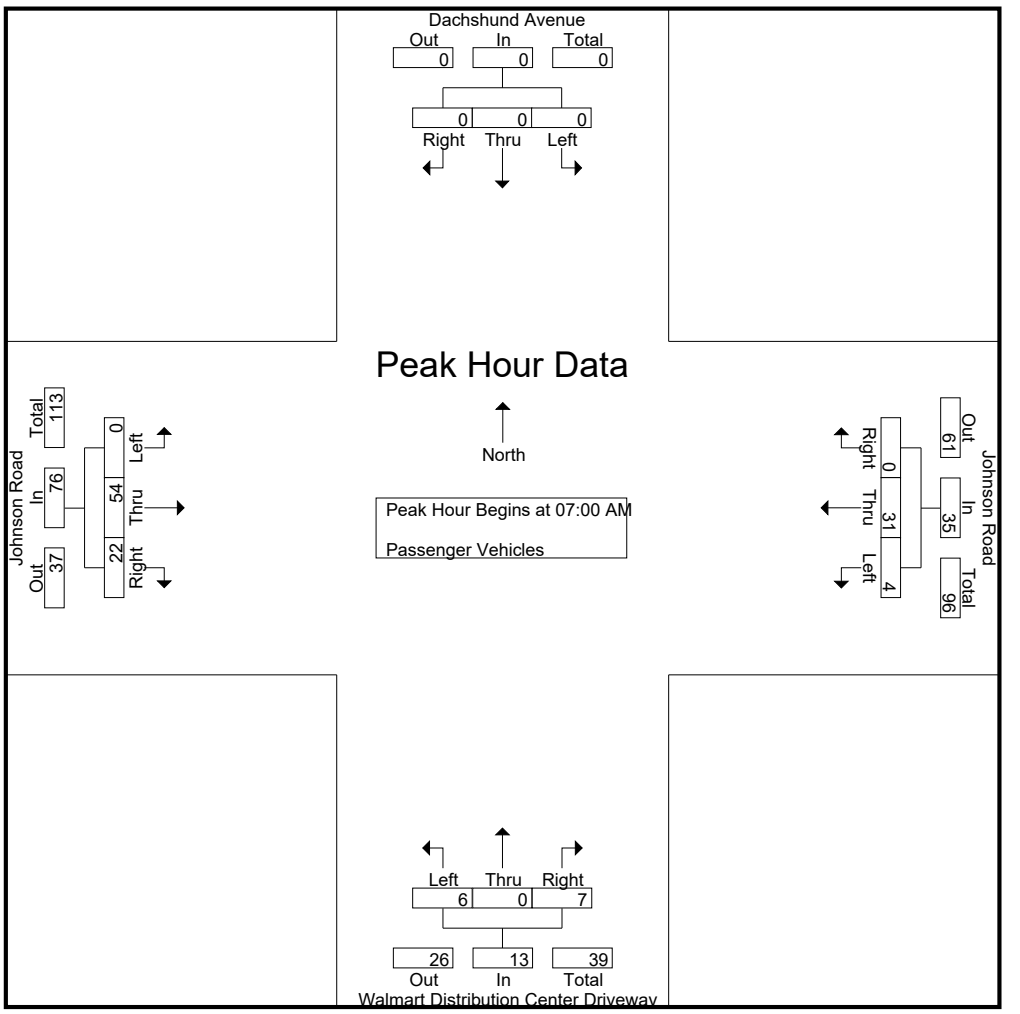
	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	2	6	0	8	2	0	1	3	0	8	3	11	22
07:15 AM	0	0	0	0	1	5	0	6	1	0	1	2	0	7	9	16	24
07:30 AM	0	0	0	0	0	9	0	9	2	0	4	6	0	16	5	21	36
07:45 AM	0	0	0	0	1	11	0	12	1	0	1	2	0	23	5	28	42
Total	0	0	0	0	4	31	0	35	6	0	7	13	0	54	22	76	124
08:00 AM	0	0	0	0	0	8	0	8	0	0	1	1	0	4	5	9	18
08:15 AM	0	0	0	0	0	2	0	2	2	0	0	2	0	9	3	12	16
08:30 AM	0	0	0	0	3	2	0	5	0	0	2	2	0	12	2	14	21
08:45 AM	0	0	0	0	6	1	0	7	0	0	0	0	0	12	5	17	24
Total	0	0	0	0	9	13	0	22	2	0	3	5	0	37	15	52	79
Grand Total	0	0	0	0	13	44	0	57	8	0	10	18	0	91	37	128	203
Apprch %	0	0	0		22.8	77.2	0		44.4	0	55.6		0	71.1	28.9		
Total %	0	0	0	0	6.4	21.7	0	28.1	3.9	0	4.9	8.9	0	44.8	18.2	63.1	

	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	**2**	6	0	8	**2**	0	1	3	0	8	3	11	22
07:15 AM	0	0	0	0	1	5	0	6	1	0	1	2	0	7	**9**	16	24
07:30 AM	0	0	0	0	0	9	0	9	2	0	**4**	**6**	0	16	5	21	36
07:45 AM	0	0	0	0	1	**11**	0	**12**	1	0	1	2	0	**23**	5	**28**	**42**
Total Volume	0	0	0	0	4	31	0	35	6	0	7	13	0	54	22	76	124
% App. Total	0	0	0		11.4	88.6	0		46.2	0	53.8		0	71.1	28.9		
PHF	.000	.000	.000	.000	.500	.705	.000	.729	.750	.000	.438	.542	.000	.587	.611	.679	.738

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	**2**	6	0	8	**2**	0	1	3	0	8	3	11
+15 mins.	0	0	0	0	1	5	0	6	1	0	1	2	0	7	**9**	16
+30 mins.	0	0	0	0	0	9	0	9	2	0	**4**	**6**	0	16	5	21
+45 mins.	0	0	0	0	1	**11**	0	**12**	1	0	1	2	0	**23**	5	**28**
Total Volume	0	0	0	0	4	31	0	35	6	0	7	13	0	54	22	76
% App. Total	0	0	0		11.4	88.6	0		46.2	0	53.8		0	71.1	28.9	
PHF	.000	.000	.000	.000	.500	.705	.000	.729	.750	.000	.438	.542	.000	.587	.611	.679

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

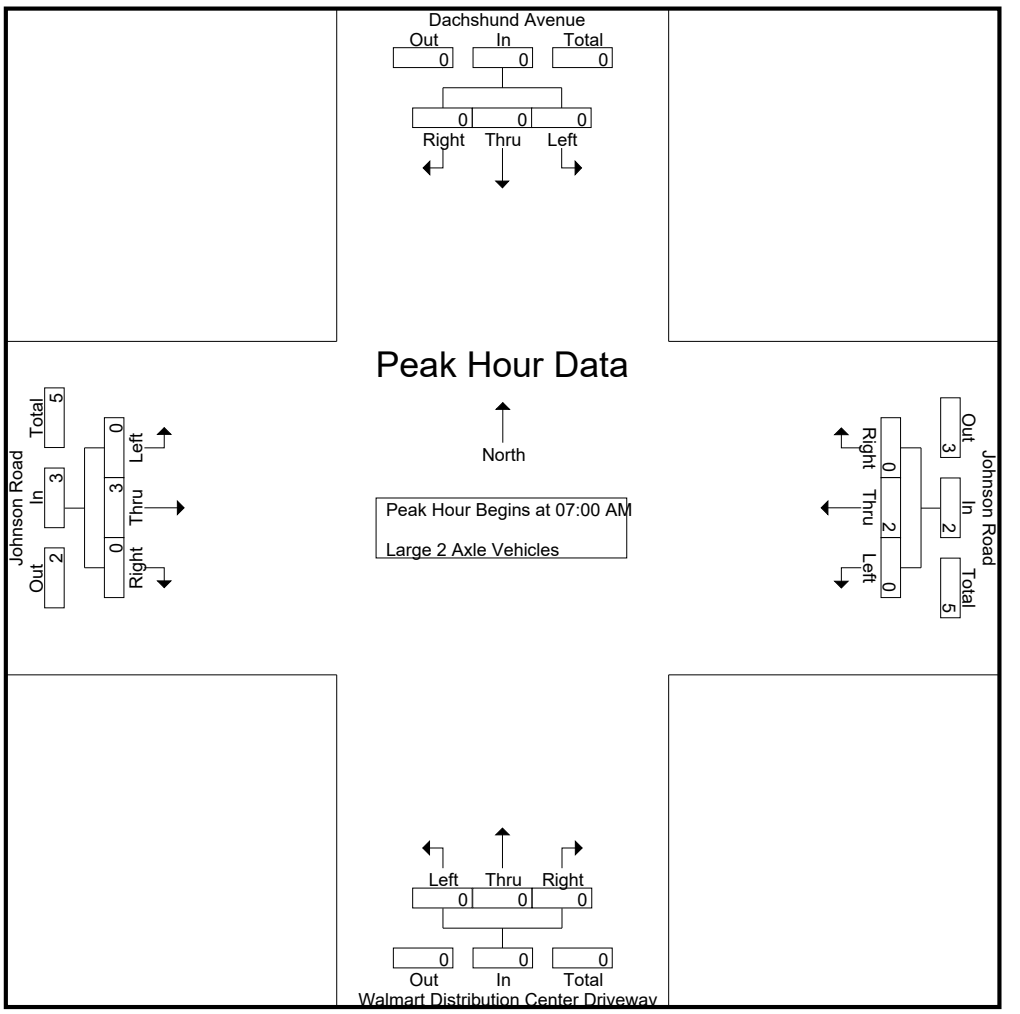
	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
08:45 AM	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
Total	0	0	0	0	0	3	0	3	1	0	1	2	0	1	0	1	6
Grand Total	0	0	0	0	0	5	0	5	1	0	1	2	0	4	0	4	11
Apprch %	0	0	0		0	100	0		50	0	50		0	100	0		
Total %	0	0	0	0	0	45.5	0	45.5	9.1	0	9.1	18.2	0	36.4	0	36.4	

	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	**2**	0	**2**	**3**
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.375	.000	.375	.417

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	**2**	0	**2**
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.375	.000	.375

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

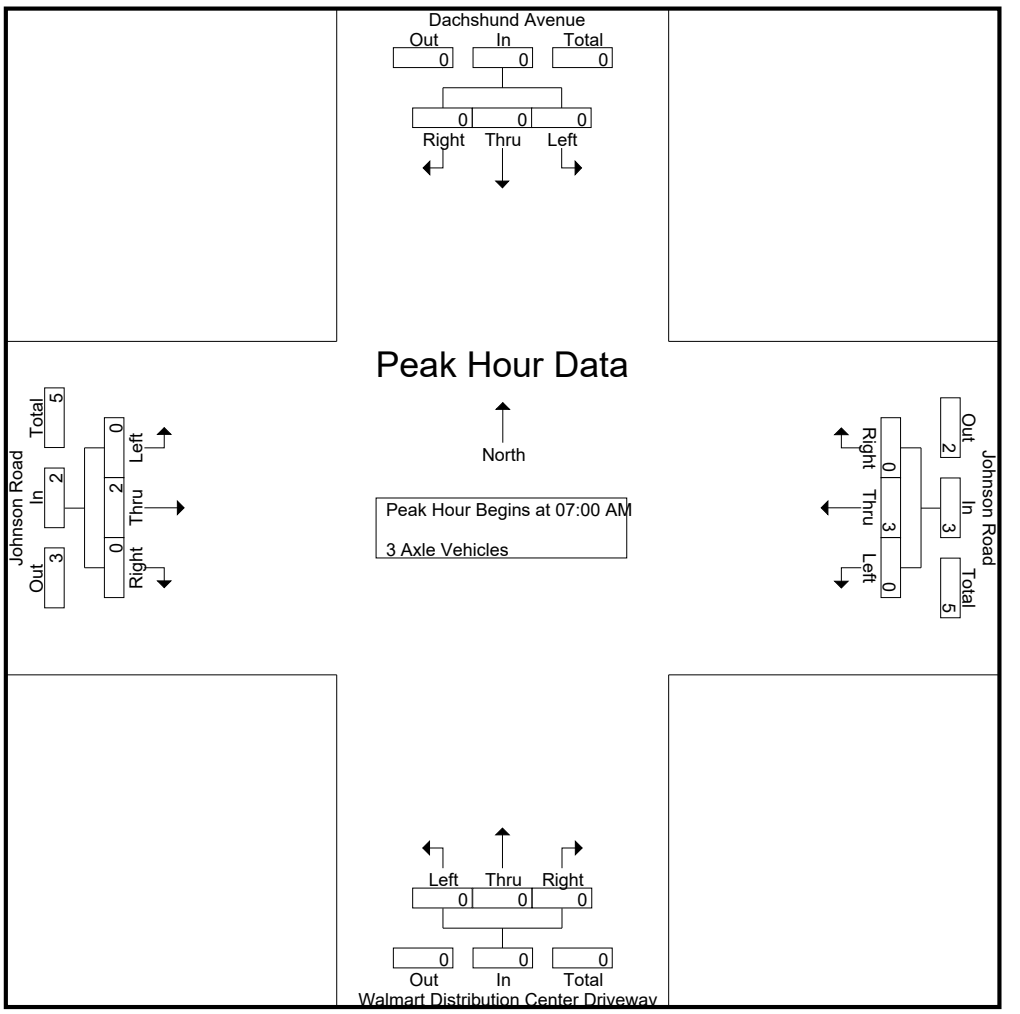
	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
08:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	4	0	4	0	0	0	0	0	6	0	6	10
Grand Total	0	0	0	0	0	7	0	7	0	0	0	0	0	8	0	8	15
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	46.7	0	46.7	0	0	0	0	0	53.3	0	53.3	

	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	**2**
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.500	.000	.500	.625

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.500	.000	.500

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

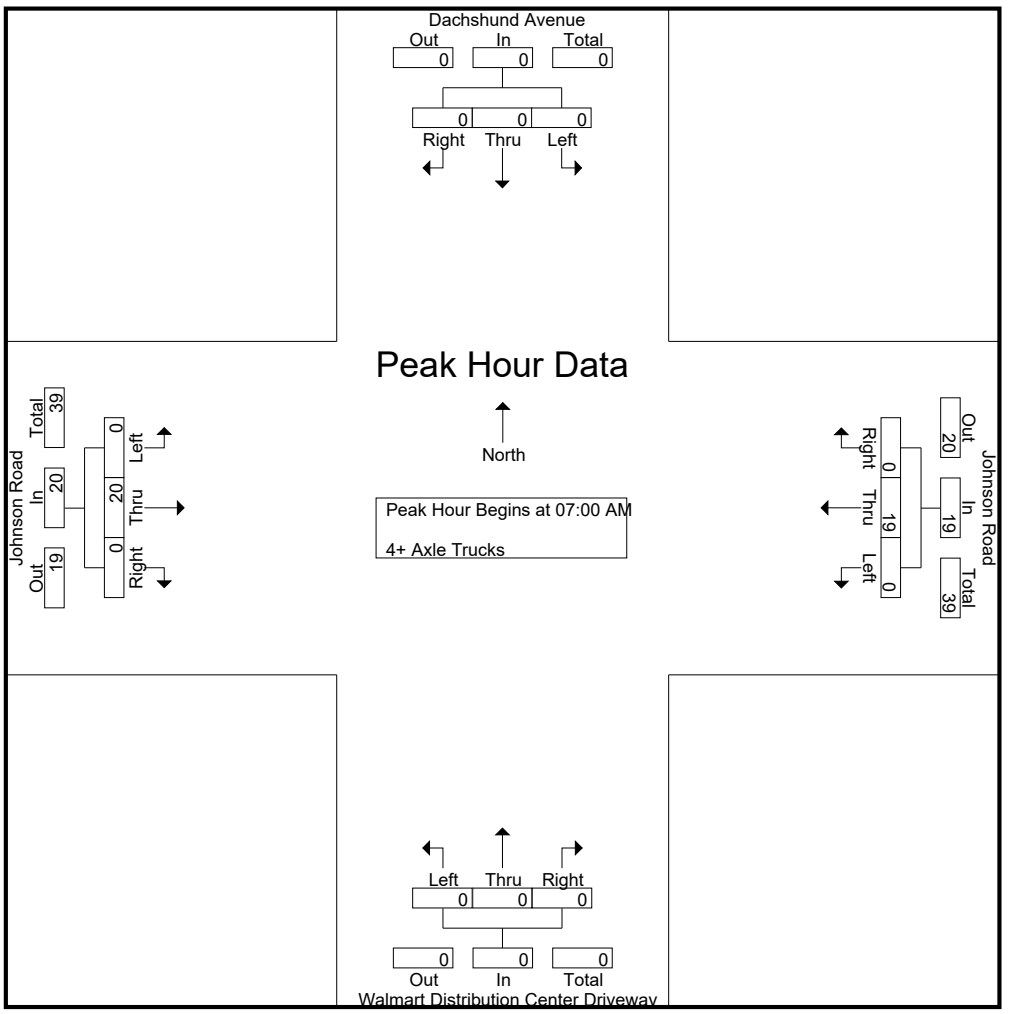
	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	1	0	1	7
07:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	7	0	7	12
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
07:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	7	0	7	12
Total	0	0	0	0	0	19	0	19	0	0	0	0	0	20	0	20	39
08:00 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	4	0	4	8
08:15 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	9	0	9	12
08:30 AM	0	0	0	0	0	9	0	9	0	0	0	0	0	6	0	6	15
08:45 AM	0	0	0	0	0	9	0	9	0	0	0	0	0	9	0	9	18
Total	0	0	0	0	0	25	0	25	0	0	0	0	0	28	0	28	53
Grand Total	0	0	0	0	0	44	0	44	0	0	0	0	0	48	0	48	92
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	47.8	0	47.8	0	0	0	0	0	52.2	0	52.2	

	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	**6**	0	**6**	0	0	0	0	0	1	0	1	7
07:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	**7**	0	**7**	**12**
07:30 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
07:45 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	7	0	7	12
Total Volume	0	0	0	0	0	19	0	19	0	0	0	0	0	20	0	20	39
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.792	.000	.792	.000	.000	.000	.000	.000	.714	.000	.714	.813

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	**6**	0	**6**	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	**7**	0	**7**
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5
+45 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	7	0	7
Total Volume	0	0	0	0	0	19	0	19	0	0	0	0	0	20	0	20
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.792	.000	.792	.000	.000	.000	.000	.000	.714	.000	.714

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

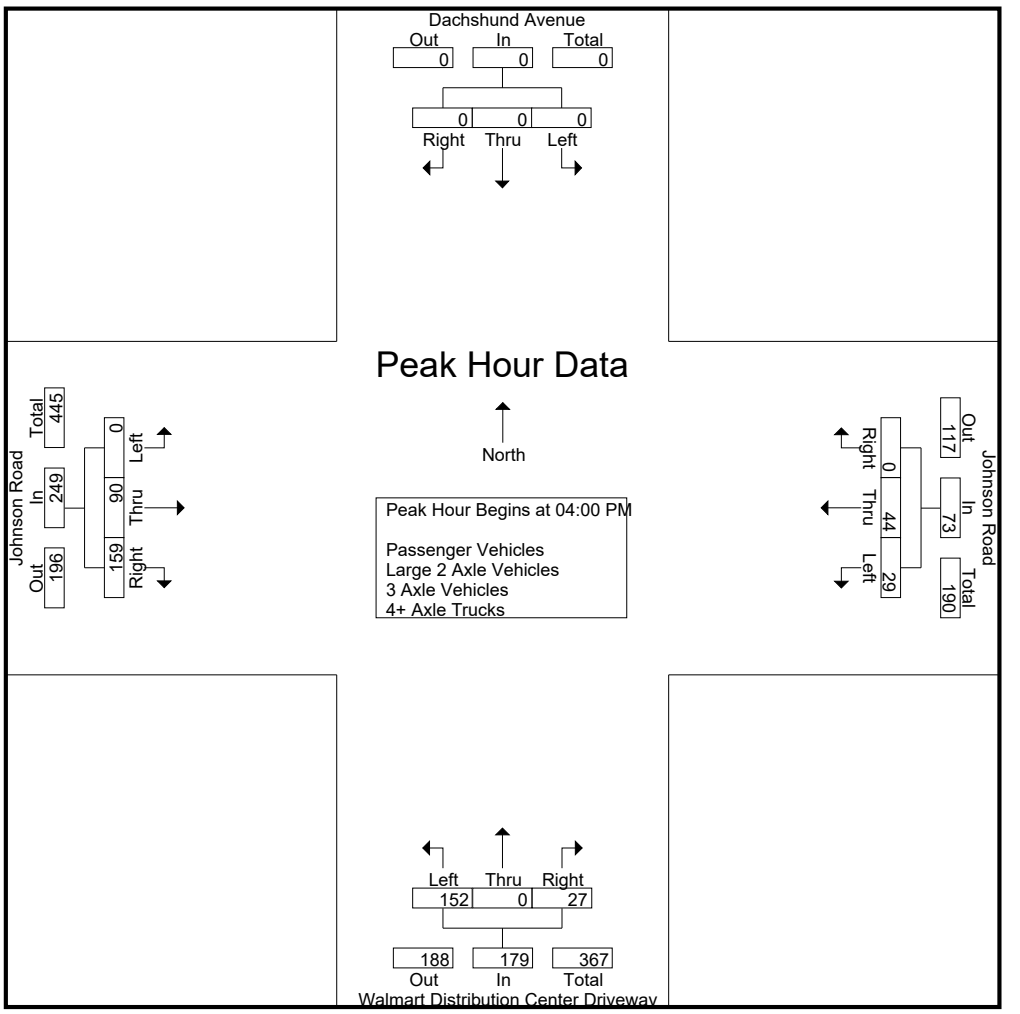
	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	4	6	0	10	108	0	15	123	0	22	34	56	189
04:15 PM	0	0	0	0	17	13	0	30	24	0	3	27	0	20	106	126	183
04:30 PM	0	0	0	0	8	16	0	24	12	0	7	19	0	21	15	36	79
04:45 PM	0	0	0	0	0	9	0	9	8	0	2	10	0	27	4	31	50
Total	0	0	0	0	29	44	0	73	152	0	27	179	0	90	159	249	501
05:00 PM	0	0	0	0	2	26	0	28	5	0	3	8	0	33	2	35	71
05:15 PM	0	0	0	0	1	17	0	18	5	0	1	6	0	23	2	25	49
05:30 PM	0	0	0	0	1	21	0	22	11	0	2	13	0	21	1	22	57
05:45 PM	0	0	0	0	0	29	0	29	3	0	0	3	0	14	0	14	46
Total	0	0	0	0	4	93	0	97	24	0	6	30	0	91	5	96	223
Grand Total	0	0	0	0	33	137	0	170	176	0	33	209	0	181	164	345	724
Apprch %	0	0	0		19.4	80.6	0		84.2	0	15.8		0	52.5	47.5		
Total %	0	0	0	0	4.6	18.9	0	23.5	24.3	0	4.6	28.9	0	25	22.7	47.7	
Passenger Vehicles	0	0	0	0	33	113	0	146	176	0	33	209	0	139	164	303	658
% Passenger Vehicles	0	0	0	0	100	82.5	0	85.9	100	0	100	100	0	76.8	100	87.8	90.9
Large 2 Axle Vehicles	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4	7
% Large 2 Axle Vehicles	0	0	0	0	0	2.2	0	1.8	0	0	0	0	0	2.2	0	1.2	1
3 Axle Vehicles	0	0	0	0	0	3	0	3	0	0	0	0	0	6	0	6	9
% 3 Axle Vehicles	0	0	0	0	0	2.2	0	1.8	0	0	0	0	0	3.3	0	1.7	1.2
4+ Axle Trucks	0	0	0	0	0	18	0	18	0	0	0	0	0	32	0	32	50
% 4+ Axle Trucks	0	0	0	0	0	13.1	0	10.6	0	0	0	0	0	17.7	0	9.3	6.9

	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	4	6	0	10	**108**	0	**15**	**123**	0	22	34	56	**189**
04:15 PM	0	0	0	0	**17**	13	0	**30**	24	0	3	27	0	20	**106**	**126**	183
04:30 PM	0	0	0	0	8	**16**	0	24	12	0	7	19	0	21	15	36	79
04:45 PM	0	0	0	0	0	9	0	9	8	0	2	10	0	**27**	4	31	50
Total Volume	0	0	0	0	29	44	0	73	152	0	27	179	0	90	159	249	501
% App. Total	0	0	0		39.7	60.3	0		84.9	0	15.1		0	36.1	63.9		
PHF	.000	.000	.000	.000	.426	.688	.000	.608	.352	.000	.450	.364	.000	.833	.375	.494	.663

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM				05:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	**2**	26	0	28	**108**	0	**15**	**123**	0	22	34	56
+15 mins.	0	0	0	0	1	17	0	18	24	0	3	27	0	20	**106**	**126**
+30 mins.	0	0	0	0	1	21	0	22	12	0	7	19	0	21	15	36
+45 mins.	0	0	0	0	0	**29**	0	**29**	8	0	2	10	0	**27**	4	31
Total Volume	0	0	0	0	4	93	0	97	152	0	27	179	0	90	159	249
% App. Total	0	0	0		4.1	95.9	0		84.9	0	15.1		0	36.1	63.9	
PHF	.000	.000	.000	.000	.500	.802	.000	.836	.352	.000	.450	.364	.000	.833	.375	.494

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

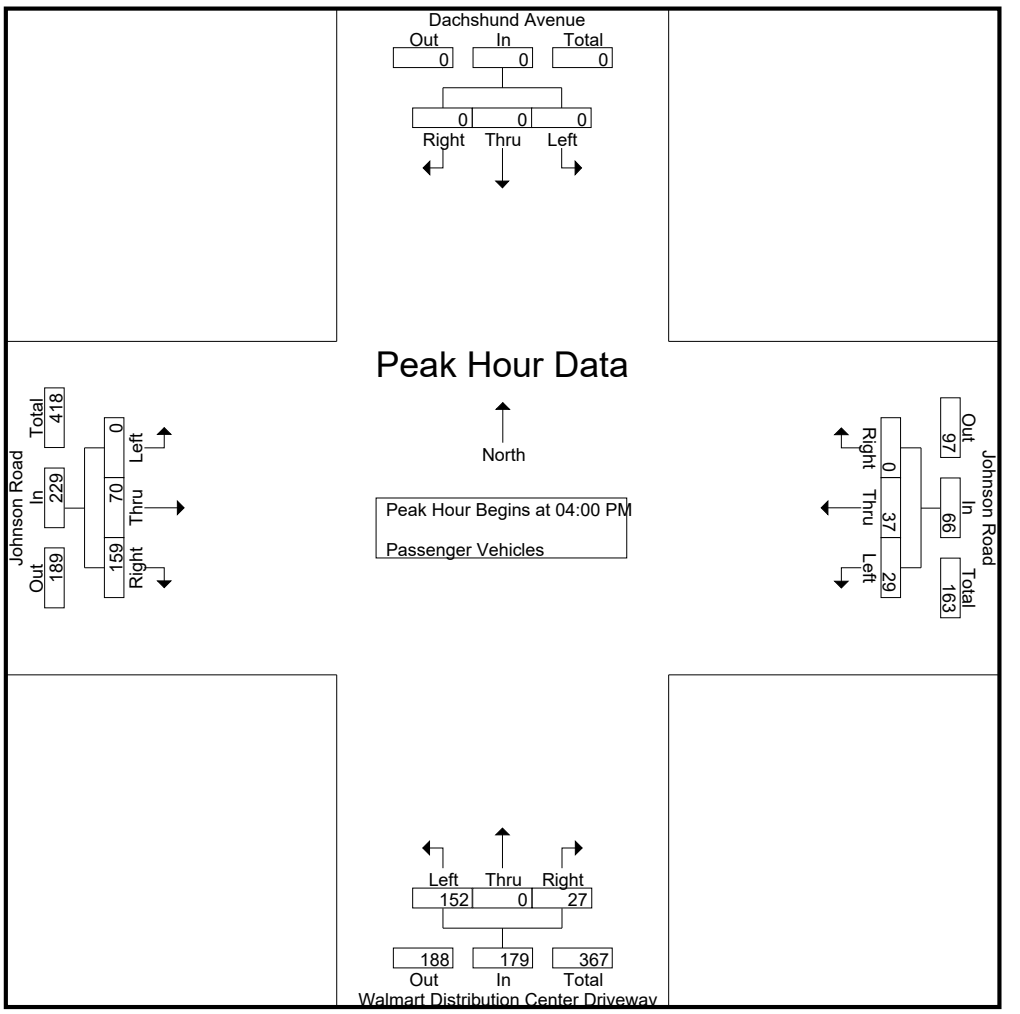
	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	4	5	0	9	108	0	15	123	0	17	34	51	183
04:15 PM	0	0	0	0	17	11	0	28	24	0	3	27	0	15	106	121	176
04:30 PM	0	0	0	0	8	13	0	21	12	0	7	19	0	16	15	31	71
04:45 PM	0	0	0	0	0	8	0	8	8	0	2	10	0	22	4	26	44
Total	0	0	0	0	29	37	0	66	152	0	27	179	0	70	159	229	474
05:00 PM	0	0	0	0	2	23	0	25	5	0	3	8	0	25	2	27	60
05:15 PM	0	0	0	0	1	14	0	15	5	0	1	6	0	17	2	19	40
05:30 PM	0	0	0	0	1	14	0	15	11	0	2	13	0	16	1	17	45
05:45 PM	0	0	0	0	0	25	0	25	3	0	0	3	0	11	0	11	39
Total	0	0	0	0	4	76	0	80	24	0	6	30	0	69	5	74	184
Grand Total	0	0	0	0	33	113	0	146	176	0	33	209	0	139	164	303	658
Apprch %	0	0	0		22.6	77.4	0		84.2	0	15.8		0	45.9	54.1		
Total %	0	0	0	0	5	17.2	0	22.2	26.7	0	5	31.8	0	21.1	24.9	46	

	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	4	5	0	9	**108**	0	**15**	**123**	0	17	34	51	**183**
04:15 PM	0	0	0	0	**17**	11	0	**28**	24	0	3	27	0	15	**106**	**121**	176
04:30 PM	0	0	0	0	8	**13**	0	21	12	0	7	19	0	16	15	31	71
04:45 PM	0	0	0	0	0	8	0	8	8	0	2	10	0	**22**	4	26	44
Total Volume	0	0	0	0	29	37	0	66	152	0	27	179	0	70	159	229	474
% App. Total	0	0	0		43.9	56.1	0		84.9	0	15.1		0	30.6	69.4		
PHF	.000	.000	.000	.000	.426	.712	.000	.589	.352	.000	.450	.364	.000	.795	.375	.473	.648

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John PM
Site Code : 231073
Start Date : 11/8/2023
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	4	5	0	9	**108**	0	**15**	**123**	0	17	34	51
+15 mins.	0	0	0	0	**17**	11	0	**28**	24	0	3	27	0	15	**106**	**121**
+30 mins.	0	0	0	0	8	**13**	0	21	12	0	7	19	0	16	15	31
+45 mins.	0	0	0	0	0	8	0	8	8	0	2	10	0	**22**	4	26
Total Volume	0	0	0	0	29	37	0	66	152	0	27	179	0	70	159	229
% App. Total	0	0	0		43.9	56.1	0		84.9	0	15.1		0	30.6	69.4	
PHF	.000	.000	.000	.000	.426	.712	.000	.589	.352	.000	.450	.364	.000	.795	.375	.473

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

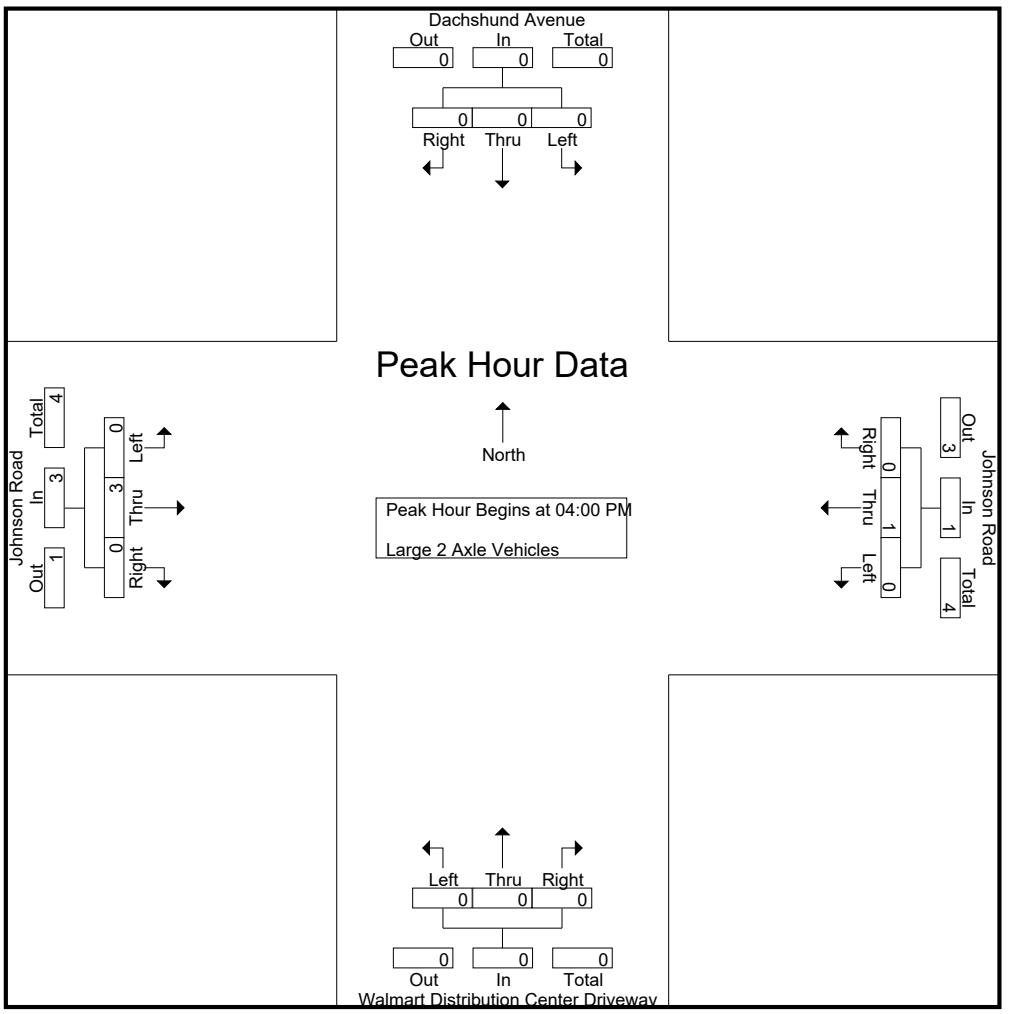
	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Grand Total	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4	7
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	42.9	0	42.9	0	0	0	0	0	57.1	0	57.1	

	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	1	0	1	**2**
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.750	.000	.750	.500

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.750	.000	.750

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

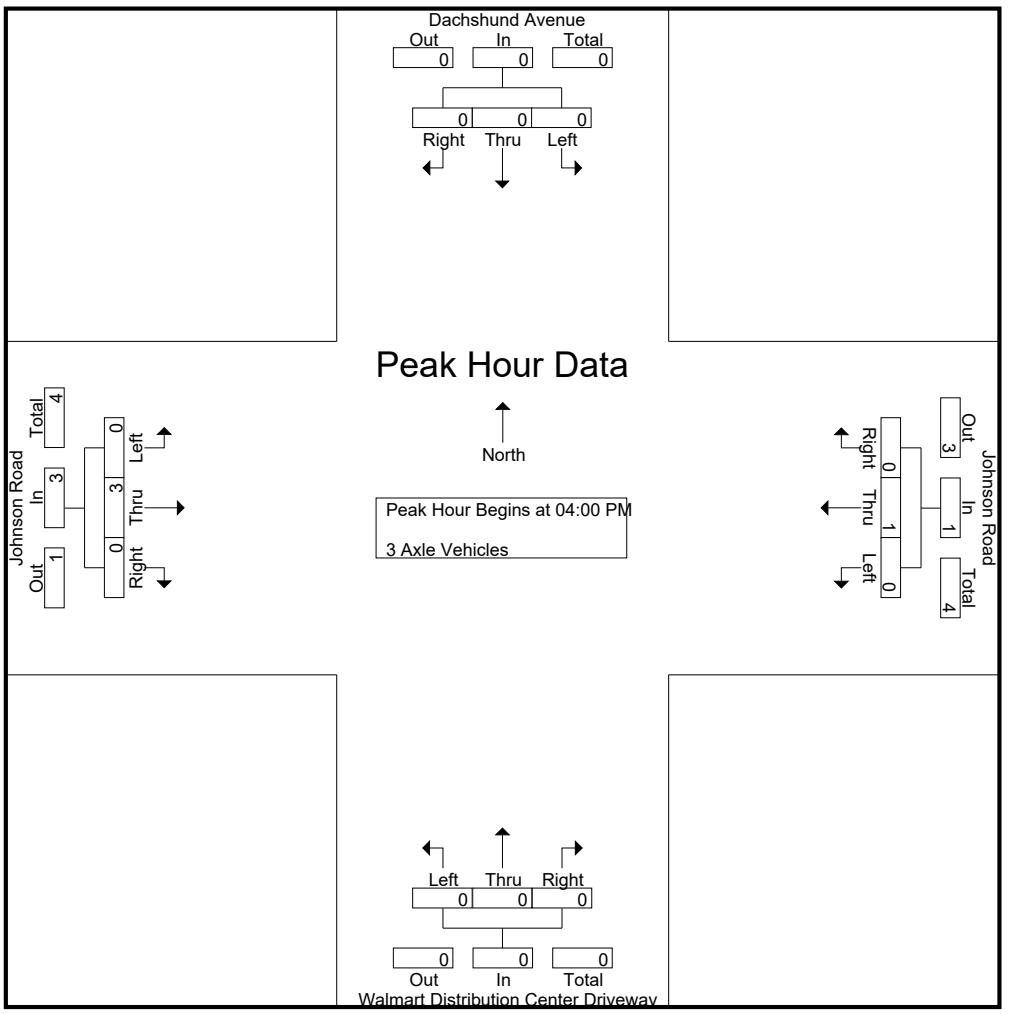
	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	3	0	3	5
Grand Total	0	0	0	0	0	3	0	3	0	0	0	0	0	6	0	6	9
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	33.3	0	33.3	0	0	0	0	0	66.7	0	66.7	

	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	1	0	1	**2**
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	**2**	2
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.000	.375	.500

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**	0	**2**
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.000	.375

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

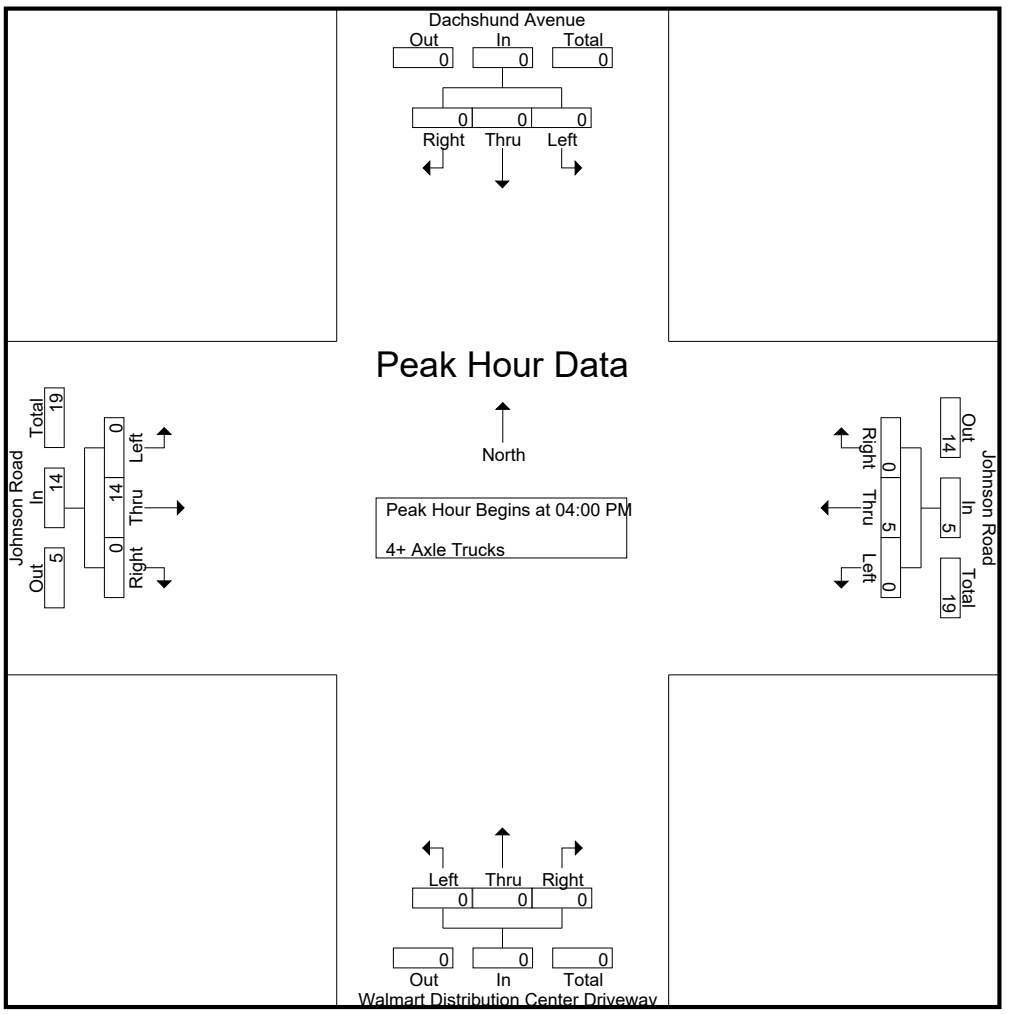
	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	4	0	4	5
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
Total	0	0	0	0	0	5	0	5	0	0	0	0	0	14	0	14	19
05:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	4	0	4	7
05:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	6	0	6	8
05:30 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	5	0	5	10
05:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
Total	0	0	0	0	0	13	0	13	0	0	0	0	0	18	0	18	31
Grand Total	0	0	0	0	0	18	0	18	0	0	0	0	0	32	0	32	50
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	36	0	36	0	0	0	0	0	64	0	64	

	Dachshund Avenue Southbound				Johnson Road Westbound				Walmart Distribution Center Driveway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	**4**	0	**4**	5
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
04:30 PM	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	4	0	4	**6**
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
Total Volume	0	0	0	0	0	5	0	5	0	0	0	0	0	14	0	14	19
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.625	.000	.625	.000	.000	.000	.000	.000	.875	.000	.875	.792

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

City of Apple Valley
N/S: Dachshund Avenue
E/W: Johnson Road
Weather: Clear

File Name : 01_APV_Dach_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	**4**	0	**4**
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3
+30 mins.	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	4	0	4
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3
Total Volume	0	0	0	0	0	5	0	5	0	0	0	0	0	14	0	14
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.625	.000	.625	.000	.000	.000	.000	.000	.875	.000	.875

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

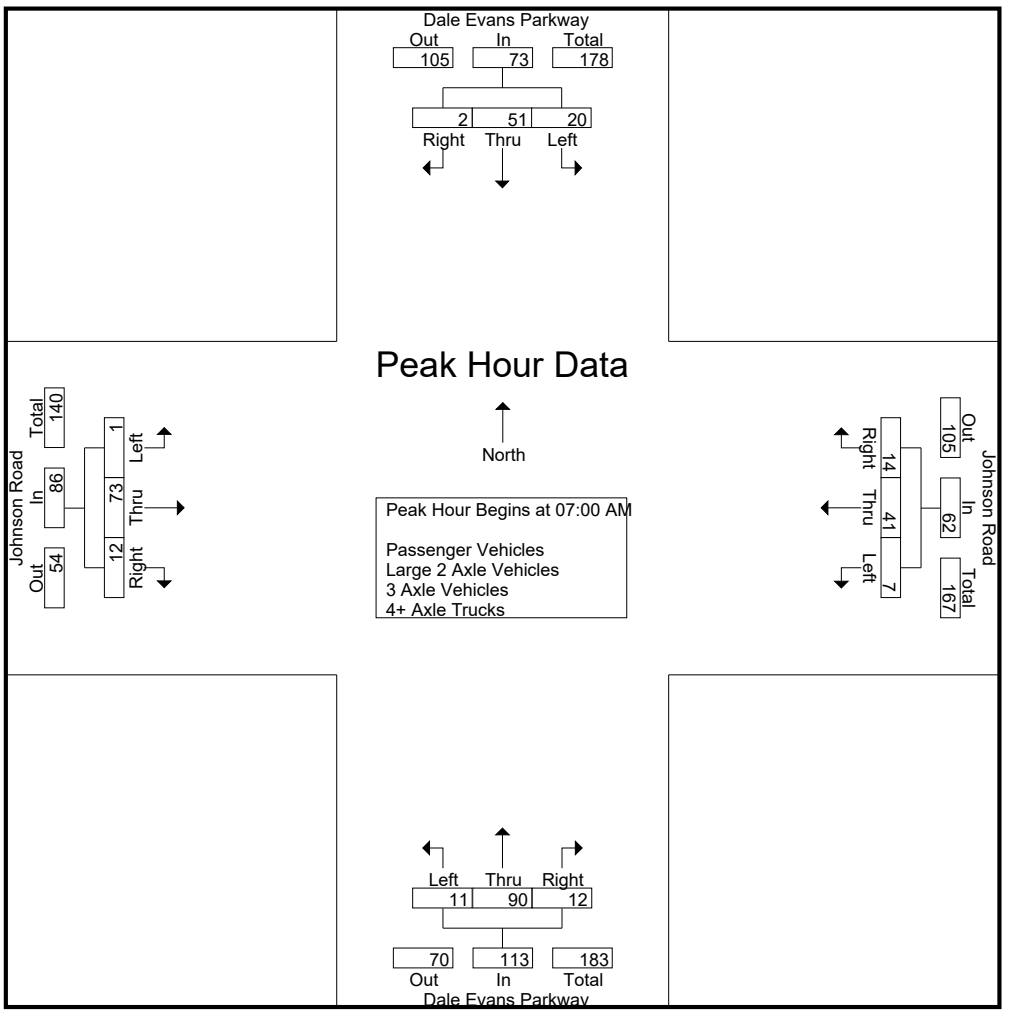
	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	11	1	17	1	11	4	16	3	22	2	27	0	13	2	15	75
07:15 AM	3	13	1	17	1	7	4	12	2	23	3	28	1	19	3	23	80
07:30 AM	9	16	0	25	4	10	3	17	2	24	4	30	0	13	5	18	90
07:45 AM	3	11	0	14	1	13	3	17	4	21	3	28	0	28	2	30	89
Total	20	51	2	73	7	41	14	62	11	90	12	113	1	73	12	86	334
08:00 AM	3	13	0	16	1	7	4	12	3	17	4	24	0	12	3	15	67
08:15 AM	6	11	0	17	0	8	3	11	2	18	2	22	1	11	3	15	65
08:30 AM	6	16	0	22	1	9	6	16	1	11	3	15	1	17	7	25	78
08:45 AM	5	12	0	17	1	10	1	12	0	20	4	24	0	17	2	19	72
Total	20	52	0	72	3	34	14	51	6	66	13	85	2	57	15	74	282
Grand Total	40	103	2	145	10	75	28	113	17	156	25	198	3	130	27	160	616
Apprch %	27.6	71	1.4		8.8	66.4	24.8		8.6	78.8	12.6		1.9	81.2	16.9		
Total %	6.5	16.7	0.3	23.5	1.6	12.2	4.5	18.3	2.8	25.3	4.1	32.1	0.5	21.1	4.4	26	
Passenger Vehicles	12	98	2	112	8	39	9	56	16	150	21	187	3	93	22	118	473
% Passenger Vehicles	30	95.1	100	77.2	80	52	32.1	49.6	94.1	96.2	84	94.4	100	71.5	81.5	73.8	76.8
Large 2 Axle Vehicles	2	5	0	7	1	3	2	6	0	4	2	6	0	1	2	3	22
% Large 2 Axle Vehicles	5	4.9	0	4.8	10	4	7.1	5.3	0	2.6	8	3	0	0.8	7.4	1.9	3.6
3 Axle Vehicles	3	0	0	3	0	6	1	7	0	0	0	0	0	6	0	6	16
% 3 Axle Vehicles	7.5	0	0	2.1	0	8	3.6	6.2	0	0	0	0	0	4.6	0	3.8	2.6
4+ Axle Trucks	23	0	0	23	1	27	16	44	1	2	2	5	0	30	3	33	105
% 4+ Axle Trucks	57.5	0	0	15.9	10	36	57.1	38.9	5.9	1.3	8	2.5	0	23.1	11.1	20.6	17

	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	5	11	**1**	17	1	11	**4**	16	3	22	2	27	0	13	2	15	75
07:15 AM	3	13	1	17	1	7	4	12	2	23	3	28	**1**	19	3	23	80
07:30 AM	**9**	**16**	0	**25**	**4**	10	3	**17**	2	**24**	**4**	**30**	0	13	**5**	18	**90**
07:45 AM	3	11	0	14	1	**13**	3	17	**4**	21	3	28	0	**28**	2	**30**	89
Total Volume	20	51	2	73	7	41	14	62	11	90	12	113	1	73	12	86	334
% App. Total	27.4	69.9	2.7		11.3	66.1	22.6		9.7	79.6	10.6		1.2	84.9	14		
PHF	.556	.797	.500	.730	.438	.788	.875	.912	.688	.938	.750	.942	.250	.652	.600	.717	.928

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	5	11	**1**	17	1	11	**4**	16	3	22	2	27	0	13	2	15
+15 mins.	3	13	1	17	1	7	4	12	2	23	3	28	**1**	19	3	23
+30 mins.	**9**	**16**	0	**25**	**4**	10	3	**17**	2	**24**	**4**	**30**	0	13	**5**	18
+45 mins.	3	11	0	14	1	**13**	3	17	**4**	21	3	28	0	**28**	2	**30**
Total Volume	20	51	2	73	7	41	14	62	11	90	12	113	1	73	12	86
% App. Total	27.4	69.9	2.7		11.3	66.1	22.6		9.7	79.6	10.6		1.2	84.9	14	
PHF	.556	.797	.500	.730	.438	.788	.875	.912	.688	.938	.750	.942	.250	.652	.600	.717

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

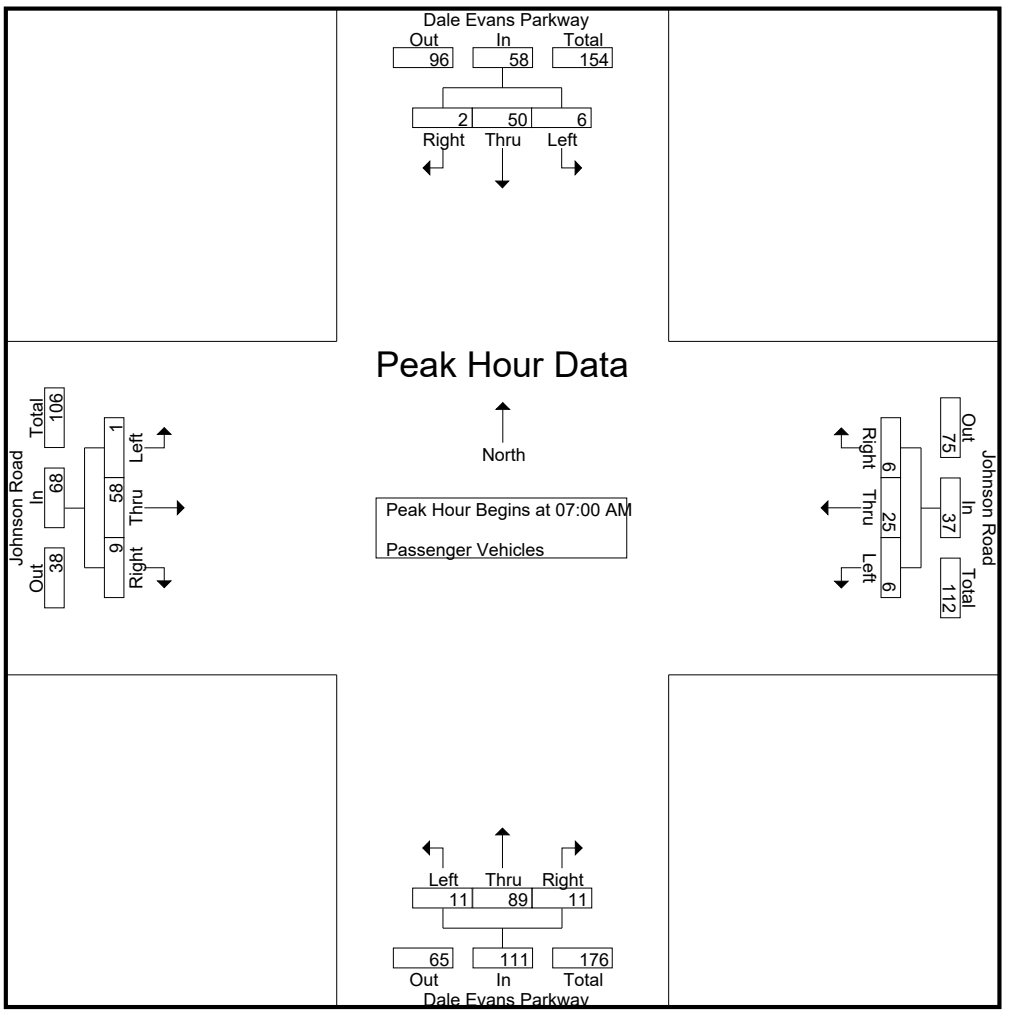
	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	11	1	12	1	5	3	9	3	22	1	26	0	11	2	13	60
07:15 AM	1	13	1	15	1	2	2	5	2	23	3	28	1	12	3	16	64
07:30 AM	5	16	0	21	3	8	1	12	2	23	4	29	0	11	2	13	75
07:45 AM	0	10	0	10	1	10	0	11	4	21	3	28	0	24	2	26	75
Total	6	50	2	58	6	25	6	37	11	89	11	111	1	58	9	68	274
08:00 AM	1	11	0	12	1	5	1	7	3	17	3	23	0	7	2	9	51
08:15 AM	1	10	0	11	0	5	1	6	1	17	2	20	1	6	3	10	47
08:30 AM	1	15	0	16	1	3	1	5	1	10	2	13	1	11	6	18	52
08:45 AM	3	12	0	15	0	1	0	1	0	17	3	20	0	11	2	13	49
Total	6	48	0	54	2	14	3	19	5	61	10	76	2	35	13	50	199
Grand Total	12	98	2	112	8	39	9	56	16	150	21	187	3	93	22	118	473
Apprch %	10.7	87.5	1.8		14.3	69.6	16.1		8.6	80.2	11.2		2.5	78.8	18.6		
Total %	2.5	20.7	0.4	23.7	1.7	8.2	1.9	11.8	3.4	31.7	4.4	39.5	0.6	19.7	4.7	24.9	

	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	11	**1**	12	1	5	**3**	9	3	22	1	26	0	11	2	13	60
07:15 AM	1	13	1	15	1	2	2	5	2	**23**	3	28	**1**	12	**3**	16	64
07:30 AM	**5**	**16**	0	**21**	**3**	8	1	**12**	2	23	**4**	**29**	0	11	2	13	**75**
07:45 AM	0	10	0	10	1	**10**	0	11	**4**	21	3	28	0	**24**	2	**26**	75
Total Volume	6	50	2	58	6	25	6	37	11	89	11	111	1	58	9	68	274
% App. Total	10.3	86.2	3.4		16.2	67.6	16.2		9.9	80.2	9.9		1.5	85.3	13.2		
PHF	.300	.781	.500	.690	.500	.625	.500	.771	.688	.967	.688	.957	.250	.604	.750	.654	.913

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	11	**1**	12	1	5	**3**	9	3	22	1	26	0	11	2	13
+15 mins.	1	13	1	15	1	2	2	5	2	**23**	3	28	**1**	12	**3**	16
+30 mins.	**5**	**16**	0	**21**	**3**	8	1	**12**	2	23	**4**	**29**	0	11	2	13
+45 mins.	0	10	0	10	1	**10**	0	11	**4**	21	3	28	0	**24**	2	**26**
Total Volume	6	50	2	58	6	25	6	37	11	89	11	111	1	58	9	68
% App. Total	10.3	86.2	3.4		16.2	67.6	16.2		9.9	80.2	9.9		1.5	85.3	13.2	
PHF	.300	.781	.500	.690	.500	.625	.500	.771	.688	.967	.688	.957	.250	.604	.750	.654

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

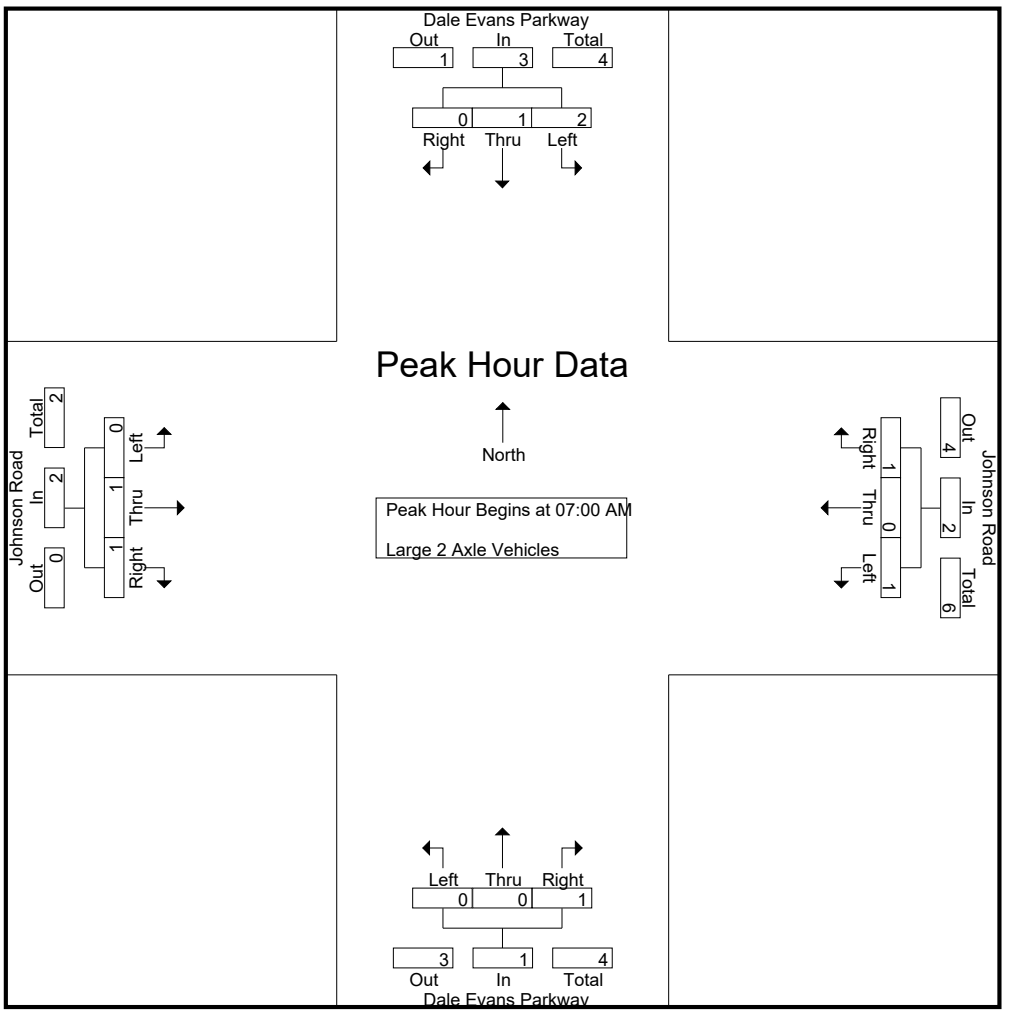
	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2
07:30 AM	1	0	0	1	1	0	0	1	0	0	0	0	0	0	1	1	3
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	2	1	0	3	1	0	1	2	0	0	1	1	0	1	1	2	8
08:00 AM	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0	3
08:15 AM	0	1	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
08:30 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	1	1	3
08:45 AM	0	0	0	0	0	2	0	2	0	3	0	3	0	0	0	0	5
Total	0	4	0	4	0	3	1	4	0	4	1	5	0	0	1	1	14
Grand Total	2	5	0	7	1	3	2	6	0	4	2	6	0	1	2	3	22
Apprch %	28.6	71.4	0		16.7	50	33.3		0	66.7	33.3		0	33.3	66.7		
Total %	9.1	22.7	0	31.8	4.5	13.6	9.1	27.3	0	18.2	9.1	27.3	0	4.5	9.1	13.6	

	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	**1**	0	0	**1**	0	0	0	0	0	0	**1**	**1**	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	**1**	**1**	0	0	0	0	0	**1**	0	**1**	2
07:30 AM	1	0	0	1	**1**	0	0	1	0	0	0	0	0	0	**1**	1	**3**
07:45 AM	0	**1**	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	2	1	0	3	1	0	1	2	0	0	1	1	0	1	1	2	8
% App. Total	66.7	33.3	0		50	0	50		0	0	100		0	50	50		
PHF	.500	.250	.000	.750	.250	.000	.250	.500	.000	.000	.250	.250	.000	.250	.250	.500	.667

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	**1**	0	0	**1**	0	0	0	0	0	0	**1**	**1**	0	0	0	0
+15 mins.	0	0	0	0	0	0	**1**	**1**	0	0	0	0	0	**1**	0	**1**
+30 mins.	1	0	0	1	**1**	0	0	1	0	0	0	0	0	0	**1**	1
+45 mins.	0	**1**	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	2	1	0	3	1	0	1	2	0	0	1	1	0	1	1	2
% App. Total	66.7	33.3	0		50	0	50		0	0	100		0	50	50	
PHF	.500	.250	.000	.750	.250	.000	.250	.500	.000	.000	.250	.250	.000	.250	.250	.500

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

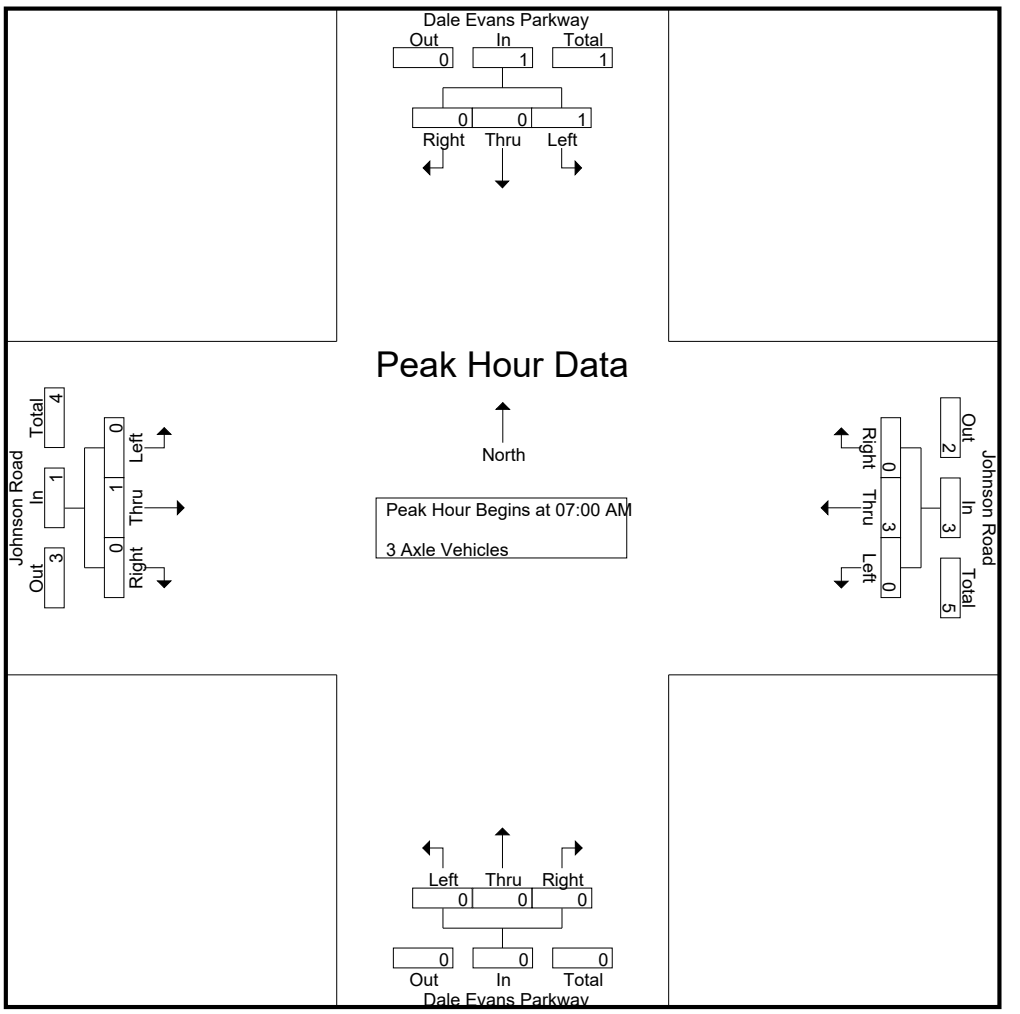
	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:15 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	3	0	3	0	0	0	0	0	1	0	1	5
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:15 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
08:30 AM	1	0	0	1	0	0	1	1	0	0	0	0	0	2	0	2	4
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	2	0	0	2	0	3	1	4	0	0	0	0	0	5	0	5	11
Grand Total	3	0	0	3	0	6	1	7	0	0	0	0	0	6	0	6	16
Apprch %	100	0	0		0	85.7	14.3		0	0	0		0	100	0		
Total %	18.8	0	0	18.8	0	37.5	6.2	43.8	0	0	0	0	0	37.5	0	37.5	

	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	**2**
07:15 AM	**1**	0	0	**1**	0	1	0	1	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	3	0	3	0	0	0	0	0	1	0	1	5
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.750	.000	.750	.000	.000	.000	.000	.000	.250	.000	.250	.625

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**
+15 mins.	**1**	0	0	**1**	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	3	0	3	0	0	0	0	0	1	0	1
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0	
PHF	.250	.000	.000	.250	.000	.750	.000	.750	.000	.000	.000	.000	.000	.250	.000	.250

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

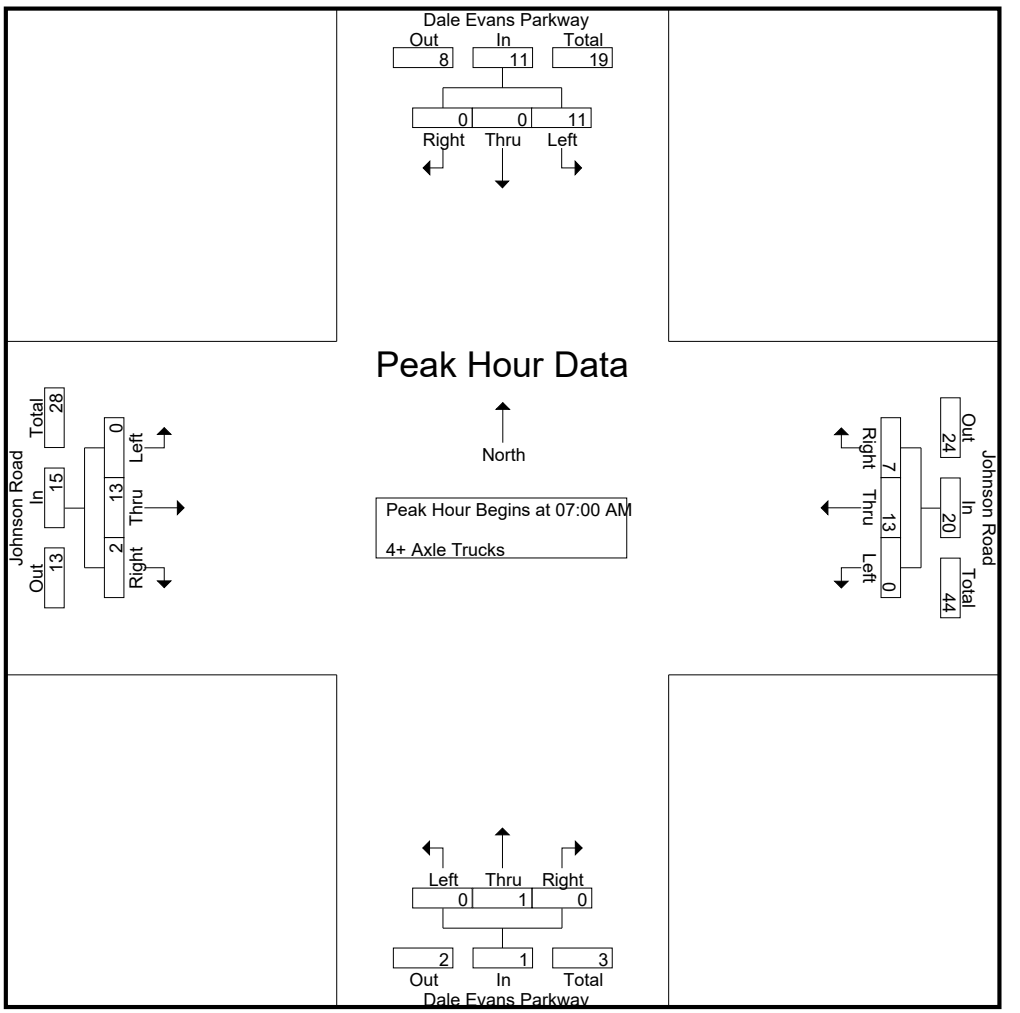
	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	0	0	4	0	5	1	6	0	0	0	0	0	1	0	1	11
07:15 AM	1	0	0	1	0	4	1	5	0	0	0	0	0	6	0	6	12
07:30 AM	3	0	0	3	0	1	2	3	0	1	0	1	0	2	2	4	11
07:45 AM	3	0	0	3	0	3	3	6	0	0	0	0	0	4	0	4	13
Total	11	0	0	11	0	13	7	20	0	1	0	1	0	13	2	15	47
08:00 AM	2	0	0	2	0	1	3	4	0	0	0	0	0	3	1	4	10
08:15 AM	4	0	0	4	0	2	1	3	1	0	0	1	0	4	0	4	12
08:30 AM	4	0	0	4	0	5	4	9	0	1	1	2	0	4	0	4	19
08:45 AM	2	0	0	2	1	6	1	8	0	0	1	1	0	6	0	6	17
Total	12	0	0	12	1	14	9	24	1	1	2	4	0	17	1	18	58
Grand Total	23	0	0	23	1	27	16	44	1	2	2	5	0	30	3	33	105
Apprch %	100	0	0		2.3	61.4	36.4		20	40	40		0	90.9	9.1		
Total %	21.9	0	0	21.9	1	25.7	15.2	41.9	1	1.9	1.9	4.8	0	28.6	2.9	31.4	

	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	**4**	0	0	**4**	0	**5**	1	**6**	0	0	0	0	0	1	0	1	11
07:15 AM	1	0	0	1	0	4	1	5	0	0	0	0	0	**6**	0	**6**	12
07:30 AM	3	0	0	3	0	1	2	3	0	**1**	0	**1**	0	2	**2**	4	11
07:45 AM	3	0	0	3	0	3	**3**	6	0	0	0	0	0	4	0	4	**13**
Total Volume	11	0	0	11	0	13	7	20	0	1	0	1	0	13	2	15	47
% App. Total	100	0	0		0	65	35		0	100	0		0	86.7	13.3		
PHF	.688	.000	.000	.688	.000	.650	.583	.833	.000	.250	.000	.250	.000	.542	.250	.625	.904

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	**4**	0	0	**4**	0	**5**	1	**6**	0	0	0	0	0	1	0	1
+15 mins.	1	0	0	1	0	4	1	5	0	0	0	0	0	**6**	0	**6**
+30 mins.	3	0	0	3	0	1	2	3	0	**1**	0	**1**	0	2	**2**	4
+45 mins.	3	0	0	3	0	3	**3**	6	0	0	0	0	0	4	0	4
Total Volume	11	0	0	11	0	13	7	20	0	1	0	1	0	13	2	15
% App. Total	100	0	0		0	65	35		0	100	0		0	86.7	13.3	
PHF	.688	.000	.000	.688	.000	.650	.583	.833	.000	.250	.000	.250	.000	.542	.250	.625

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

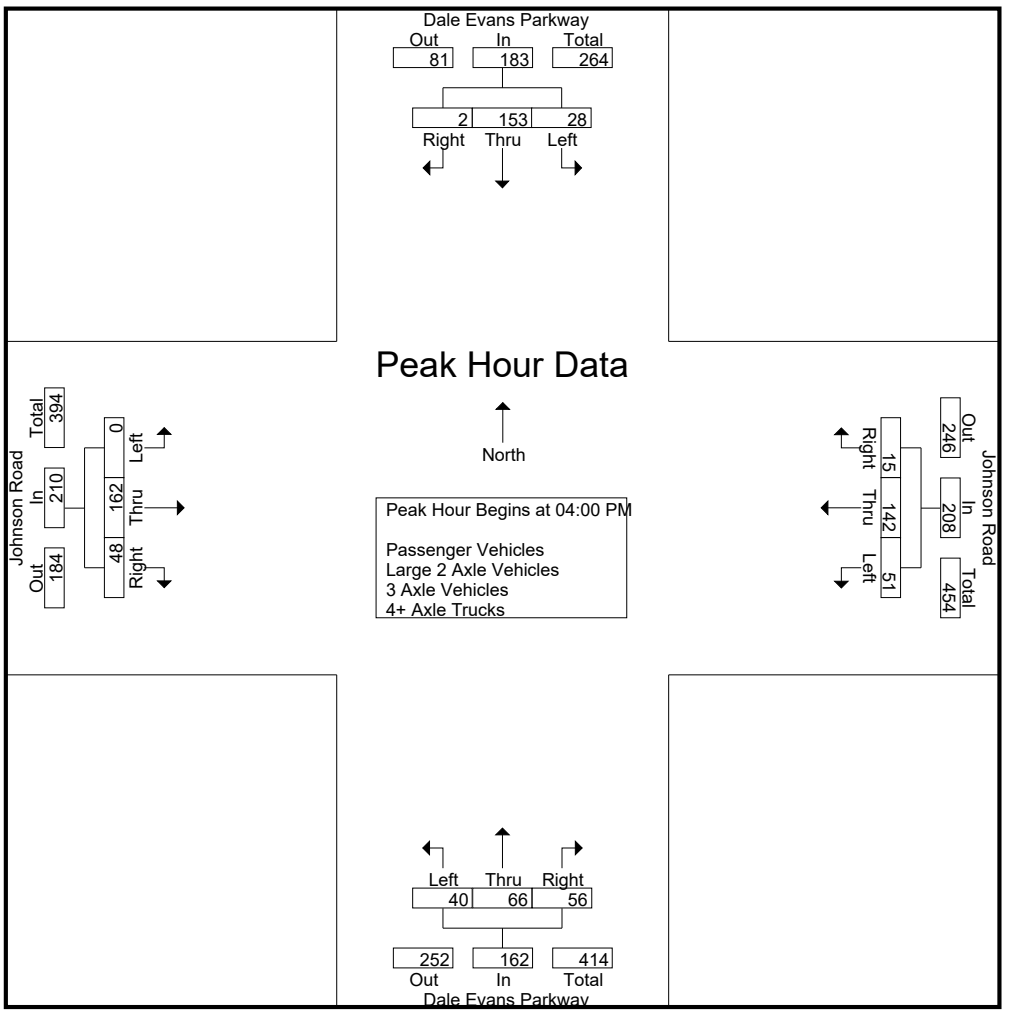
	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	10	28	1	39	31	80	7	118	19	20	13	52	0	34	17	51	260
04:15 PM	7	30	0	37	11	28	2	41	15	18	31	64	0	87	12	99	241
04:30 PM	7	39	1	47	5	20	4	29	3	11	11	25	0	17	12	29	130
04:45 PM	4	56	0	60	4	14	2	20	3	17	1	21	0	24	7	31	132
Total	28	153	2	183	51	142	15	208	40	66	56	162	0	162	48	210	763
05:00 PM	9	46	0	55	4	23	4	31	1	17	4	22	0	23	5	28	136
05:15 PM	6	38	0	44	2	16	5	23	3	15	4	22	0	19	10	29	118
05:30 PM	3	38	1	42	5	21	5	31	2	8	1	11	0	14	5	19	103
05:45 PM	3	22	0	25	2	27	1	30	2	12	0	14	0	11	3	14	83
Total	21	144	1	166	13	87	15	115	8	52	9	69	0	67	23	90	440
Grand Total	49	297	3	349	64	229	30	323	48	118	65	231	0	229	71	300	1203
Apprch %	14	85.1	0.9		19.8	70.9	9.3		20.8	51.1	28.1		0	76.3	23.7		
Total %	4.1	24.7	0.2	29	5.3	19	2.5	26.8	4	9.8	5.4	19.2	0	19	5.9	24.9	
Passenger Vehicles	33	289	3	325	62	222	19	303	45	116	63	224	0	206	66	272	1124
% Passenger Vehicles	67.3	97.3	100	93.1	96.9	96.9	63.3	93.8	93.8	98.3	96.9	97	0	90	93	90.7	93.4
Large 2 Axle Vehicles	1	1	0	2	1	0	1	2	0	2	2	4	0	0	1	1	9
% Large 2 Axle Vehicles	2	0.3	0	0.6	1.6	0	3.3	0.6	0	1.7	3.1	1.7	0	0	1.4	0.3	0.7
3 Axle Vehicles	0	0	0	0	1	1	0	2	2	0	0	2	0	7	3	10	14
% 3 Axle Vehicles	0	0	0	0	1.6	0.4	0	0.6	4.2	0	0	0.9	0	3.1	4.2	3.3	1.2
4+ Axle Trucks	15	7	0	22	0	6	10	16	1	0	0	1	0	16	1	17	56
% 4+ Axle Trucks	30.6	2.4	0	6.3	0	2.6	33.3	5	2.1	0	0	0.4	0	7	1.4	5.7	4.7

	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**10**	28	**1**	39	**31**	**80**	**7**	**118**	**19**	**20**	13	52	0	34	**17**	51	**260**
04:15 PM	7	30	0	37	11	28	2	41	15	18	**31**	**64**	0	**87**	12	**99**	241
04:30 PM	7	39	1	47	5	20	4	29	3	11	11	25	0	17	12	29	130
04:45 PM	4	**56**	0	**60**	4	14	2	20	3	17	1	21	0	24	7	31	132
Total Volume	28	153	2	183	51	142	15	208	40	66	56	162	0	162	48	210	763
% App. Total	15.3	83.6	1.1		24.5	68.3	7.2		24.7	40.7	34.6		0	77.1	22.9		
PHF	.700	.683	.500	.763	.411	.444	.536	.441	.526	.825	.452	.633	.000	.466	.706	.530	.734

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:30 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	7	39	**1**	47	**31**	**80**	**7**	**118**	**19**	**20**	13	52	0	34	**17**	51
+15 mins.	4	**56**	0	**60**	11	28	2	41	15	18	**31**	**64**	0	**87**	12	**99**
+30 mins.	**9**	46	0	55	5	20	4	29	3	11	11	25	0	17	12	29
+45 mins.	6	38	0	44	4	14	2	20	3	17	1	21	0	24	7	31
Total Volume	26	179	1	206	51	142	15	208	40	66	56	162	0	162	48	210
% App. Total	12.6	86.9	0.5		24.5	68.3	7.2		24.7	40.7	34.6		0	77.1	22.9	
PHF	.722	.799	.250	.858	.411	.444	.536	.441	.526	.825	.452	.633	.000	.466	.706	.530

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

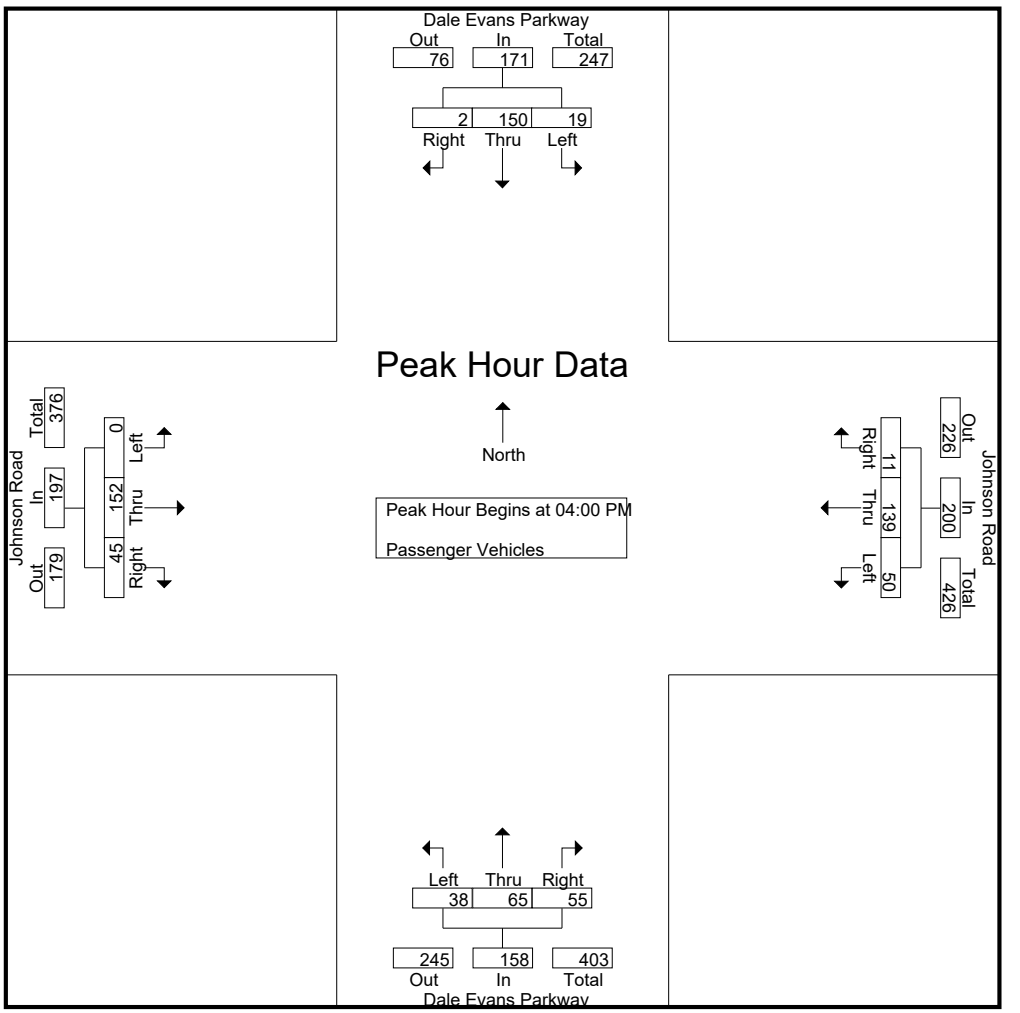
	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	28	1	35	31	79	6	116	19	20	12	51	0	32	14	46	248
04:15 PM	6	30	0	36	11	27	1	39	13	18	31	62	0	85	12	97	234
04:30 PM	4	37	1	42	4	19	3	26	3	11	11	25	0	15	12	27	120
04:45 PM	3	55	0	58	4	14	1	19	3	16	1	20	0	20	7	27	124
Total	19	150	2	171	50	139	11	200	38	65	55	158	0	152	45	197	726
05:00 PM	6	45	0	51	3	23	1	27	1	17	3	21	0	20	5	25	124
05:15 PM	4	38	0	42	2	15	4	21	3	15	4	22	0	14	10	24	109
05:30 PM	1	35	1	37	5	18	2	25	2	7	1	10	0	12	4	16	88
05:45 PM	3	21	0	24	2	27	1	30	1	12	0	13	0	8	2	10	77
Total	14	139	1	154	12	83	8	103	7	51	8	66	0	54	21	75	398
Grand Total	33	289	3	325	62	222	19	303	45	116	63	224	0	206	66	272	1124
Apprch %	10.2	88.9	0.9		20.5	73.3	6.3		20.1	51.8	28.1		0	75.7	24.3		
Total %	2.9	25.7	0.3	28.9	5.5	19.8	1.7	27	4	10.3	5.6	19.9	0	18.3	5.9	24.2	

	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**6**	28	**1**	35	**31**	**79**	**6**	**116**	**19**	**20**	12	51	0	32	**14**	46	**248**
04:15 PM	6	30	0	36	11	27	1	39	13	18	**31**	**62**	0	**85**	12	**97**	234
04:30 PM	4	37	1	42	4	19	3	26	3	11	11	25	0	15	12	27	120
04:45 PM	3	**55**	0	**58**	4	14	1	19	3	16	1	20	0	20	7	27	124
Total Volume	19	150	2	171	50	139	11	200	38	65	55	158	0	152	45	197	726
% App. Total	11.1	87.7	1.2		25	69.5	5.5		24.1	41.1	34.8		0	77.2	22.8		
PHF	.792	.682	.500	.737	.403	.440	.458	.431	.500	.813	.444	.637	.000	.447	.804	.508	.732

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John PM
Site Code : 231073
Start Date : 11/8/2023
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.	**6**	28	**1**	35	**31**	**79**	**6**	**116**	**19**	**20**	12	51	0	32	**14**	46
+15 mins.	6	30	0	36	11	27	1	39	13	18	**31**	**62**	0	**85**	12	**97**
+30 mins.	4	37	1	42	4	19	3	26	3	11	11	25	0	15	12	27
+45 mins.	3	**55**	0	**58**	4	14	1	19	3	16	1	20	0	20	7	27
Total Volume	19	150	2	171	50	139	11	200	38	65	55	158	0	152	45	197
% App. Total	11.1	87.7	1.2		25	69.5	5.5		24.1	41.1	34.8		0	77.2	22.8	
PHF	.792	.682	.500	.737	.403	.440	.458	.431	.500	.813	.444	.637	.000	.447	.804	.508

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

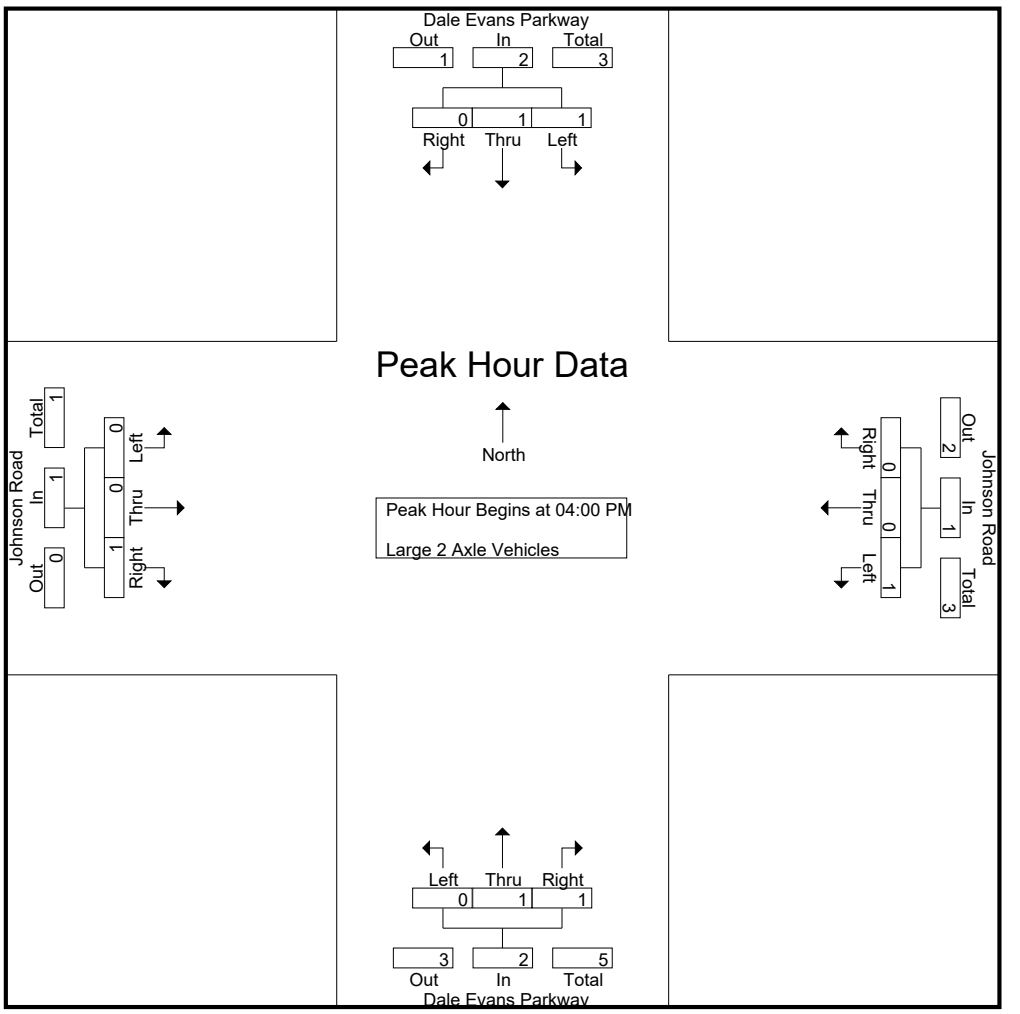
	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	1	0	2	1	0	0	1	0	0	0	0	0	0	0	0	3
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	1	1	0	2	1	0	0	1	0	1	1	2	0	0	1	1	6
05:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	1	0	1	1	2	0	0	0	0	3
Grand Total	1	1	0	2	1	0	1	2	0	2	2	4	0	0	1	1	9
Apprch %	50	50	0		50	0	50		0	50	50		0	0	100		
Total %	11.1	11.1	0	22.2	11.1	0	11.1	22.2	0	22.2	22.2	44.4	0	0	11.1	11.1	

	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	**1**	**1**	0	0	**1**	**1**	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	**1**	**1**	0	**2**	**1**	0	0	**1**	0	0	0	0	0	0	0	0	**3**
04:45 PM	0	0	0	0	0	0	0	0	0	**1**	0	1	0	0	0	0	1
Total Volume	1	1	0	2	1	0	0	1	0	1	1	2	0	0	1	1	6
% App. Total	50	50	0		100	0	0		0	50	50		0	0	100		
PHF	.250	.250	.000	.250	.250	.000	.000	.250	.000	.250	.250	.500	.000	.000	.250	.250	.500

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	**1**	**1**	0	0	**1**	**1**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	**1**	**1**	0	**2**	**1**	0	0	**1**	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	1	1	0	2	1	0	0	1	0	1	1	2	0	0	1	1
% App. Total	50	50	0		100	0	0		0	50	50		0	0	100	
PHF	.250	.250	.000	.250	.250	.000	.000	.250	.000	.250	.250	.500	.000	.000	.250	.250

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

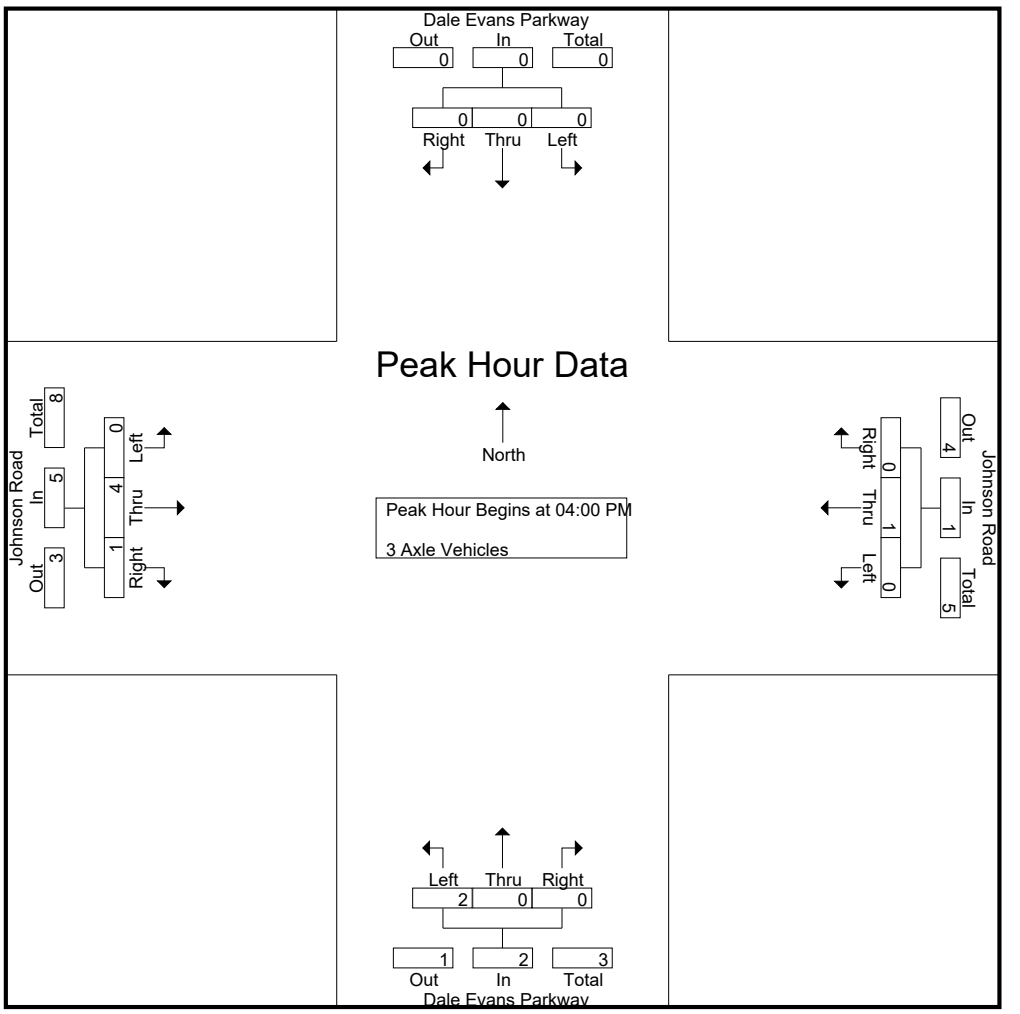
	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
04:15 PM	0	0	0	0	0	1	0	1	2	0	0	2	0	2	0	2	5
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	1	0	1	2	0	0	2	0	4	1	5	8
05:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	2	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
Total	0	0	0	0	1	0	0	1	0	0	0	0	0	3	2	5	6
Grand Total	0	0	0	0	1	1	0	2	2	0	0	2	0	7	3	10	14
Apprch %	0	0	0		50	50	0		100	0	0		0	70	30		
Total %	0	0	0	0	7.1	7.1	0	14.3	14.3	0	0	14.3	0	50	21.4	71.4	

	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	1
04:15 PM	0	0	0	0	0	**1**	0	**1**	**2**	0	0	**2**	0	**2**	0	**2**	**5**
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total Volume	0	0	0	0	0	1	0	1	2	0	0	2	0	4	1	5	8
% App. Total	0	0	0		0	100	0		100	0	0		0	80	20		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	.000	.500	.250	.625	.400

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1
+15 mins.	0	0	0	0	0	**1**	0	**1**	**2**	0	0	**2**	0	**2**	0	**2**
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Total Volume	0	0	0	0	0	1	0	1	2	0	0	2	0	4	1	5
% App. Total	0	0	0		0	100	0		100	0	0		0	80	20	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	.000	.500	.250	.625

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

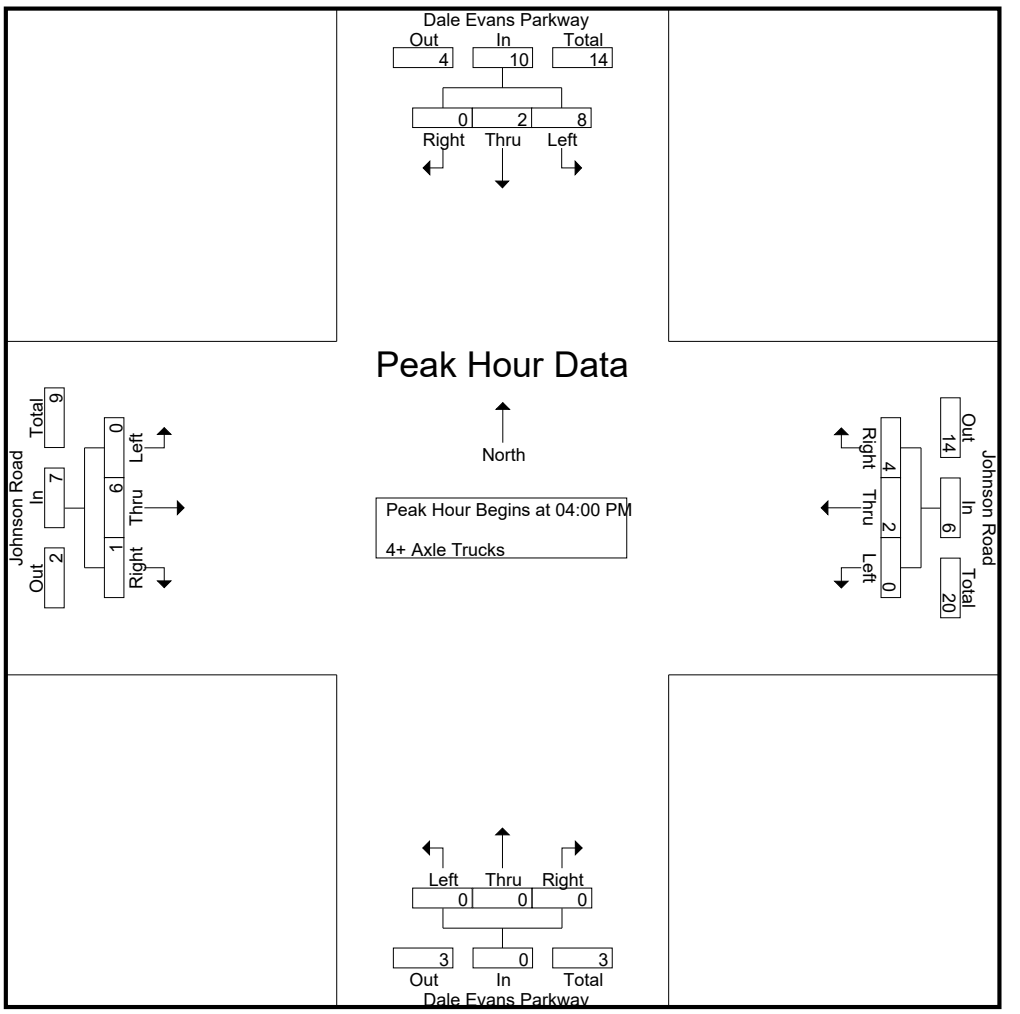
	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	0	0	4	0	1	1	2	0	0	0	0	0	2	1	3	9
04:15 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
04:30 PM	2	1	0	3	0	1	1	2	0	0	0	0	0	2	0	2	7
04:45 PM	1	1	0	2	0	0	1	1	0	0	0	0	0	2	0	2	5
Total	8	2	0	10	0	2	4	6	0	0	0	0	0	6	1	7	23
05:00 PM	3	1	0	4	0	0	3	3	0	0	0	0	0	1	0	1	8
05:15 PM	2	0	0	2	0	1	1	2	0	0	0	0	0	5	0	5	9
05:30 PM	2	3	0	5	0	3	2	5	0	0	0	0	0	2	0	2	12
05:45 PM	0	1	0	1	0	0	0	0	1	0	0	1	0	2	0	2	4
Total	7	5	0	12	0	4	6	10	1	0	0	1	0	10	0	10	33
Grand Total	15	7	0	22	0	6	10	16	1	0	0	1	0	16	1	17	56
Apprch %	68.2	31.8	0		0	37.5	62.5		100	0	0		0	94.1	5.9		
Total %	26.8	12.5	0	39.3	0	10.7	17.9	28.6	1.8	0	0	1.8	0	28.6	1.8	30.4	

	Dale Evans Parkway Southbound				Johnson Road Westbound				Dale Evans Parkway Northbound				Johnson Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**4**	0	0	**4**	0	**1**	**1**	**2**	0	0	0	0	0	**2**	**1**	**3**	**9**
04:15 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
04:30 PM	2	**1**	0	3	0	1	1	2	0	0	0	0	0	2	0	2	7
04:45 PM	1	1	0	2	0	0	1	1	0	0	0	0	0	2	0	2	5
Total Volume	8	2	0	10	0	2	4	6	0	0	0	0	0	6	1	7	23
% App. Total	80	20	0		0	33.3	66.7		0	0	0		0	85.7	14.3		
PHF	.500	.500	.000	.625	.000	.500	1.00	.750	.000	.000	.000	.000	.000	.750	.250	.583	.639

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Johnson Road
Weather: Clear

File Name : 02_APV_DEP_John PM
Site Code : 231073
Start Date : 11/8/2023
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.	**4**	0	0	**4**	0	**1**	**1**	**2**	0	0	0	0	0	**2**	**1**	**3**
+15 mins.	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
+30 mins.	2	**1**	0	3	0	1	1	2	0	0	0	0	0	2	0	2
+45 mins.	1	1	0	2	0	0	1	1	0	0	0	0	0	2	0	2
Total Volume	8	2	0	10	0	2	4	6	0	0	0	0	0	6	1	7
% App. Total	80	20	0		0	33.3	66.7		0	0	0		0	85.7	14.3	
PHF	.500	.500	.000	.625	.000	.500	1.000	.750	.000	.000	.000	.000	.000	.750	.250	.583

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

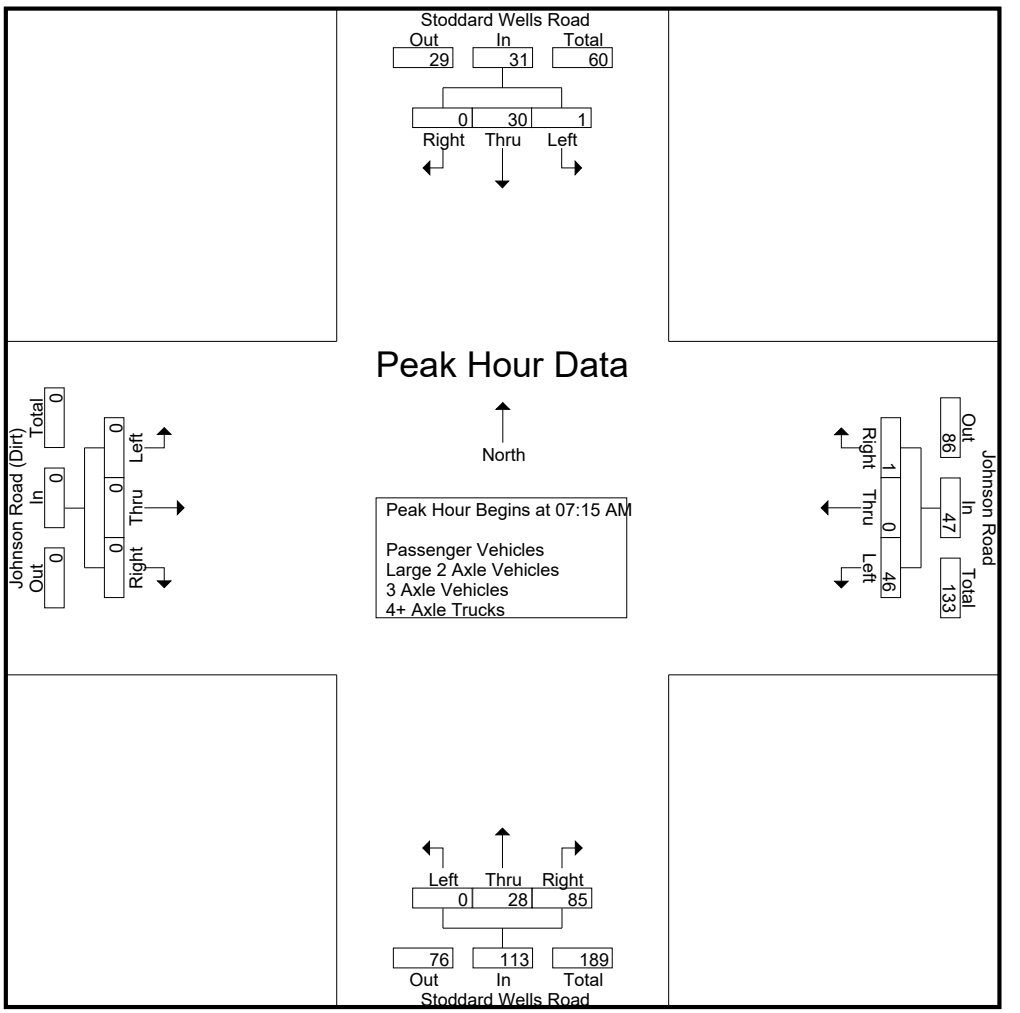
	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	4	0	4	14	0	0	14	0	6	14	20	0	0	0	0	38
07:15 AM	0	9	0	9	10	0	0	10	0	5	24	29	0	0	0	0	48
07:30 AM	1	5	0	6	7	0	0	7	0	7	19	26	0	0	0	0	39
07:45 AM	0	7	0	7	17	0	1	18	0	7	26	33	0	0	0	0	58
Total	1	25	0	26	48	0	1	49	0	25	83	108	0	0	0	0	183
08:00 AM	0	9	0	9	12	0	0	12	0	9	16	25	0	0	0	0	46
08:15 AM	0	8	0	8	8	0	0	8	0	4	12	16	0	0	0	0	32
08:30 AM	1	10	0	11	8	0	0	8	0	9	26	35	0	0	0	0	54
08:45 AM	0	6	0	6	10	0	0	10	0	3	18	21	0	0	0	0	37
Total	1	33	0	34	38	0	0	38	0	25	72	97	0	0	0	0	169
Grand Total	2	58	0	60	86	0	1	87	0	50	155	205	0	0	0	0	352
Apprch %	3.3	96.7	0		98.9	0	1.1		0	24.4	75.6		0	0	0		
Total %	0.6	16.5	0	17	24.4	0	0.3	24.7	0	14.2	44	58.2	0	0	0	0	
Passenger Vehicles	0	27	0	27	50	0	1	51	0	14	115	129	0	0	0	0	207
% Passenger Vehicles	0	46.6	0	45	58.1	0	100	58.6	0	28	74.2	62.9	0	0	0	0	58.8
Large 2 Axle Vehicles	2	0	0	2	3	0	0	3	0	0	1	1	0	0	0	0	6
% Large 2 Axle Vehicles	100	0	0	3.3	3.5	0	0	3.4	0	0	0.6	0.5	0	0	0	0	1.7
3 Axle Vehicles	0	6	0	6	6	0	0	6	0	2	6	8	0	0	0	0	20
% 3 Axle Vehicles	0	10.3	0	10	7	0	0	6.9	0	4	3.9	3.9	0	0	0	0	5.7
4+ Axle Trucks	0	25	0	25	27	0	0	27	0	34	33	67	0	0	0	0	119
% 4+ Axle Trucks	0	43.1	0	41.7	31.4	0	0	31	0	68	21.3	32.7	0	0	0	0	33.8

	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**9**	0	**9**	10	0	0	10	0	5	24	29	0	0	0	0	48
07:30 AM	**1**	5	0	6	7	0	0	7	0	7	19	26	0	0	0	0	39
07:45 AM	0	7	0	7	**17**	0	**1**	**18**	0	7	**26**	**33**	0	0	0	0	**58**
08:00 AM	0	9	0	9	12	0	0	12	0	**9**	16	25	0	0	0	0	46
Total Volume	1	30	0	31	46	0	1	47	0	28	85	113	0	0	0	0	191
% App. Total	3.2	96.8	0		97.9	0	2.1		0	24.8	75.2		0	0	0		
PHF	.250	.833	.000	.861	.676	.000	.250	.653	.000	.778	.817	.856	.000	.000	.000	.000	.823

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:45 AM				07:00 AM				07:15 AM				07:00 AM			
+0 mins.	0	7	0	7	14	0	0	14	0	5	24	29	0	0	0	0
+15 mins.	0	9	0	9	10	0	0	10	0	7	19	26	0	0	0	0
+30 mins.	0	8	0	8	7	0	0	7	0	7	**26**	**33**	0	0	0	0
+45 mins.	**1**	**10**	0	**11**	**17**	0	**1**	**18**	0	**9**	16	25	0	0	0	0
Total Volume	1	34	0	35	48	0	1	49	0	28	85	113	0	0	0	0
% App. Total	2.9	97.1	0		98	0	2		0	24.8	75.2		0	0	0	
PHF	.250	.850	.000	.795	.706	.000	.250	.681	.000	.778	.817	.856	.000	.000	.000	.000

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

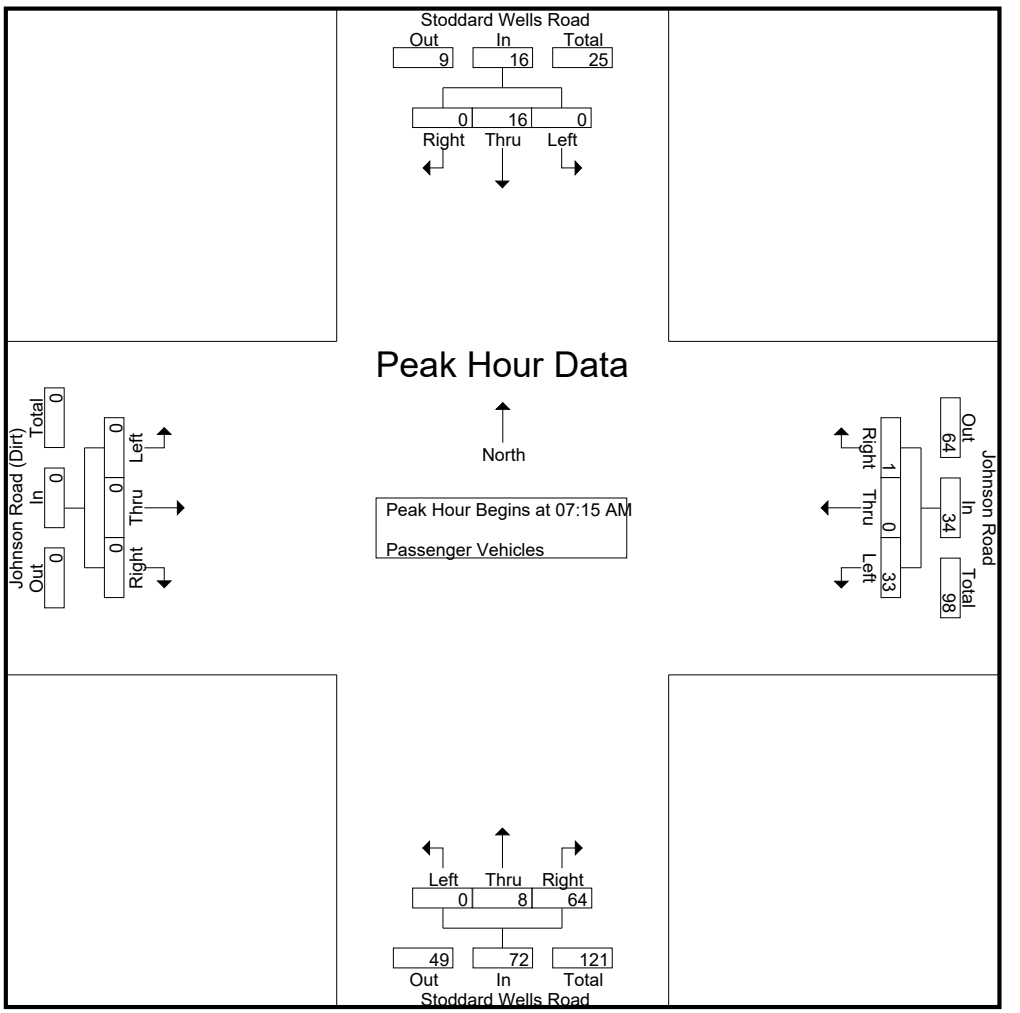
	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	3	0	3	9	0	0	9	0	2	12	14	0	0	0	0	26
07:15 AM	0	6	0	6	4	0	0	4	0	1	16	17	0	0	0	0	27
07:30 AM	0	2	0	2	6	0	0	6	0	3	16	19	0	0	0	0	27
07:45 AM	0	3	0	3	14	0	1	15	0	2	23	25	0	0	0	0	43
Total	0	14	0	14	33	0	1	34	0	8	67	75	0	0	0	0	123
08:00 AM	0	5	0	5	9	0	0	9	0	2	9	11	0	0	0	0	25
08:15 AM	0	0	0	0	5	0	0	5	0	0	8	8	0	0	0	0	13
08:30 AM	0	5	0	5	2	0	0	2	0	4	20	24	0	0	0	0	31
08:45 AM	0	3	0	3	1	0	0	1	0	0	11	11	0	0	0	0	15
Total	0	13	0	13	17	0	0	17	0	6	48	54	0	0	0	0	84
Grand Total	0	27	0	27	50	0	1	51	0	14	115	129	0	0	0	0	207
Apprch %	0	100	0		98	0	2		0	10.9	89.1		0	0	0		
Total %	0	13	0	13	24.2	0	0.5	24.6	0	6.8	55.6	62.3	0	0	0	0	

	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**6**	0	**6**	4	0	0	4	0	1	16	17	0	0	0	0	27
07:30 AM	0	2	0	2	6	0	0	6	0	**3**	16	19	0	0	0	0	27
07:45 AM	0	3	0	3	**14**	0	**1**	**15**	0	2	**23**	**25**	0	0	0	0	**43**
08:00 AM	0	5	0	5	9	0	0	9	0	2	9	11	0	0	0	0	25
Total Volume	0	16	0	16	33	0	1	34	0	8	64	72	0	0	0	0	122
% App. Total	0	100	0		97.1	0	2.9		0	11.1	88.9		0	0	0		
PHF	.000	.667	.000	.667	.589	.000	.250	.567	.000	.667	.696	.720	.000	.000	.000	.000	.709

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**6**	0	**6**	4	0	0	4	0	1	16	17	0	0	0	0
+15 mins.	0	2	0	2	6	0	0	6	0	**3**	16	19	0	0	0	0
+30 mins.	0	3	0	3	**14**	0	**1**	**15**	0	2	**23**	**25**	0	0	0	0
+45 mins.	0	5	0	5	9	0	0	9	0	2	9	11	0	0	0	0
Total Volume	0	16	0	16	33	0	1	34	0	8	64	72	0	0	0	0
% App. Total	0	100	0		97.1	0	2.9		0	11.1	88.9		0	0	0	
PHF	.000	.667	.000	.667	.589	.000	.250	.567	.000	.667	.696	.720	.000	.000	.000	.000

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

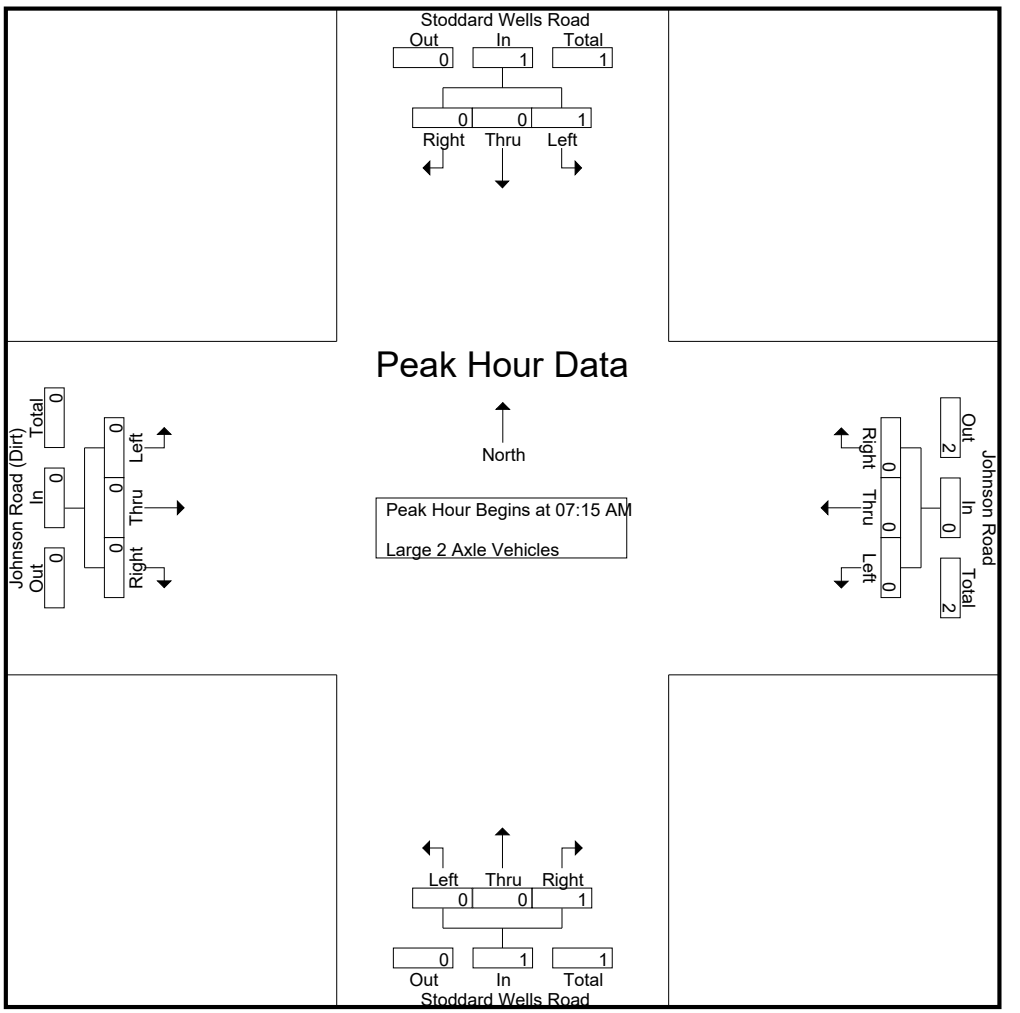
	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	3
Total	1	0	0	1	3	0	0	3	0	0	0	0	0	0	0	0	4
Grand Total	2	0	0	2	3	0	0	3	0	0	1	1	0	0	0	0	6
Apprch %	100	0	0		100	0	0		0	0	100		0	0	0		
Total %	33.3	0	0	33.3	50	0	0	50	0	0	16.7	16.7	0	0	0	0	

	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	**1**	**1**	0	0	0	0	**1**
07:30 AM	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
% App. Total	100	0	0		0	0	0		0	0	100		0	0	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.500

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

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

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

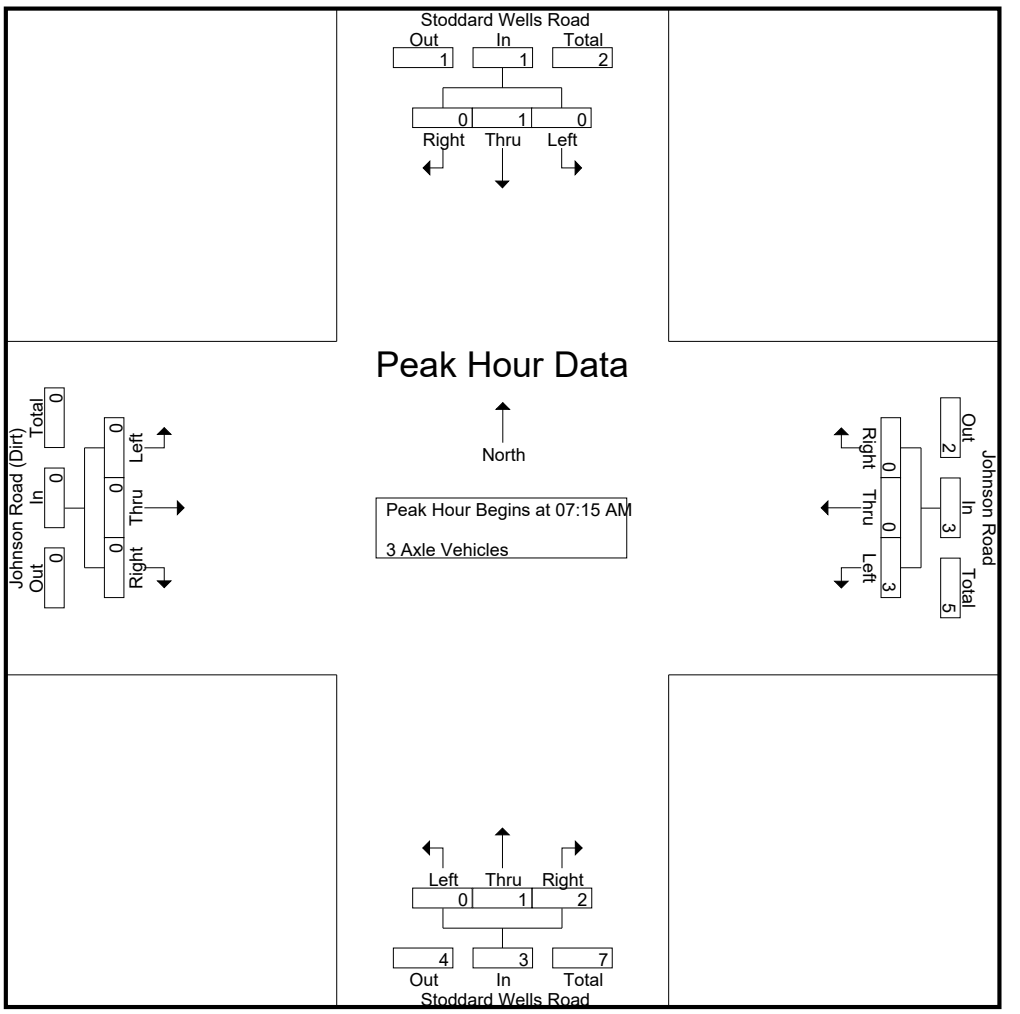
	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
07:15 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	1	0	1	3	0	0	3	0	1	1	2	0	0	0	0	6
08:00 AM	0	0	0	0	1	0	0	1	0	0	2	2	0	0	0	0	3
08:15 AM	0	2	0	2	1	0	0	1	0	1	1	2	0	0	0	0	5
08:30 AM	0	1	0	1	0	0	0	0	0	0	2	2	0	0	0	0	3
08:45 AM	0	2	0	2	1	0	0	1	0	0	0	0	0	0	0	0	3
Total	0	5	0	5	3	0	0	3	0	1	5	6	0	0	0	0	14
Grand Total	0	6	0	6	6	0	0	6	0	2	6	8	0	0	0	0	20
Apprch %	0	100	0		100	0	0		0	25	75		0	0	0		
Total %	0	30	0	30	30	0	0	30	0	10	30	40	0	0	0	0	

	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**1**	0	**1**	**1**	0	0	**1**	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	**1**	0	1	0	0	0	0	1
08:00 AM	0	0	0	0	1	0	0	1	0	0	**2**	**2**	0	0	0	0	**3**
Total Volume	0	1	0	1	3	0	0	3	0	1	2	3	0	0	0	0	7
% App. Total	0	100	0		100	0	0		0	33.3	66.7		0	0	0		
PHF	.000	.250	.000	.250	.750	.000	.000	.750	.000	.250	.250	.375	.000	.000	.000	.000	.583

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**1**	0	**1**	**1**	0	0	**1**	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	**1**	0	1	0	0	0	0
+45 mins.	0	0	0	0	1	0	0	1	0	0	**2**	**2**	0	0	0	0
Total Volume	0	1	0	1	3	0	0	3	0	1	2	3	0	0	0	0
% App. Total	0	100	0		100	0	0		0	33.3	66.7		0	0	0	
PHF	.000	.250	.000	.250	.750	.000	.000	.750	.000	.250	.250	.375	.000	.000	.000	.000

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

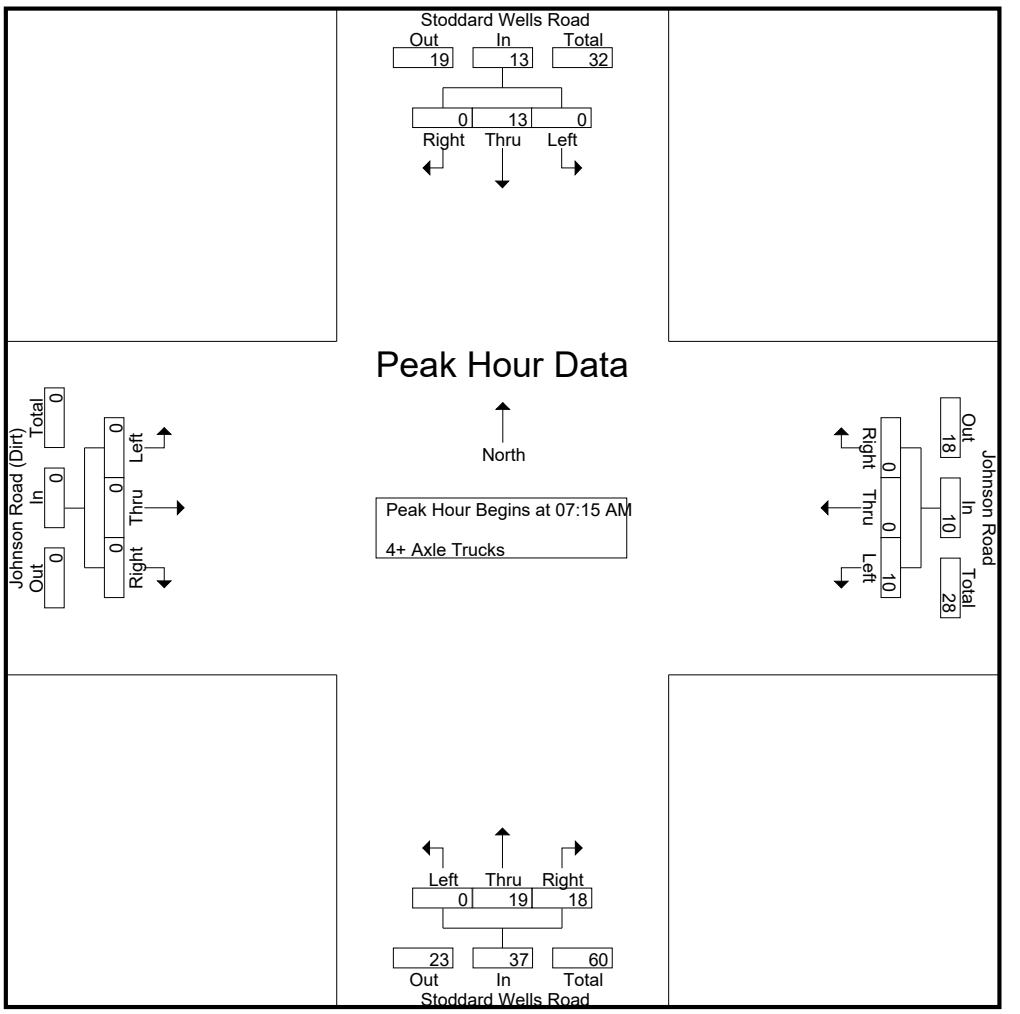
	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	4	0	0	4	0	4	1	5	0	0	0	0	10
07:15 AM	0	2	0	2	5	0	0	5	0	4	7	11	0	0	0	0	18
07:30 AM	0	3	0	3	0	0	0	0	0	4	3	7	0	0	0	0	10
07:45 AM	0	4	0	4	3	0	0	3	0	4	3	7	0	0	0	0	14
Total	0	10	0	10	12	0	0	12	0	16	14	30	0	0	0	0	52
08:00 AM	0	4	0	4	2	0	0	2	0	7	5	12	0	0	0	0	18
08:15 AM	0	6	0	6	2	0	0	2	0	3	3	6	0	0	0	0	14
08:30 AM	0	4	0	4	6	0	0	6	0	5	4	9	0	0	0	0	19
08:45 AM	0	1	0	1	5	0	0	5	0	3	7	10	0	0	0	0	16
Total	0	15	0	15	15	0	0	15	0	18	19	37	0	0	0	0	67
Grand Total	0	25	0	25	27	0	0	27	0	34	33	67	0	0	0	0	119
Apprch %	0	100	0		100	0	0		0	50.7	49.3		0	0	0		
Total %	0	21	0	21	22.7	0	0	22.7	0	28.6	27.7	56.3	0	0	0	0	

	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	2	0	2	**5**	0	0	**5**	0	4	**7**	11	0	0	0	0	**18**
07:30 AM	0	3	0	3	0	0	0	0	0	4	3	7	0	0	0	0	10
07:45 AM	0	**4**	0	**4**	3	0	0	3	0	4	3	7	0	0	0	0	14
08:00 AM	0	4	0	4	2	0	0	2	0	**7**	5	**12**	0	0	0	0	18
Total Volume	0	13	0	13	10	0	0	10	0	19	18	37	0	0	0	0	60
% App. Total	0	100	0		100	0	0		0	51.4	48.6		0	0	0		
PHF	.000	.813	.000	.813	.500	.000	.000	.500	.000	.679	.643	.771	.000	.000	.000	.000	.833

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	2	0	2	**5**	0	0	**5**	0	4	**7**	11	0	0	0	0
+15 mins.	0	3	0	3	0	0	0	0	0	4	3	7	0	0	0	0
+30 mins.	0	**4**	0	**4**	3	0	0	3	0	4	3	7	0	0	0	0
+45 mins.	0	4	0	4	2	0	0	2	0	**7**	5	**12**	0	0	0	0
Total Volume	0	13	0	13	10	0	0	10	0	19	18	37	0	0	0	0
% App. Total	0	100	0		100	0	0		0	51.4	48.6		0	0	0	
PHF	.000	.813	.000	.813	.500	.000	.000	.500	.000	.679	.643	.771	.000	.000	.000	.000

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

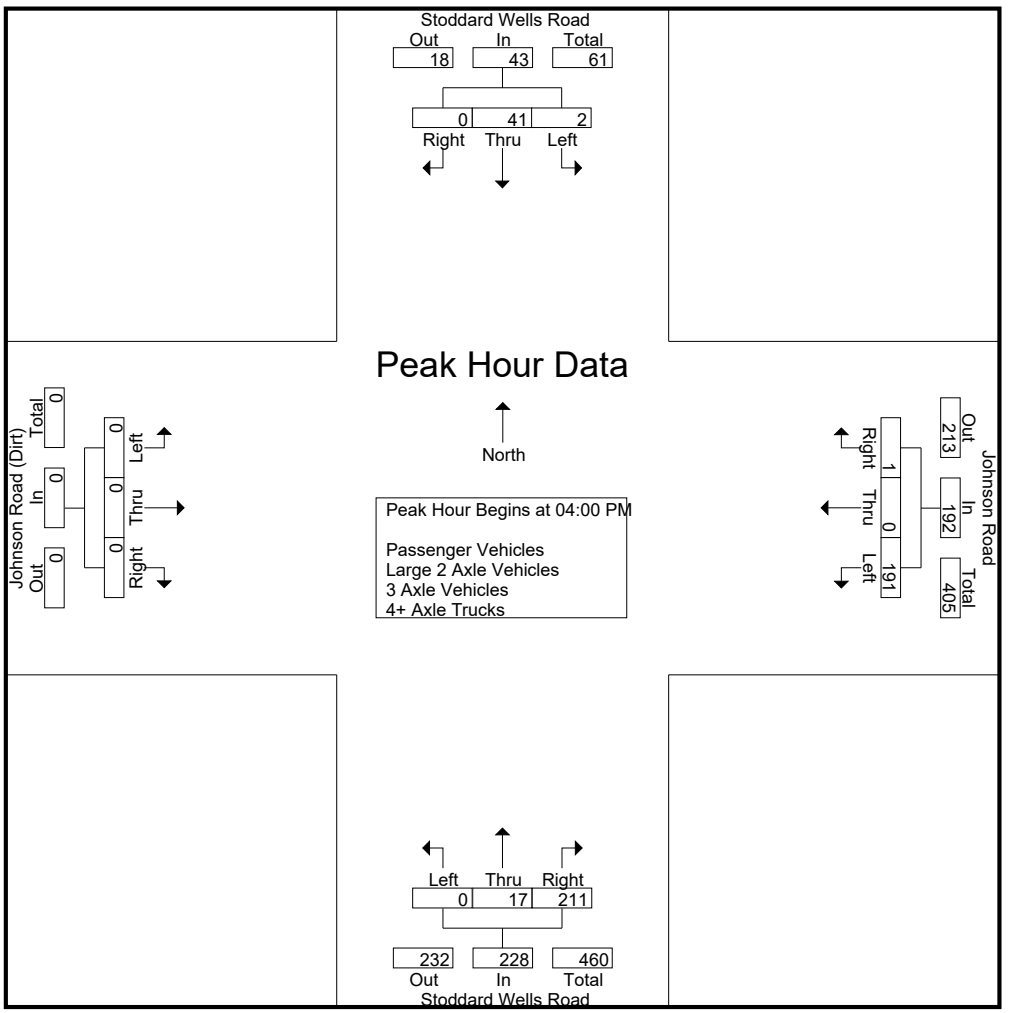
	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	12	0	13	109	0	0	109	0	7	55	62	0	0	0	0	184
04:15 PM	0	9	0	9	43	0	0	43	0	5	97	102	0	0	0	0	154
04:30 PM	1	12	0	13	21	0	0	21	0	3	24	27	0	0	0	0	61
04:45 PM	0	8	0	8	18	0	1	19	0	2	35	37	0	0	0	0	64
Total	2	41	0	43	191	0	1	192	0	17	211	228	0	0	0	0	463
05:00 PM	0	5	0	5	27	0	0	27	0	1	21	22	0	0	0	0	54
05:15 PM	0	3	0	3	13	0	2	15	0	2	31	33	0	0	0	0	51
05:30 PM	1	3	0	4	23	0	0	23	0	1	16	17	0	0	0	0	44
05:45 PM	0	1	0	1	31	0	0	31	0	5	14	19	0	0	0	0	51
Total	1	12	0	13	94	0	2	96	0	9	82	91	0	0	0	0	200
Grand Total	3	53	0	56	285	0	3	288	0	26	293	319	0	0	0	0	663
Apprch %	5.4	94.6	0		99	0	1		0	8.2	91.8		0	0	0		
Total %	0.5	8	0	8.4	43	0	0.5	43.4	0	3.9	44.2	48.1	0	0	0	0	
Passenger Vehicles	3	51	0	54	270	0	3	273	0	23	264	287	0	0	0	0	614
% Passenger Vehicles	100	96.2	0	96.4	94.7	0	100	94.8	0	88.5	90.1	90	0	0	0	0	92.6
Large 2 Axle Vehicles	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
% Large 2 Axle Vehicles	0	1.9	0	1.8	0.4	0	0	0.3	0	0	0.3	0.3	0	0	0	0	0.5
3 Axle Vehicles	0	0	0	0	4	0	0	4	0	0	10	10	0	0	0	0	14
% 3 Axle Vehicles	0	0	0	0	1.4	0	0	1.4	0	0	3.4	3.1	0	0	0	0	2.1
4+ Axle Trucks	0	1	0	1	10	0	0	10	0	3	18	21	0	0	0	0	32
% 4+ Axle Trucks	0	1.9	0	1.8	3.5	0	0	3.5	0	11.5	6.1	6.6	0	0	0	0	4.8

	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) 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	**1**	**12**	0	**13**	**109**	0	0	**109**	0	**7**	55	62	0	0	0	0	**184**
04:15 PM	0	9	0	9	43	0	0	43	0	5	**97**	**102**	0	0	0	0	154
04:30 PM	1	12	0	13	21	0	0	21	0	3	24	27	0	0	0	0	61
04:45 PM	0	8	0	8	18	0	**1**	19	0	2	35	37	0	0	0	0	64
Total Volume	2	41	0	43	191	0	1	192	0	17	211	228	0	0	0	0	463
% App. Total	4.7	95.3	0		99.5	0	0.5		0	7.5	92.5		0	0	0		
PHF	.500	.854	.000	.827	.438	.000	.250	.440	.000	.607	.544	.559	.000	.000	.000	.000	.629

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	**1**	**12**	0	**13**	**109**	0	0	**109**	0	**7**	55	62	0	0	0	0
+15 mins.	0	9	0	9	43	0	0	43	0	5	**97**	**102**	0	0	0	0
+30 mins.	1	12	0	13	21	0	0	21	0	3	24	27	0	0	0	0
+45 mins.	0	8	0	8	18	0	**1**	19	0	2	35	37	0	0	0	0
Total Volume	2	41	0	43	191	0	1	192	0	17	211	228	0	0	0	0
% App. Total	4.7	95.3	0		99.5	0	0.5		0	7.5	92.5		0	0	0	
PHF	.500	.854	.000	.827	.438	.000	.250	.440	.000	.607	.544	.559	.000	.000	.000	.000

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

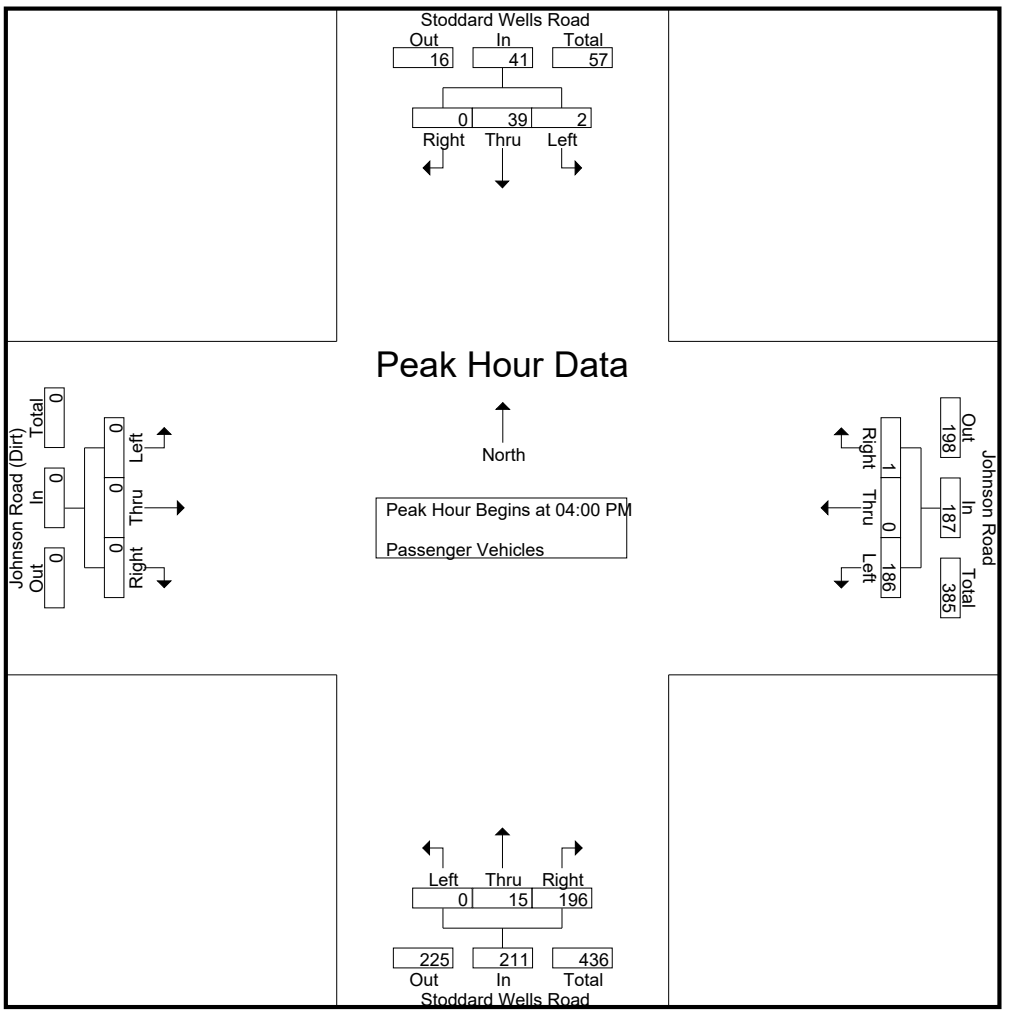
	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	12	0	13	109	0	0	109	0	6	50	56	0	0	0	0	178
04:15 PM	0	7	0	7	39	0	0	39	0	5	95	100	0	0	0	0	146
04:30 PM	1	12	0	13	21	0	0	21	0	3	21	24	0	0	0	0	58
04:45 PM	0	8	0	8	17	0	1	18	0	1	30	31	0	0	0	0	57
Total	2	39	0	41	186	0	1	187	0	15	196	211	0	0	0	0	439
05:00 PM	0	5	0	5	27	0	0	27	0	1	20	21	0	0	0	0	53
05:15 PM	0	3	0	3	12	0	2	14	0	2	26	28	0	0	0	0	45
05:30 PM	1	3	0	4	19	0	0	19	0	1	13	14	0	0	0	0	37
05:45 PM	0	1	0	1	26	0	0	26	0	4	9	13	0	0	0	0	40
Total	1	12	0	13	84	0	2	86	0	8	68	76	0	0	0	0	175
Grand Total	3	51	0	54	270	0	3	273	0	23	264	287	0	0	0	0	614
Apprch %	5.6	94.4	0		98.9	0	1.1		0	8	92		0	0	0		
Total %	0.5	8.3	0	8.8	44	0	0.5	44.5	0	3.7	43	46.7	0	0	0	0	

	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) 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	**1**	**12**	0	**13**	**109**	0	0	**109**	0	**6**	50	56	0	0	0	0	**178**
04:15 PM	0	7	0	7	39	0	0	39	0	5	**95**	**100**	0	0	0	0	146
04:30 PM	1	12	0	13	21	0	0	21	0	3	21	24	0	0	0	0	58
04:45 PM	0	8	0	8	17	0	**1**	18	0	1	30	31	0	0	0	0	57
Total Volume	2	39	0	41	186	0	1	187	0	15	196	211	0	0	0	0	439
% App. Total	4.9	95.1	0		99.5	0	0.5		0	7.1	92.9		0	0	0		
PHF	.500	.813	.000	.788	.427	.000	.250	.429	.000	.625	.516	.528	.000	.000	.000	.000	.617

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John PM
Site Code : 231073
Start Date : 11/8/2023
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.	**1**	**12**	0	**13**	**109**	0	0	**109**	0	**6**	50	56	0	0	0	0
+15 mins.	0	7	0	7	39	0	0	39	0	5	**95**	**100**	0	0	0	0
+30 mins.	1	12	0	13	21	0	0	21	0	3	21	24	0	0	0	0
+45 mins.	0	8	0	8	17	0	**1**	18	0	1	30	31	0	0	0	0
Total Volume	2	39	0	41	186	0	1	187	0	15	196	211	0	0	0	0
% App. Total	4.9	95.1	0		99.5	0	0.5		0	7.1	92.9		0	0	0	
PHF	.500	.813	.000	.788	.427	.000	.250	.429	.000	.625	.516	.528	.000	.000	.000	.000

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

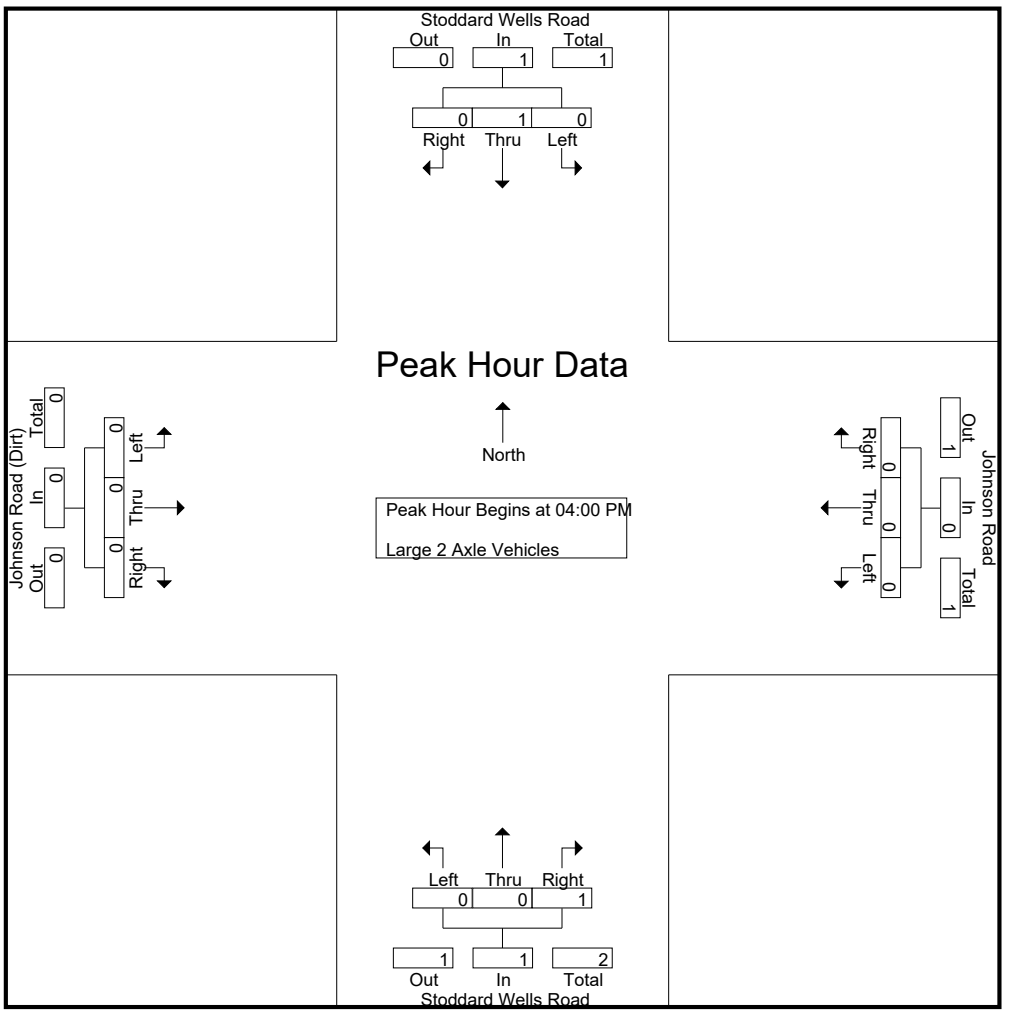
	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
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	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Grand Total	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
Apprch %	0	100	0		100	0	0		0	0	100		0	0	0		
Total %	0	33.3	0	33.3	33.3	0	0	33.3	0	0	33.3	33.3	0	0	0	0	

	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) 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	0	**1**	**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	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
% App. Total	0	100	0		0	0	0		0	0	100		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.500

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

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

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

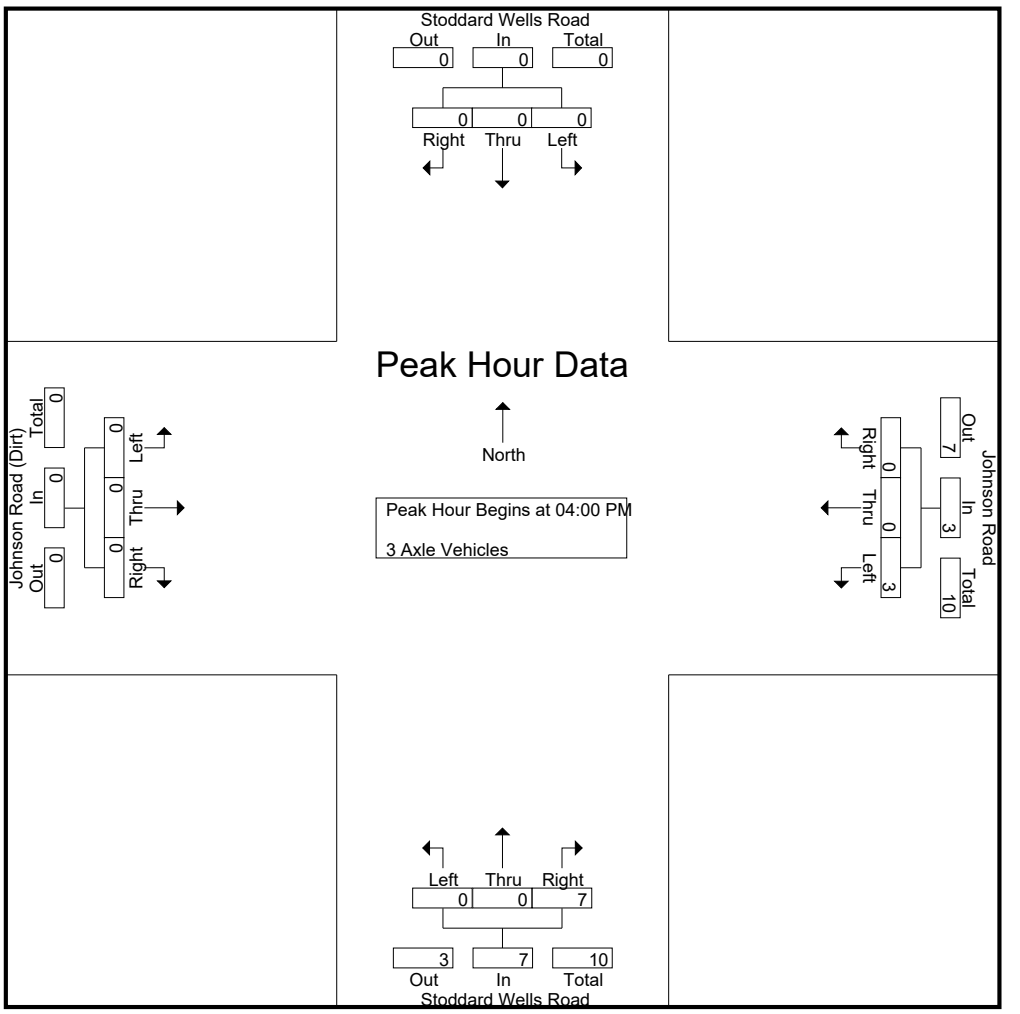
	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:15 PM	0	0	0	0	3	0	0	3	0	0	2	2	0	0	0	0	5
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	4
Total	0	0	0	0	3	0	0	3	0	0	7	7	0	0	0	0	10
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
05:45 PM	0	0	0	0	1	0	0	1	0	0	2	2	0	0	0	0	3
Total	0	0	0	0	1	0	0	1	0	0	3	3	0	0	0	0	4
Grand Total	0	0	0	0	4	0	0	4	0	0	10	10	0	0	0	0	14
Apprch %	0	0	0		100	0	0		0	0	100		0	0	0		
Total %	0	0	0	0	28.6	0	0	28.6	0	0	71.4	71.4	0	0	0	0	

	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) 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	0	1	1	0	0	0	0	1
04:15 PM	0	0	0	0	**3**	0	0	**3**	0	0	2	2	0	0	0	0	**5**
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	**4**	**4**	0	0	0	0	4
Total Volume	0	0	0	0	3	0	0	3	0	0	7	7	0	0	0	0	10
% App. Total	0	0	0		100	0	0		0	0	100		0	0	0		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.438	.438	.000	.000	.000	.000	.500

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
+15 mins.	0	0	0	0	**3**	0	0	**3**	0	0	2	2	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	**4**	**4**	0	0	0	0
Total Volume	0	0	0	0	3	0	0	3	0	0	7	7	0	0	0	0
% App. Total	0	0	0		100	0	0		0	0	100		0	0	0	
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.438	.438	.000	.000	.000	.000

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

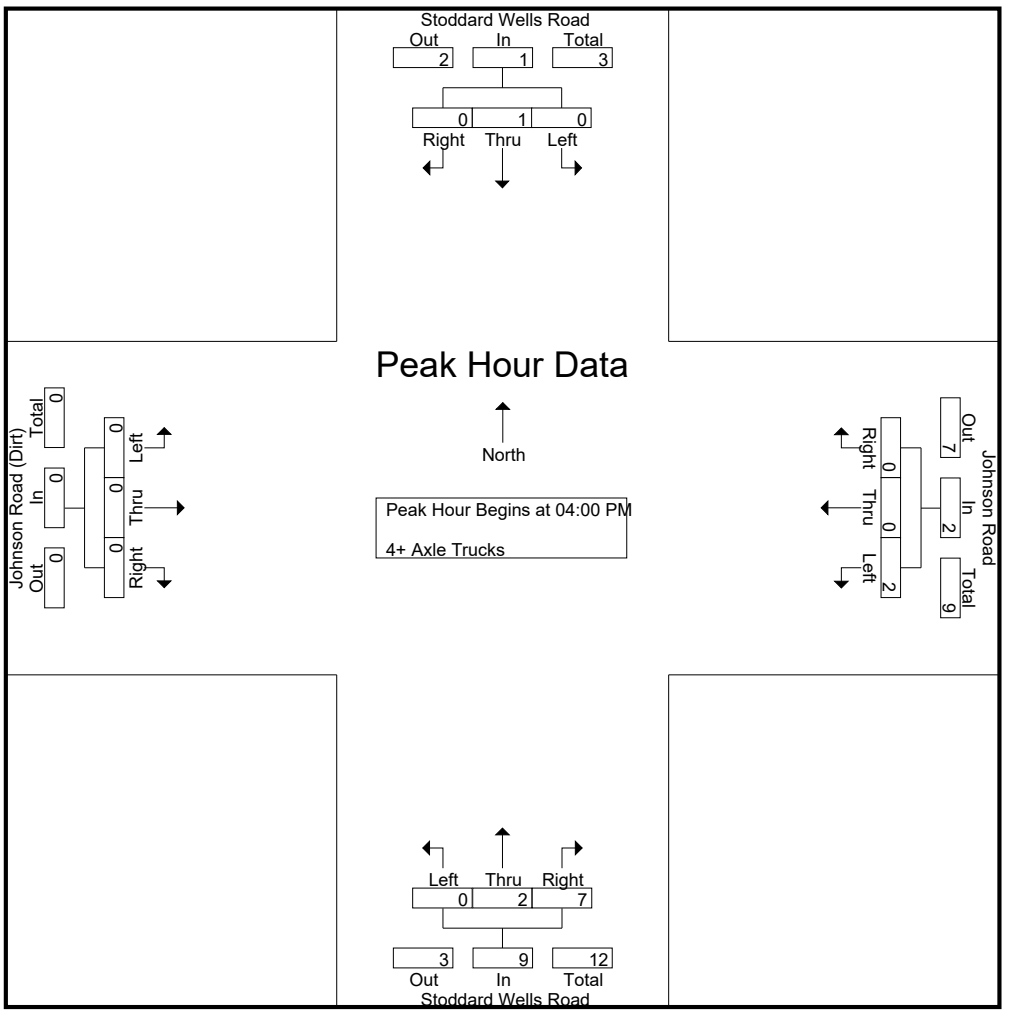
	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	1	3	4	0	0	0	0	4
04:15 PM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	3
04:45 PM	0	0	0	0	1	0	0	1	0	1	1	2	0	0	0	0	3
Total	0	1	0	1	2	0	0	2	0	2	7	9	0	0	0	0	12
05:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	5
05:30 PM	0	0	0	0	4	0	0	4	0	0	2	2	0	0	0	0	6
05:45 PM	0	0	0	0	4	0	0	4	0	1	3	4	0	0	0	0	8
Total	0	0	0	0	8	0	0	8	0	1	11	12	0	0	0	0	20
Grand Total	0	1	0	1	10	0	0	10	0	3	18	21	0	0	0	0	32
Apprch %	0	100	0		100	0	0		0	14.3	85.7		0	0	0		
Total %	0	3.1	0	3.1	31.2	0	0	31.2	0	9.4	56.2	65.6	0	0	0	0	

	Stoddard Wells Road Southbound				Johnson Road Westbound				Stoddard Wells Road Northbound				Johnson Road (Dirt) 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**	**3**	**4**	0	0	0	0	**4**
04:15 PM	0	**1**	0	**1**	**1**	0	0	**1**	0	0	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	3
04:45 PM	0	0	0	0	1	0	0	1	0	1	1	2	0	0	0	0	3
Total Volume	0	1	0	1	2	0	0	2	0	2	7	9	0	0	0	0	12
% App. Total	0	100	0		100	0	0		0	22.2	77.8		0	0	0		
PHF	.000	.250	.000	.250	.500	.000	.000	.500	.000	.500	.583	.563	.000	.000	.000	.000	.750

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

City of Apple Valley
N/S: Stoddard Wells Road
E/W: Johnson Road
Weather: Clear

File Name : 03_APV_SW_John PM
Site Code : 231073
Start Date : 11/8/2023
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**	**3**	**4**	0	0	0	0
+15 mins.	0	**1**	0	**1**	**1**	0	0	**1**	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
+45 mins.	0	0	0	0	1	0	0	1	0	1	1	2	0	0	0	0
Total Volume	0	1	0	1	2	0	0	2	0	2	7	9	0	0	0	0
% App. Total	0	100	0		100	0	0		0	22.2	77.8		0	0	0	
PHF	.000	.250	.000	.250	.500	.000	.000	.500	.000	.500	.583	.563	.000	.000	.000	.000

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

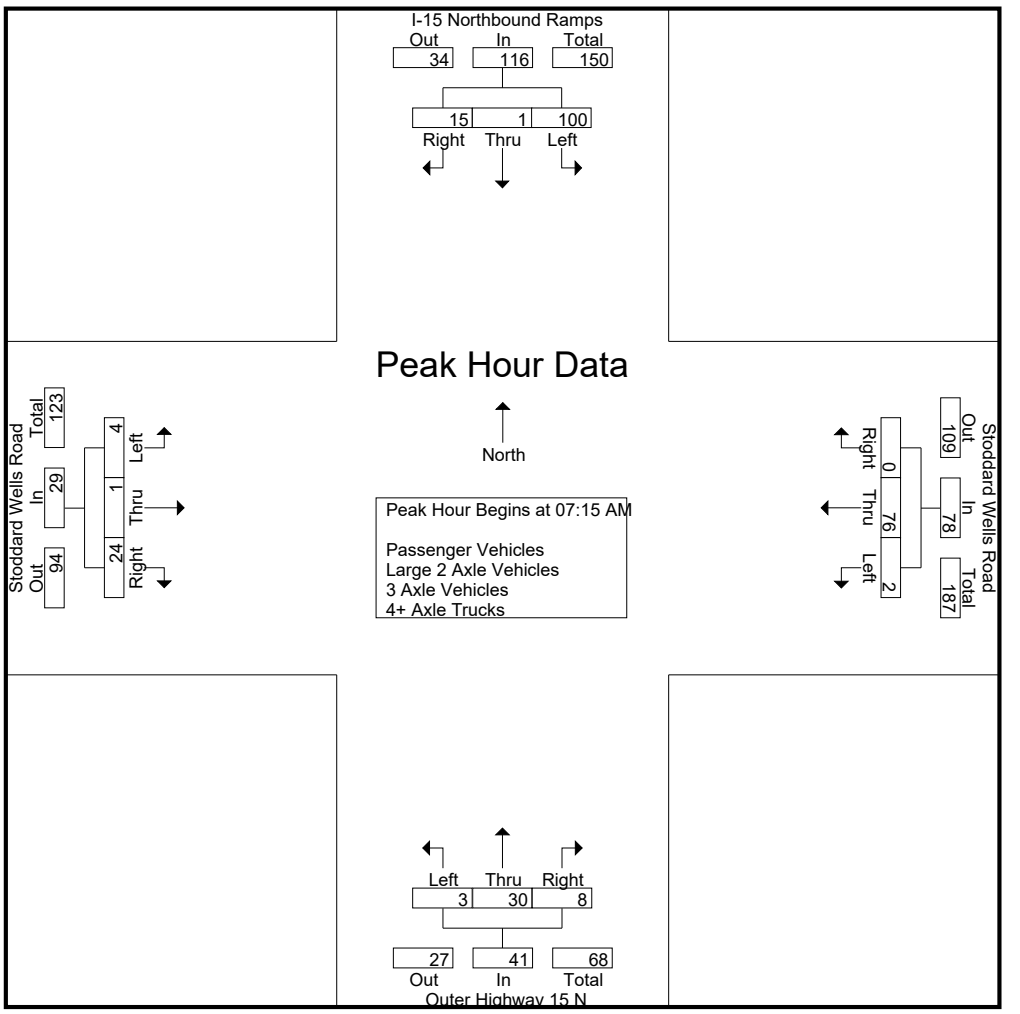
	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	22	0	5	27	0	18	0	18	1	4	0	5	0	1	3	4	54
07:15 AM	23	0	1	24	1	17	0	18	0	10	1	11	1	0	5	6	59
07:30 AM	27	0	2	29	0	16	0	16	1	8	1	10	1	0	6	7	62
07:45 AM	28	1	8	37	0	23	0	23	2	9	5	16	1	0	8	9	85
Total	100	1	16	117	1	74	0	75	4	31	7	42	3	1	22	26	260
08:00 AM	22	0	4	26	1	20	0	21	0	3	1	4	1	1	5	7	58
08:15 AM	15	0	1	16	0	13	0	13	2	7	2	11	0	3	6	9	49
08:30 AM	21	1	0	22	0	19	0	19	1	5	3	9	1	2	5	8	58
08:45 AM	22	0	1	23	0	11	0	11	0	9	2	11	1	0	11	12	57
Total	80	1	6	87	1	63	0	64	3	24	8	35	3	6	27	36	222
Grand Total	180	2	22	204	2	137	0	139	7	55	15	77	6	7	49	62	482
Apprch %	88.2	1	10.8		1.4	98.6	0		9.1	71.4	19.5		9.7	11.3	79		
Total %	37.3	0.4	4.6	42.3	0.4	28.4	0	28.8	1.5	11.4	3.1	16	1.2	1.5	10.2	12.9	
Passenger Vehicles	110	2	20	132	2	77	0	79	6	52	14	72	6	5	46	57	340
% Passenger Vehicles	61.1	100	90.9	64.7	100	56.2	0	56.8	85.7	94.5	93.3	93.5	100	71.4	93.9	91.9	70.5
Large 2 Axle Vehicles	1	0	1	2	0	1	0	1	0	0	0	0	0	0	0	0	3
% Large 2 Axle Vehicles	0.6	0	4.5	1	0	0.7	0	0.7	0	0	0	0	0	0	0	0	0.6
3 Axle Vehicles	8	0	1	9	0	11	0	11	0	0	1	1	0	2	0	2	23
% 3 Axle Vehicles	4.4	0	4.5	4.4	0	8	0	7.9	0	0	6.7	1.3	0	28.6	0	3.2	4.8
4+ Axle Trucks	61	0	0	61	0	48	0	48	1	3	0	4	0	0	3	3	116
% 4+ Axle Trucks	33.9	0	0	29.9	0	35	0	34.5	14.3	5.5	0	5.2	0	0	6.1	4.8	24.1

	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	23	0	1	24	**1**	17	0	18	0	**10**	1	11	**1**	0	5	6	59
07:30 AM	27	0	2	29	0	16	0	16	1	8	1	10	1	0	6	7	62
07:45 AM	**28**	**1**	**8**	**37**	0	**23**	0	**23**	**2**	9	**5**	**16**	1	0	**8**	**9**	**85**
08:00 AM	22	0	4	26	1	20	0	21	0	3	1	4	1	**1**	5	7	58
Total Volume	100	1	15	116	2	76	0	78	3	30	8	41	4	1	24	29	264
% App. Total	86.2	0.9	12.9		2.6	97.4	0		7.3	73.2	19.5		13.8	3.4	82.8		
PHF	.893	.250	.469	.784	.500	.826	.000	.848	.375	.750	.400	.641	1.00	.250	.750	.806	.776

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:00 AM				07:15 AM				07:00 AM				08:00 AM			
+0 mins.	22	0	5	27	**1**	17	0	18	1	4	0	5	**1**	1	5	7
+15 mins.	23	0	1	24	0	16	0	16	0	**10**	1	11	0	**3**	6	9
+30 mins.	27	0	2	29	0	**23**	0	**23**	1	8	1	10	1	2	5	8
+45 mins.	**28**	**1**	**8**	**37**	1	20	0	21	**2**	9	**5**	**16**	1	0	**11**	**12**
Total Volume	100	1	16	117	2	76	0	78	4	31	7	42	3	6	27	36
% App. Total	85.5	0.9	13.7		2.6	97.4	0		9.5	73.8	16.7		8.3	16.7	75	
PHF	.893	.250	.500	.791	.500	.826	.000	.848	.500	.775	.350	.656	.750	.500	.614	.750

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

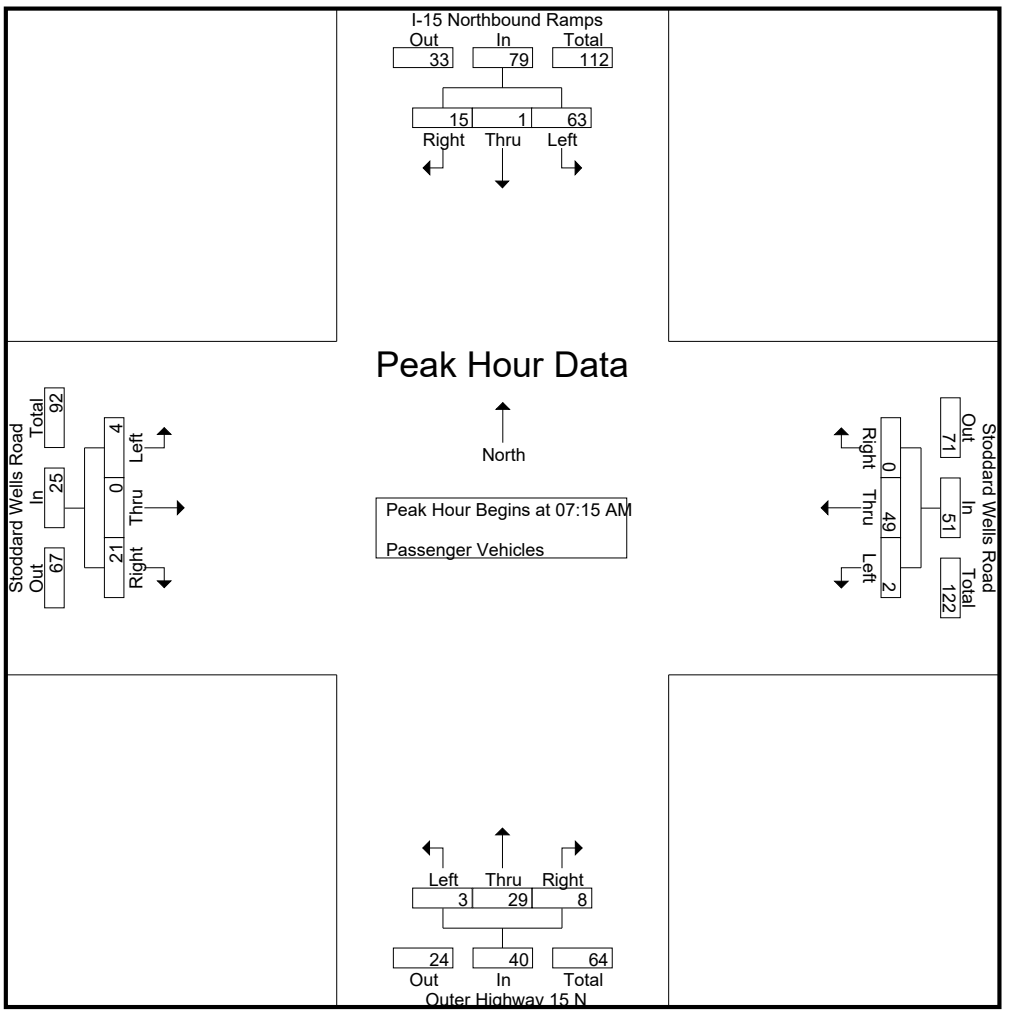
	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	17	0	3	20	0	12	0	12	1	4	0	5	0	1	3	4	41
07:15 AM	13	0	1	14	1	10	0	11	0	10	1	11	1	0	5	6	42
07:30 AM	20	0	2	22	0	10	0	10	1	8	1	10	1	0	6	7	49
07:45 AM	19	1	8	28	0	16	0	16	2	9	5	16	1	0	7	8	68
Total	69	1	14	84	1	48	0	49	4	31	7	42	3	1	21	25	200
08:00 AM	11	0	4	15	1	13	0	14	0	2	1	3	1	0	3	4	36
08:15 AM	6	0	1	7	0	6	0	6	1	5	2	8	0	2	6	8	29
08:30 AM	14	1	0	15	0	7	0	7	1	5	2	8	1	2	5	8	38
08:45 AM	10	0	1	11	0	3	0	3	0	9	2	11	1	0	11	12	37
Total	41	1	6	48	1	29	0	30	2	21	7	30	3	4	25	32	140
Grand Total	110	2	20	132	2	77	0	79	6	52	14	72	6	5	46	57	340
Apprch %	83.3	1.5	15.2		2.5	97.5	0		8.3	72.2	19.4		10.5	8.8	80.7		
Total %	32.4	0.6	5.9	38.8	0.6	22.6	0	23.2	1.8	15.3	4.1	21.2	1.8	1.5	13.5	16.8	

	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	13	0	1	14	**1**	10	0	11	0	**10**	1	11	**1**	0	5	6	42
07:30 AM	**20**	0	2	22	0	10	0	10	1	8	1	10	1	0	6	7	49
07:45 AM	19	**1**	**8**	**28**	0	**16**	0	**16**	**2**	9	**5**	**16**	1	0	**7**	**8**	**68**
08:00 AM	11	0	4	15	1	13	0	14	0	2	1	3	1	0	3	4	36
Total Volume	63	1	15	79	2	49	0	51	3	29	8	40	4	0	21	25	195
% App. Total	79.7	1.3	19		3.9	96.1	0		7.5	72.5	20		16	0	84		
PHF	.788	.250	.469	.705	.500	.766	.000	.797	.375	.725	.400	.625	1.00	.000	.750	.781	.717

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	13	0	1	14	**1**	10	0	11	0	**10**	1	11	**1**	0	5	6
+15 mins.	**20**	0	2	22	0	10	0	10	1	8	1	10	1	0	6	7
+30 mins.	19	**1**	**8**	**28**	0	**16**	0	**16**	**2**	9	**5**	**16**	1	0	**7**	**8**
+45 mins.	11	0	4	15	1	13	0	14	0	2	1	3	1	0	3	4
Total Volume	63	1	15	79	2	49	0	51	3	29	8	40	4	0	21	25
% App. Total	79.7	1.3	19		3.9	96.1	0		7.5	72.5	20		16	0	84	
PHF	.788	.250	.469	.705	.500	.766	.000	.797	.375	.725	.400	.625	1.000	.000	.750	.781

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

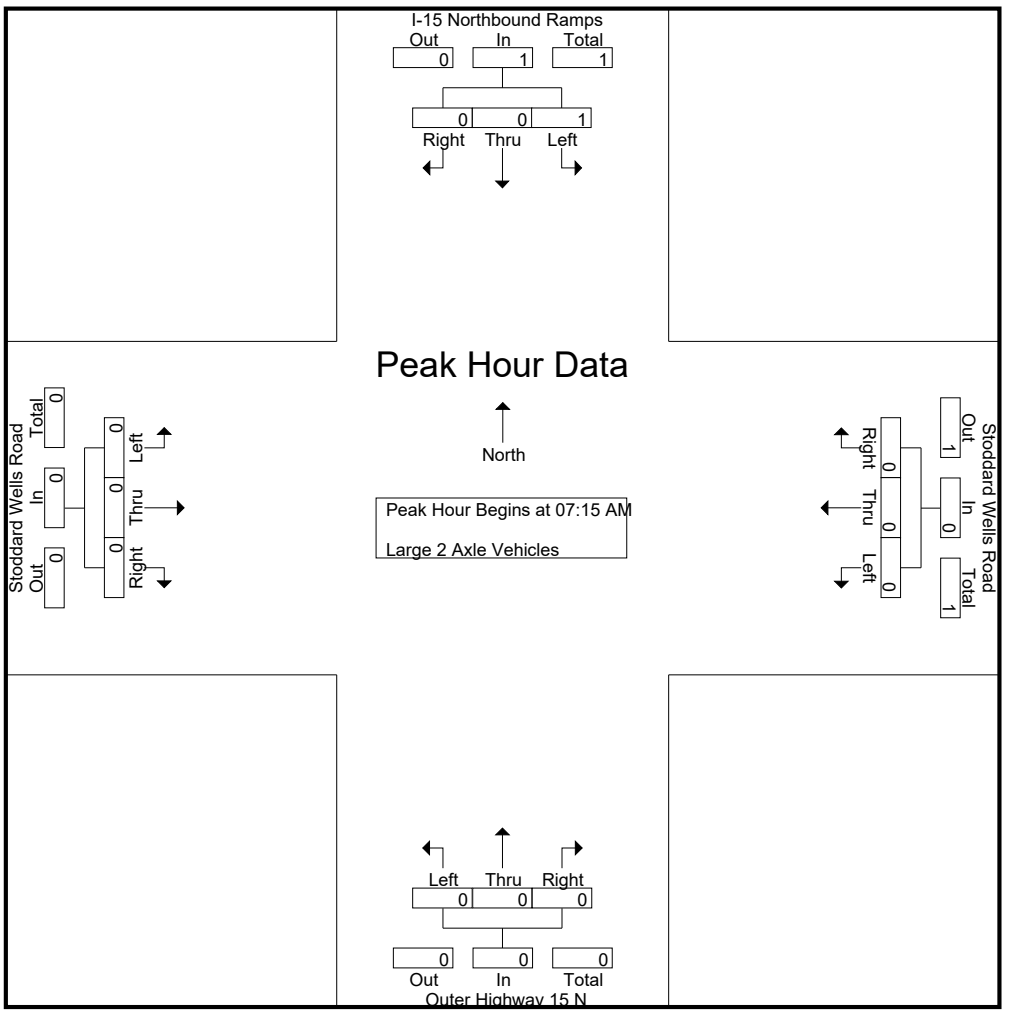
	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Grand Total	1	0	1	2	0	1	0	1	0	0	0	0	0	0	0	0	3
Apprch %	50	0	50		0	100	0		0	0	0		0	0	0		
Total %	33.3	0	33.3	66.7	0	33.3	0	33.3	0	0	0	0	0	0	0	0	

	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	**1**
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	100	0	0		0	0	0		0	0	0		0	0	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

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

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

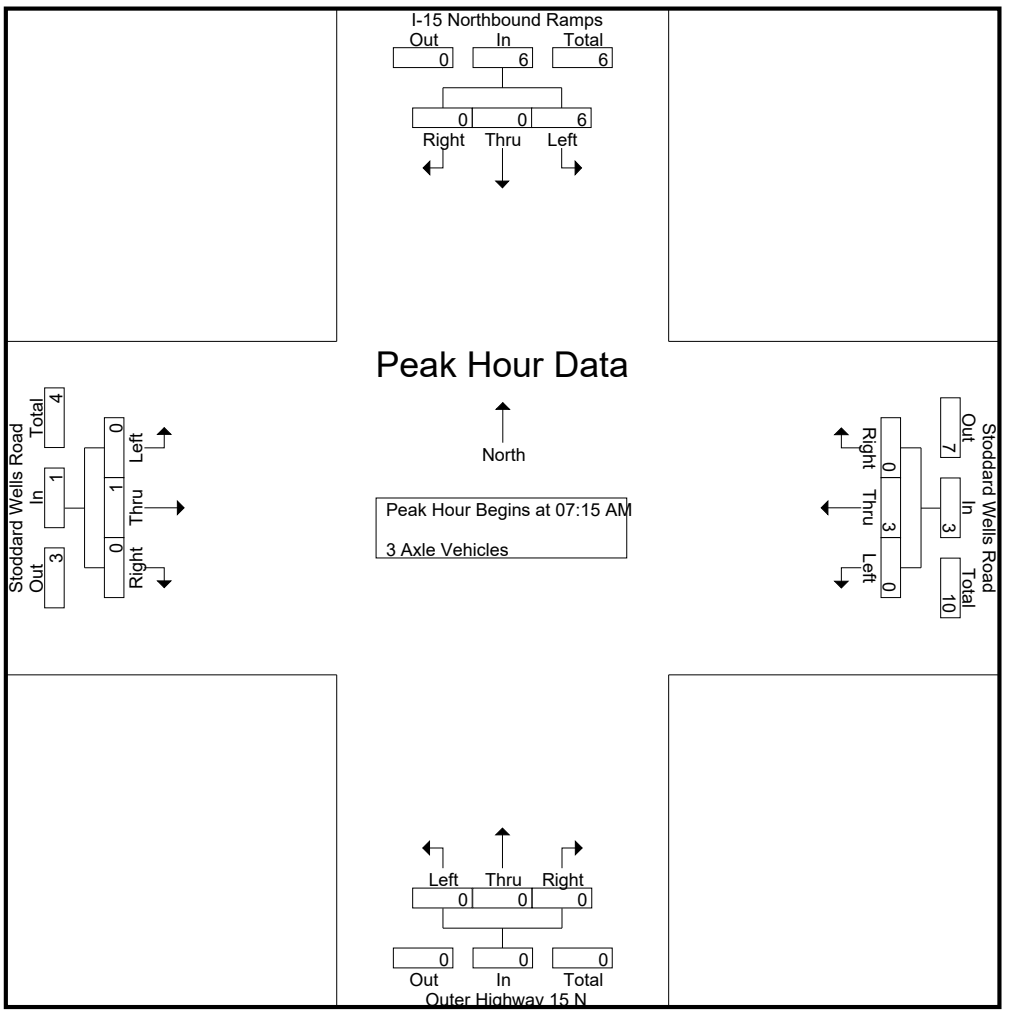
	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	2
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
07:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	2	0	1	3	0	3	0	3	0	0	0	0	0	0	0	0	6
08:00 AM	4	0	0	4	0	1	0	1	0	0	0	0	0	1	0	1	6
08:15 AM	1	0	0	1	0	3	0	3	0	0	0	0	0	1	0	1	5
08:30 AM	1	0	0	1	0	1	0	1	0	0	1	1	0	0	0	0	3
08:45 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
Total	6	0	0	6	0	8	0	8	0	0	1	1	0	2	0	2	17
Grand Total	8	0	1	9	0	11	0	11	0	0	1	1	0	2	0	2	23
Apprch %	88.9	0	11.1		0	100	0		0	0	100		0	100	0		
Total %	34.8	0	4.3	39.1	0	47.8	0	47.8	0	0	4.3	4.3	0	8.7	0	8.7	

	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0	1
07:30 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
07:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	**4**	0	0	**4**	0	1	0	1	0	0	0	0	0	**1**	0	**1**	**6**
Total Volume	6	0	0	6	0	3	0	3	0	0	0	0	0	1	0	1	10
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0		
PHF	.375	.000	.000	.375	.000	.750	.000	.750	.000	.000	.000	.000	.000	.250	.000	.250	.417

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0
+15 mins.	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	**4**	0	0	**4**	0	1	0	1	0	0	0	0	0	**1**	0	**1**
Total Volume	6	0	0	6	0	3	0	3	0	0	0	0	0	1	0	1
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0	
PHF	.375	.000	.000	.375	.000	.750	.000	.750	.000	.000	.000	.000	.000	.250	.000	.250

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

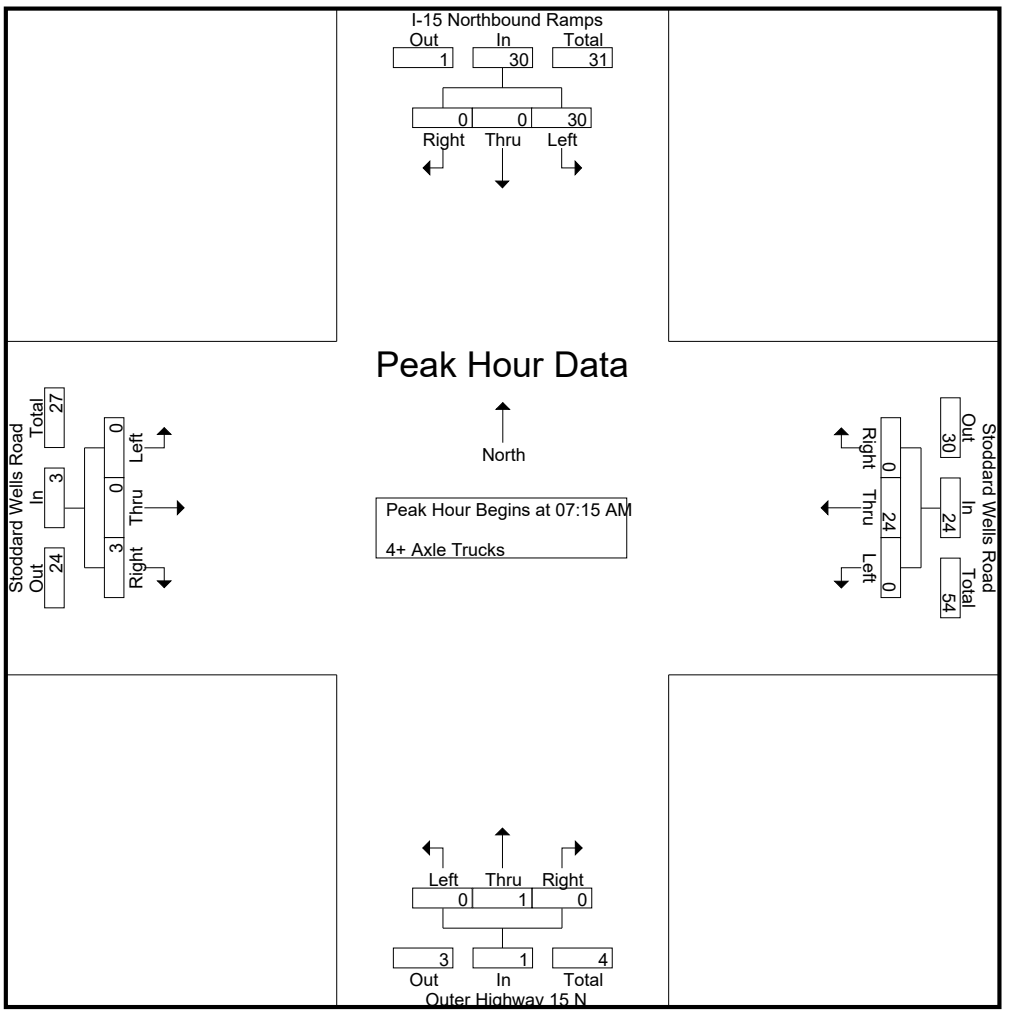
	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	0	0	5	0	5	0	5	0	0	0	0	0	0	0	0	10
07:15 AM	9	0	0	9	0	6	0	6	0	0	0	0	0	0	0	0	15
07:30 AM	6	0	0	6	0	5	0	5	0	0	0	0	0	0	0	0	11
07:45 AM	8	0	0	8	0	7	0	7	0	0	0	0	0	0	1	1	16
Total	28	0	0	28	0	23	0	23	0	0	0	0	0	0	1	1	52
08:00 AM	7	0	0	7	0	6	0	6	0	1	0	1	0	0	2	2	16
08:15 AM	8	0	0	8	0	4	0	4	1	2	0	3	0	0	0	0	15
08:30 AM	6	0	0	6	0	11	0	11	0	0	0	0	0	0	0	0	17
08:45 AM	12	0	0	12	0	4	0	4	0	0	0	0	0	0	0	0	16
Total	33	0	0	33	0	25	0	25	1	3	0	4	0	0	2	2	64
Grand Total	61	0	0	61	0	48	0	48	1	3	0	4	0	0	3	3	116
Apprch %	100	0	0		0	100	0		25	75	0		0	0	100		
Total %	52.6	0	0	52.6	0	41.4	0	41.4	0.9	2.6	0	3.4	0	0	2.6	2.6	

	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**9**	0	0	**9**	0	6	0	6	0	0	0	0	0	0	0	0	15
07:30 AM	6	0	0	6	0	5	0	5	0	0	0	0	0	0	0	0	11
07:45 AM	8	0	0	8	0	**7**	0	**7**	0	0	0	0	0	0	1	1	**16**
08:00 AM	7	0	0	7	0	6	0	6	0	**1**	0	**1**	0	0	**2**	**2**	16
Total Volume	30	0	0	30	0	24	0	24	0	1	0	1	0	0	3	3	58
% App. Total	100	0	0		0	100	0		0	100	0		0	0	100		
PHF	.833	.000	.000	.833	.000	.857	.000	.857	.000	.250	.000	.250	.000	.000	.375	.375	.906

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	**9**	0	0	**9**	0	6	0	6	0	0	0	0	0	0	0	0
+15 mins.	6	0	0	6	0	5	0	5	0	0	0	0	0	0	0	0
+30 mins.	8	0	0	8	0	**7**	0	**7**	0	0	0	0	0	0	1	1
+45 mins.	7	0	0	7	0	6	0	6	0	**1**	0	**1**	0	0	**2**	**2**
Total Volume	30	0	0	30	0	24	0	24	0	1	0	1	0	0	3	3
% App. Total	100	0	0		0	100	0		0	100	0		0	0	100	
PHF	.833	.000	.000	.833	.000	.857	.000	.857	.000	.250	.000	.250	.000	.000	.375	.375

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

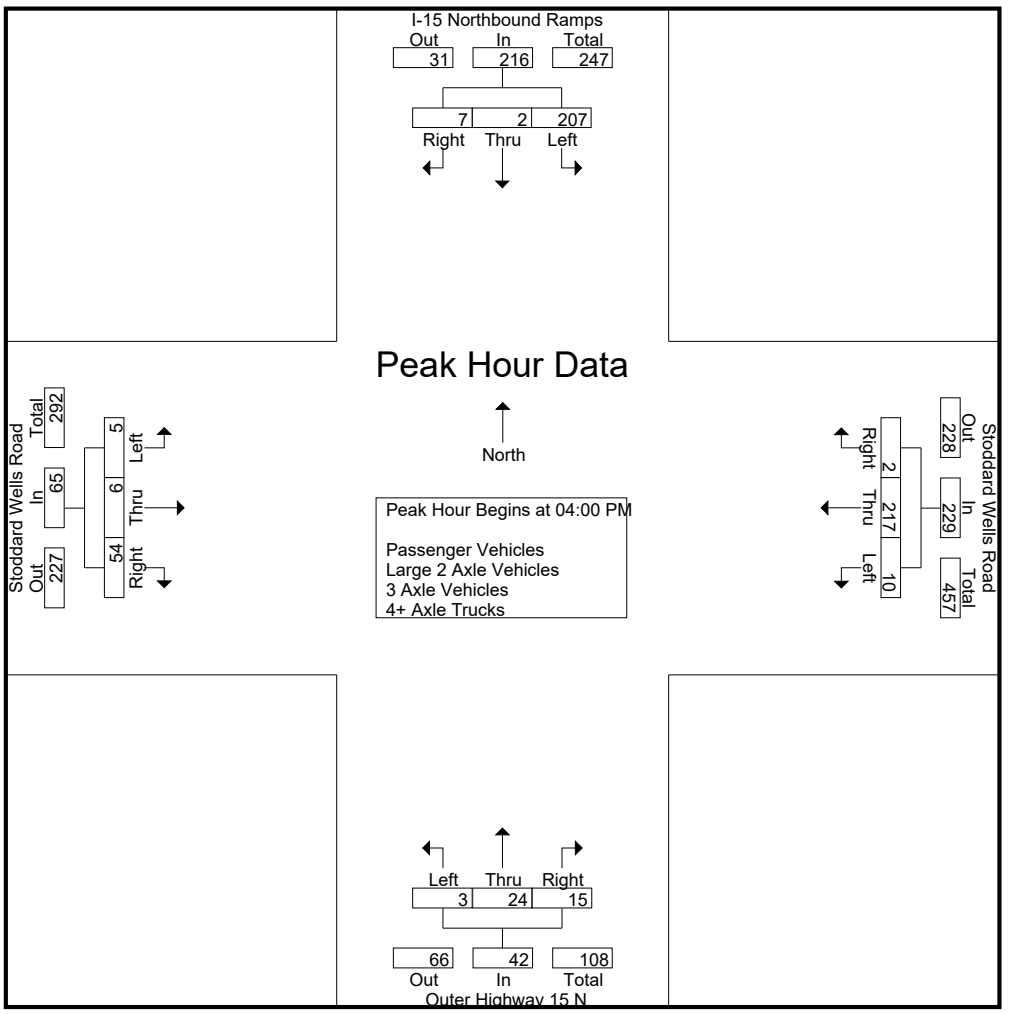
	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	65	0	3	68	6	101	2	109	0	8	4	12	4	2	12	18	207
04:15 PM	85	1	2	88	2	56	0	58	1	7	6	14	1	1	16	18	178
04:30 PM	25	1	2	28	1	33	0	34	0	6	2	8	0	2	13	15	85
04:45 PM	32	0	0	32	1	27	0	28	2	3	3	8	0	1	13	14	82
Total	207	2	7	216	10	217	2	229	3	24	15	42	5	6	54	65	552
05:00 PM	25	0	1	26	1	33	0	34	0	9	0	9	1	2	15	18	87
05:15 PM	26	0	0	26	0	14	0	14	0	6	1	7	1	3	9	13	60
05:30 PM	15	0	3	18	2	23	1	26	0	4	1	5	1	0	10	11	60
05:45 PM	14	1	1	16	1	24	0	25	0	1	3	4	0	1	8	9	54
Total	80	1	5	86	4	94	1	99	0	20	5	25	3	6	42	51	261
Grand Total	287	3	12	302	14	311	3	328	3	44	20	67	8	12	96	116	813
Apprch %	95	1	4		4.3	94.8	0.9		4.5	65.7	29.9		6.9	10.3	82.8		
Total %	35.3	0.4	1.5	37.1	1.7	38.3	0.4	40.3	0.4	5.4	2.5	8.2	1	1.5	11.8	14.3	
Passenger Vehicles	258	3	12	273	14	296	3	313	3	44	19	66	8	10	96	114	766
% Passenger Vehicles	89.9	100	100	90.4	100	95.2	100	95.4	100	100	95	98.5	100	83.3	100	98.3	94.2
Large 2 Axle Vehicles	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
% Large 2 Axle Vehicles	0.3	0	0	0.3	0	0.3	0	0.3	0	0	0	0	0	8.3	0	0.9	0.4
3 Axle Vehicles	9	0	0	9	0	5	0	5	0	0	0	0	0	1	0	1	15
% 3 Axle Vehicles	3.1	0	0	3	0	1.6	0	1.5	0	0	0	0	0	8.3	0	0.9	1.8
4+ Axle Trucks	19	0	0	19	0	9	0	9	0	0	1	1	0	0	0	0	29
% 4+ Axle Trucks	6.6	0	0	6.3	0	2.9	0	2.7	0	0	5	1.5	0	0	0	0	3.6

	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	65	0	**3**	68	**6**	**101**	**2**	**109**	0	**8**	4	12	**4**	**2**	12	**18**	**207**
04:15 PM	**85**	**1**	2	**88**	2	56	0	58	1	7	**6**	**14**	1	1	**16**	18	178
04:30 PM	25	1	2	28	1	33	0	34	0	6	2	8	0	2	13	15	85
04:45 PM	32	0	0	32	1	27	0	28	**2**	3	3	8	0	1	13	14	82
Total Volume	207	2	7	216	10	217	2	229	3	24	15	42	5	6	54	65	552
% App. Total	95.8	0.9	3.2		4.4	94.8	0.9		7.1	57.1	35.7		7.7	9.2	83.1		
PHF	.609	.500	.583	.614	.417	.537	.250	.525	.375	.750	.625	.750	.313	.750	.844	.903	.667

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	65	0	**3**	68	**6**	**101**	**2**	**109**	0	**8**	4	12	**4**	**2**	12	**18**
+15 mins.	**85**	**1**	2	**88**	2	56	0	58	1	7	**6**	**14**	1	1	**16**	18
+30 mins.	25	1	2	28	1	33	0	34	0	6	2	8	0	2	13	15
+45 mins.	32	0	0	32	1	27	0	28	**2**	3	3	8	0	1	13	14
Total Volume	207	2	7	216	10	217	2	229	3	24	15	42	5	6	54	65
% App. Total	95.8	0.9	3.2		4.4	94.8	0.9		7.1	57.1	35.7		7.7	9.2	83.1	
PHF	.609	.500	.583	.614	.417	.537	.250	.525	.375	.750	.625	.750	.313	.750	.844	.903

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

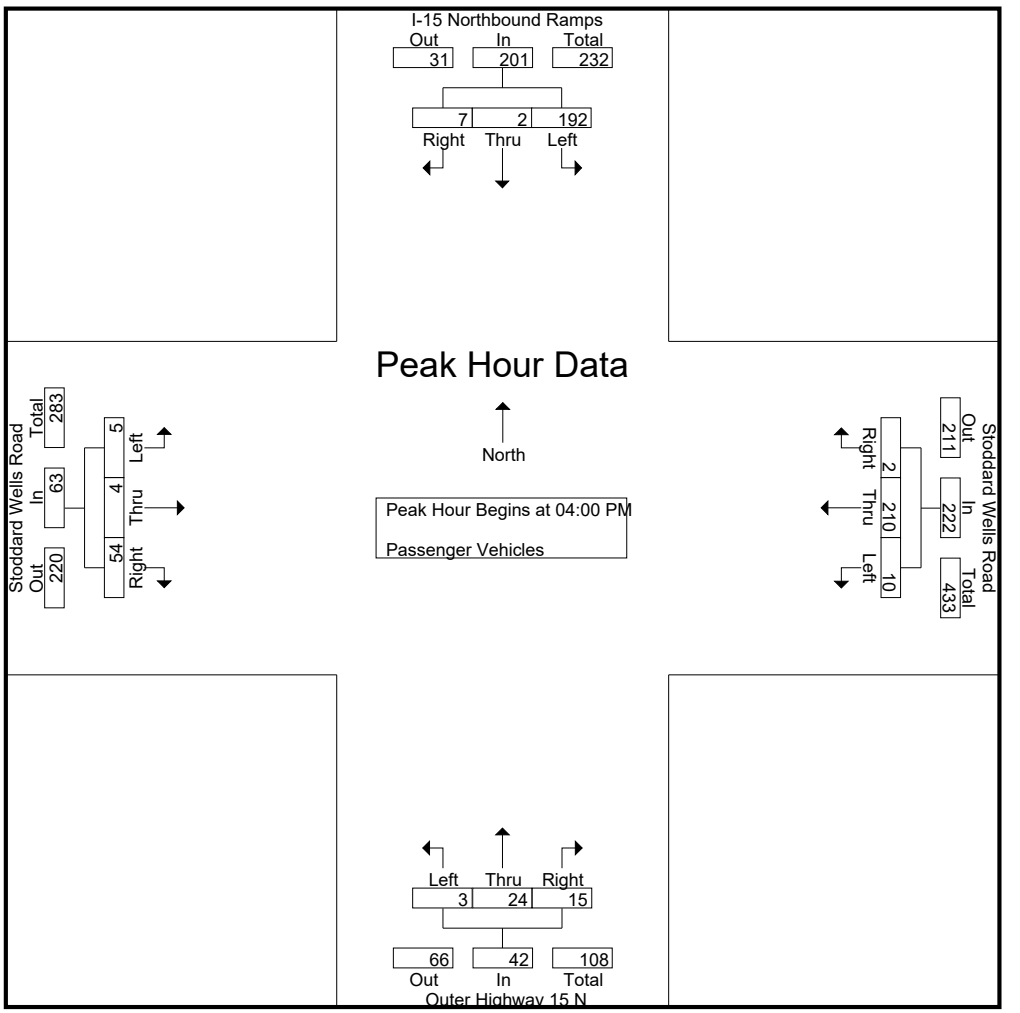
	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	60	0	3	63	6	101	2	109	0	8	4	12	4	1	12	17	201
04:15 PM	84	1	2	87	2	51	0	53	1	7	6	14	1	0	16	17	171
04:30 PM	22	1	2	25	1	32	0	33	0	6	2	8	0	2	13	15	81
04:45 PM	26	0	0	26	1	26	0	27	2	3	3	8	0	1	13	14	75
Total	192	2	7	201	10	210	2	222	3	24	15	42	5	4	54	63	528
05:00 PM	22	0	1	23	1	33	0	34	0	9	0	9	1	2	15	18	84
05:15 PM	22	0	0	22	0	13	0	13	0	6	1	7	1	3	9	13	55
05:30 PM	13	0	3	16	2	19	1	22	0	4	0	4	1	0	10	11	53
05:45 PM	9	1	1	11	1	21	0	22	0	1	3	4	0	1	8	9	46
Total	66	1	5	72	4	86	1	91	0	20	4	24	3	6	42	51	238
Grand Total	258	3	12	273	14	296	3	313	3	44	19	66	8	10	96	114	766
Apprch %	94.5	1.1	4.4		4.5	94.6	1		4.5	66.7	28.8		7	8.8	84.2		
Total %	33.7	0.4	1.6	35.6	1.8	38.6	0.4	40.9	0.4	5.7	2.5	8.6	1	1.3	12.5	14.9	

	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	60	0	**3**	63	**6**	**101**	**2**	**109**	0	**8**	4	12	**4**	1	12	**17**	**201**
04:15 PM	**84**	**1**	2	**87**	2	51	0	53	1	7	**6**	**14**	1	0	**16**	17	171
04:30 PM	22	1	2	25	1	32	0	33	0	6	2	8	0	**2**	13	15	81
04:45 PM	26	0	0	26	1	26	0	27	**2**	3	3	8	0	1	13	14	75
Total Volume	192	2	7	201	10	210	2	222	3	24	15	42	5	4	54	63	528
% App. Total	95.5	1	3.5		4.5	94.6	0.9		7.1	57.1	35.7		7.9	6.3	85.7		
PHF	.571	.500	.583	.578	.417	.520	.250	.509	.375	.750	.625	.750	.313	.500	.844	.926	.657

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW PM
Site Code : 231073
Start Date : 11/8/2023
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.	60	0	**3**	63	**6**	**101**	**2**	**109**	0	**8**	4	12	**4**	1	12	**17**
+15 mins.	**84**	**1**	2	**87**	2	51	0	53	1	7	**6**	**14**	1	0	**16**	17
+30 mins.	22	1	2	25	1	32	0	33	0	6	2	8	0	**2**	13	15
+45 mins.	26	0	0	26	1	26	0	27	**2**	3	3	8	0	1	13	14
Total Volume	192	2	7	201	10	210	2	222	3	24	15	42	5	4	54	63
% App. Total	95.5	1	3.5		4.5	94.6	0.9		7.1	57.1	35.7		7.9	6.3	85.7	
PHF	.571	.500	.583	.578	.417	.520	.250	.509	.375	.750	.625	.750	.313	.500	.844	.926

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

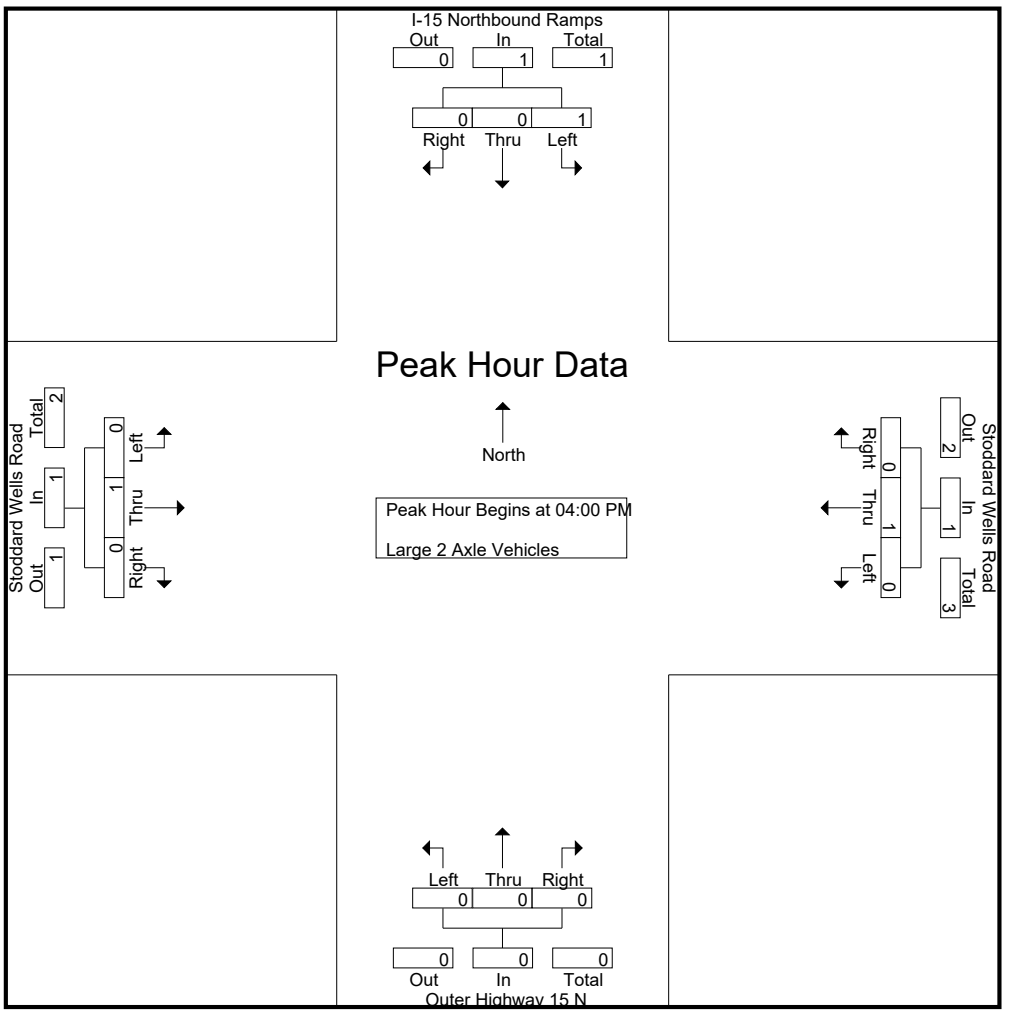
	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
Apprch %	100	0	0		0	100	0		0	0	0		0	100	0		
Total %	33.3	0	0	33.3	0	33.3	0	33.3	0	0	0	0	0	33.3	0	33.3	

	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	**2**
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.375

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW PM
Site Code : 231073
Start Date : 11/8/2023
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.	**1**	0	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0	
PHF	.250	.000	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

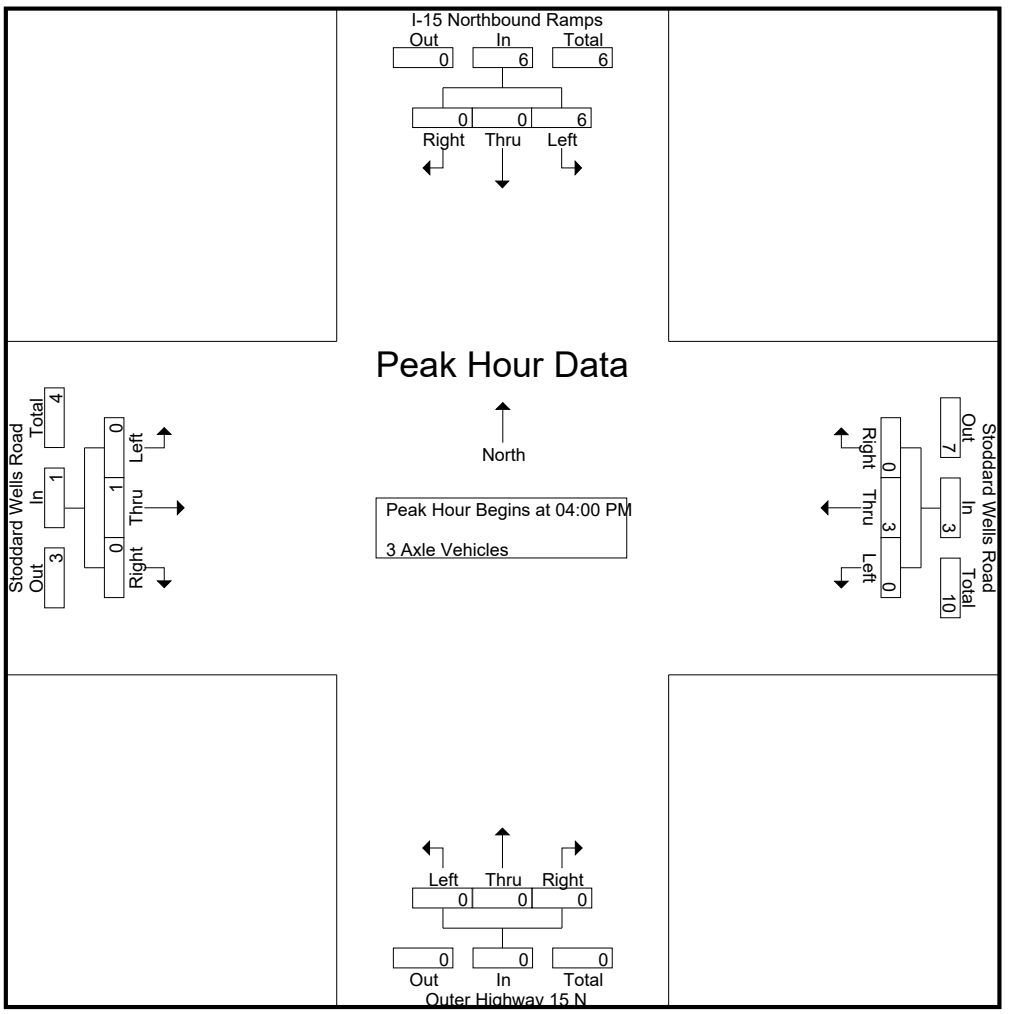
	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:15 PM	1	0	0	1	0	3	0	3	0	0	0	0	0	0	0	0	4
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	6	0	0	6	0	3	0	3	0	0	0	0	0	1	0	1	10
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	2	0	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
Total	3	0	0	3	0	2	0	2	0	0	0	0	0	0	0	0	5
Grand Total	9	0	0	9	0	5	0	5	0	0	0	0	0	1	0	1	15
Apprch %	100	0	0		0	100	0		0	0	0		0	100	0		
Total %	60	0	0	60	0	33.3	0	33.3	0	0	0	0	0	6.7	0	6.7	

	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	1
04:15 PM	1	0	0	1	0	**3**	0	**3**	0	0	0	0	0	0	0	0	4
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	**5**	0	0	**5**	0	0	0	0	0	0	0	0	0	0	0	0	**5**
Total Volume	6	0	0	6	0	3	0	3	0	0	0	0	0	1	0	1	10
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0		
PHF	.300	.000	.000	.300	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.500

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**
+15 mins.	1	0	0	1	0	**3**	0	**3**	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.	**5**	0	0	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	6	0	0	6	0	3	0	3	0	0	0	0	0	1	0	1
% App. Total	100	0	0		0	100	0		0	0	0		0	100	0	
PHF	.300	.000	.000	.300	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

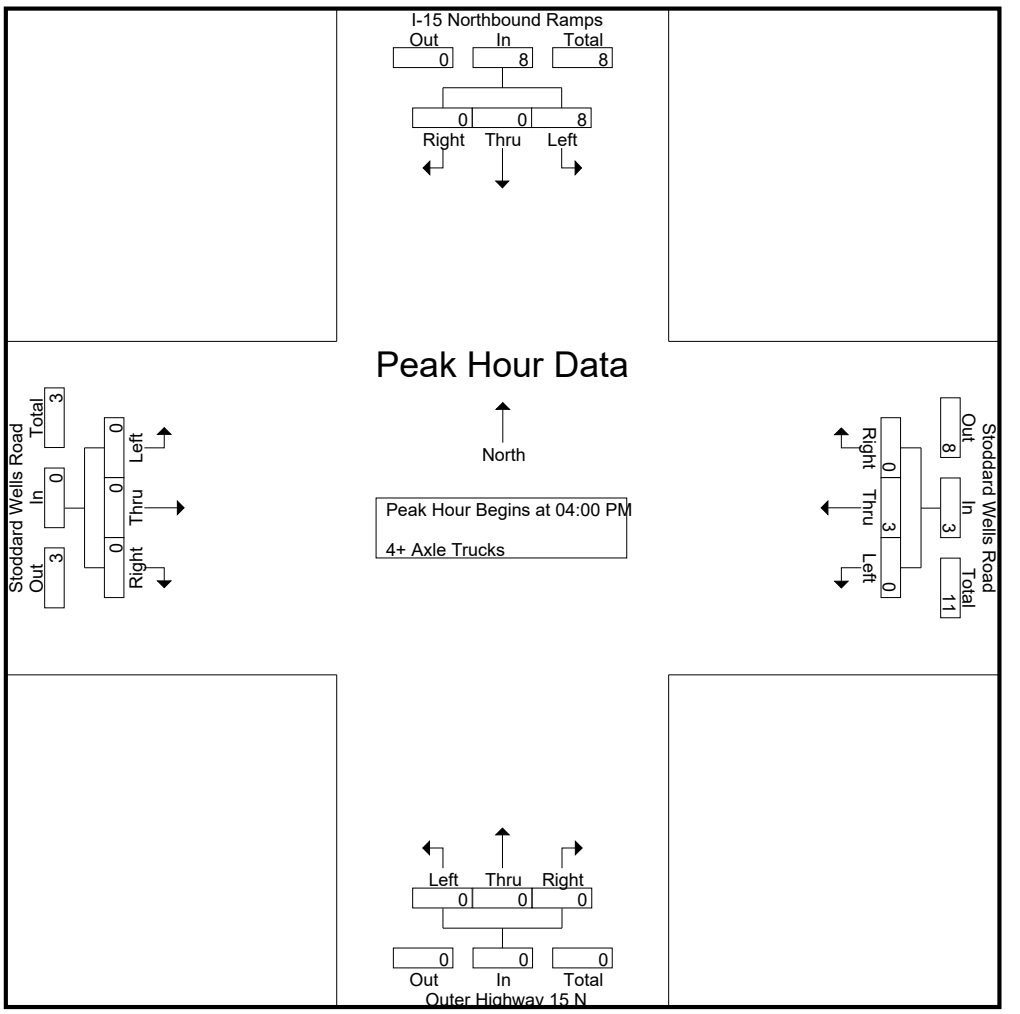
	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
04:30 PM	3	0	0	3	0	1	0	1	0	0	0	0	0	0	0	0	4
04:45 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
Total	8	0	0	8	0	3	0	3	0	0	0	0	0	0	0	0	11
05:00 PM	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:15 PM	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
05:30 PM	1	0	0	1	0	4	0	4	0	0	1	1	0	0	0	0	6
05:45 PM	3	0	0	3	0	2	0	2	0	0	0	0	0	0	0	0	5
Total	11	0	0	11	0	6	0	6	0	0	1	1	0	0	0	0	18
Grand Total	19	0	0	19	0	9	0	9	0	0	1	1	0	0	0	0	29
Apprch %	100	0	0		0	100	0		0	0	100		0	0	0		
Total %	65.5	0	0	65.5	0	31	0	31	0	0	3.4	3.4	0	0	0	0	

	I-15 Northbound Ramps Southbound				Stoddard Wells Road Westbound				Outer Highway 15 N Northbound				Stoddard Wells Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**4**	0	0	**4**	0	0	0	0	0	0	0	0	0	0	0	0	**4**
04:15 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0	1
04:30 PM	3	0	0	3	0	1	0	1	0	0	0	0	0	0	0	0	4
04:45 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
Total Volume	8	0	0	8	0	3	0	3	0	0	0	0	0	0	0	0	11
% App. Total	100	0	0		0	100	0		0	0	0		0	0	0		
PHF	.500	.000	.000	.500	.000	.750	.000	.750	.000	.000	.000	.000	.000	.000	.000	.000	.688

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

City of Apple Valley
N/S: I-15 NB Ramps/ Outer Hwy 15 N
E/W: Stoddard Wells Road
Weather: Clear

File Name : 04_APV_15N_SW PM
Site Code : 231073
Start Date : 11/8/2023
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.	**4**	0	0	**4**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0
+30 mins.	3	0	0	3	0	1	0	1	0	0	0	0	0	0	0	0
+45 mins.	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	8	0	0	8	0	3	0	3	0	0	0	0	0	0	0	0
% App. Total	100	0	0		0	100	0		0	0	0		0	0	0	
PHF	.500	.000	.000	.500	.000	.750	.000	.750	.000	.000	.000	.000	.000	.000	.000	.000

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

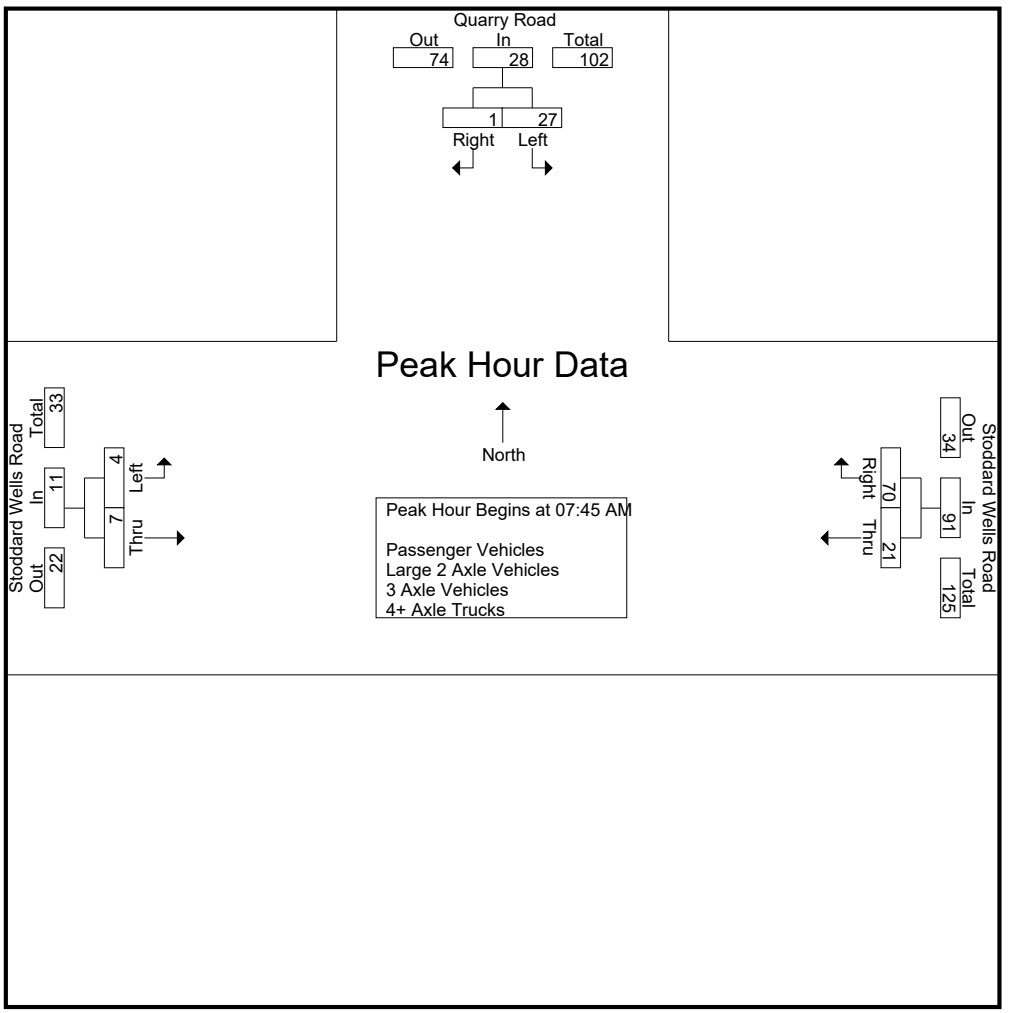
	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	1	1	2	7	15	22	0	2	2	26
07:15 AM	6	1	7	1	18	19	0	0	0	26
07:30 AM	5	0	5	5	14	19	0	1	1	25
07:45 AM	8	0	8	9	24	33	0	1	1	42
Total	20	2	22	22	71	93	0	4	4	119
08:00 AM	5	0	5	7	17	24	0	2	2	31
08:15 AM	6	1	7	3	12	15	0	3	3	25
08:30 AM	8	0	8	2	17	19	4	1	5	32
08:45 AM	10	0	10	3	11	14	0	2	2	26
Total	29	1	30	15	57	72	4	8	12	114
Grand Total	49	3	52	37	128	165	4	12	16	233
Apprch %	94.2	5.8		22.4	77.6		25	75		
Total %	21	1.3	22.3	15.9	54.9	70.8	1.7	5.2	6.9	
Passenger Vehicles	46	2	48	33	70	103	3	8	11	162
% Passenger Vehicles	93.9	66.7	92.3	89.2	54.7	62.4	75	66.7	68.8	69.5
Large 2 Axle Vehicles	0	0	0	2	0	2	0	1	1	3
% Large 2 Axle Vehicles	0	0	0	5.4	0	1.2	0	8.3	6.2	1.3
3 Axle Vehicles	1	1	2	2	10	12	1	3	4	18
% 3 Axle Vehicles	2	33.3	3.8	5.4	7.8	7.3	25	25	25	7.7
4+ Axle Trucks	2	0	2	0	48	48	0	0	0	50
% 4+ Axle Trucks	4.1	0	3.8	0	37.5	29.1	0	0	0	21.5

	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	**8**	0	**8**	**9**	**24**	**33**	0	1	1	**42**
08:00 AM	5	0	5	7	17	24	0	2	2	31
08:15 AM	6	**1**	7	3	12	15	0	**3**	3	25
08:30 AM	8	0	8	2	17	19	**4**	1	**5**	32
Total Volume	27	1	28	21	70	91	4	7	11	130
% App. Total	96.4	3.6		23.1	76.9		36.4	63.6		
PHF	.844	.250	.875	.583	.729	.689	.250	.583	.550	.774

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	08:00 AM			07:15 AM			08:00 AM		
+0 mins.	5	0	5	1	18	19	0	2	2
+15 mins.	6	**1**	7	5	14	19	0	**3**	3
+30 mins.	8	0	8	**9**	**24**	**33**	**4**	1	**5**
+45 mins.	**10**	0	**10**	7	17	24	0	2	2
Total Volume	29	1	30	22	73	95	4	8	12
% App. Total	96.7	3.3		23.2	76.8		33.3	66.7	
PHF	.725	.250	.750	.611	.760	.720	.250	.667	.600

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

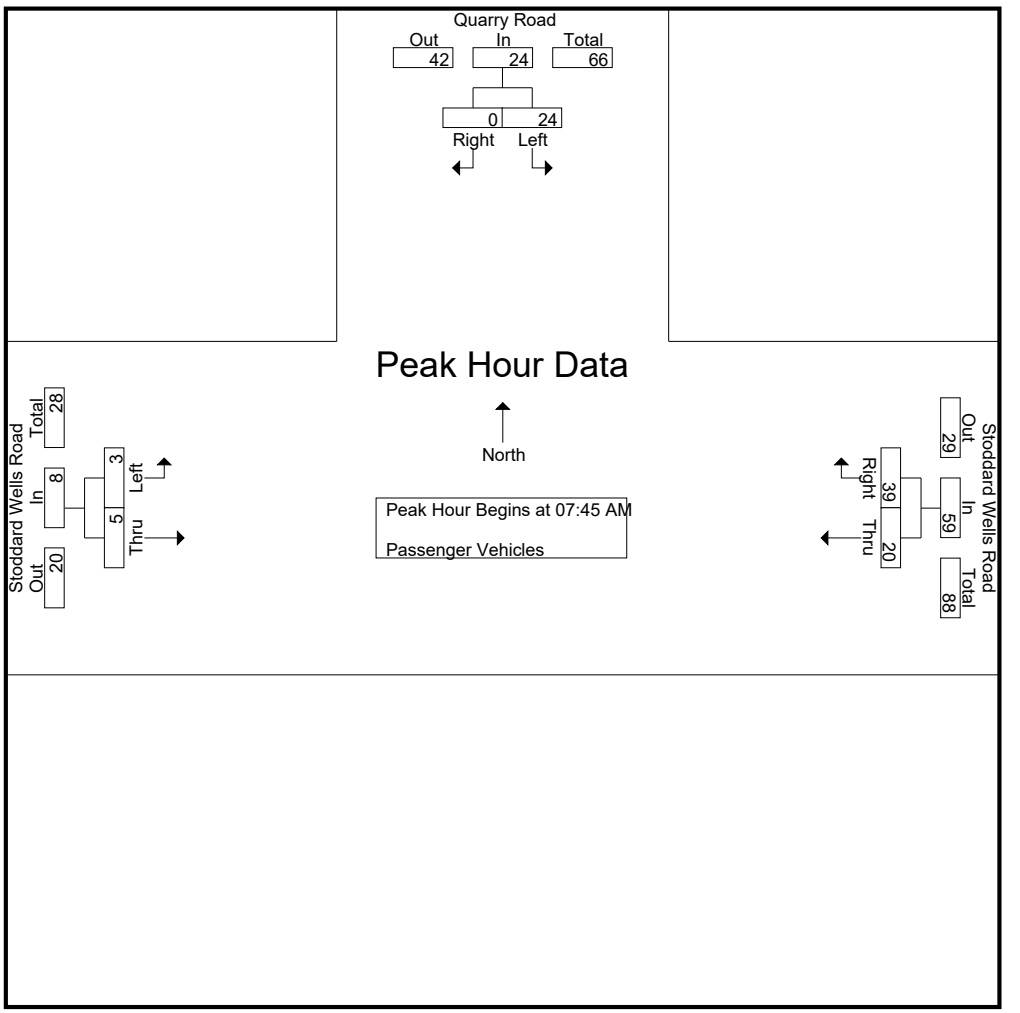
	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	1	1	2	6	10	16	0	2	2	20
07:15 AM	6	1	7	1	10	11	0	0	0	18
07:30 AM	5	0	5	4	9	13	0	1	1	19
07:45 AM	7	0	7	9	17	26	0	1	1	34
Total	19	2	21	20	46	66	0	4	4	91
08:00 AM	3	0	3	7	10	17	0	1	1	21
08:15 AM	6	0	6	2	5	7	0	2	2	15
08:30 AM	8	0	8	2	7	9	3	1	4	21
08:45 AM	10	0	10	2	2	4	0	0	0	14
Total	27	0	27	13	24	37	3	4	7	71
Grand Total	46	2	48	33	70	103	3	8	11	162
Apprch %	95.8	4.2		32	68		27.3	72.7		
Total %	28.4	1.2	29.6	20.4	43.2	63.6	1.9	4.9	6.8	

	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	7	0	7	**9**	**17**	**26**	0	1	1	**34**
08:00 AM	3	0	3	7	10	17	0	1	1	21
08:15 AM	6	0	6	2	5	7	0	**2**	2	15
08:30 AM	**8**	0	**8**	2	7	9	**3**	1	**4**	21
Total Volume	24	0	24	20	39	59	3	5	8	91
% App. Total	100	0		33.9	66.1		37.5	62.5		
PHF	.750	.000	.750	.556	.574	.567	.250	.625	.500	.669

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	7	0	7	**9**	**17**	**26**	0	1	1
+15 mins.	3	0	3	7	10	17	0	1	1
+30 mins.	6	0	6	2	5	7	0	**2**	2
+45 mins.	**8**	0	**8**	2	7	9	**3**	1	**4**
Total Volume	24	0	24	20	39	59	3	5	8
% App. Total	100	0		33.9	66.1		37.5	62.5	
PHF	.750	.000	.750	.556	.574	.567	.250	.625	.500

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

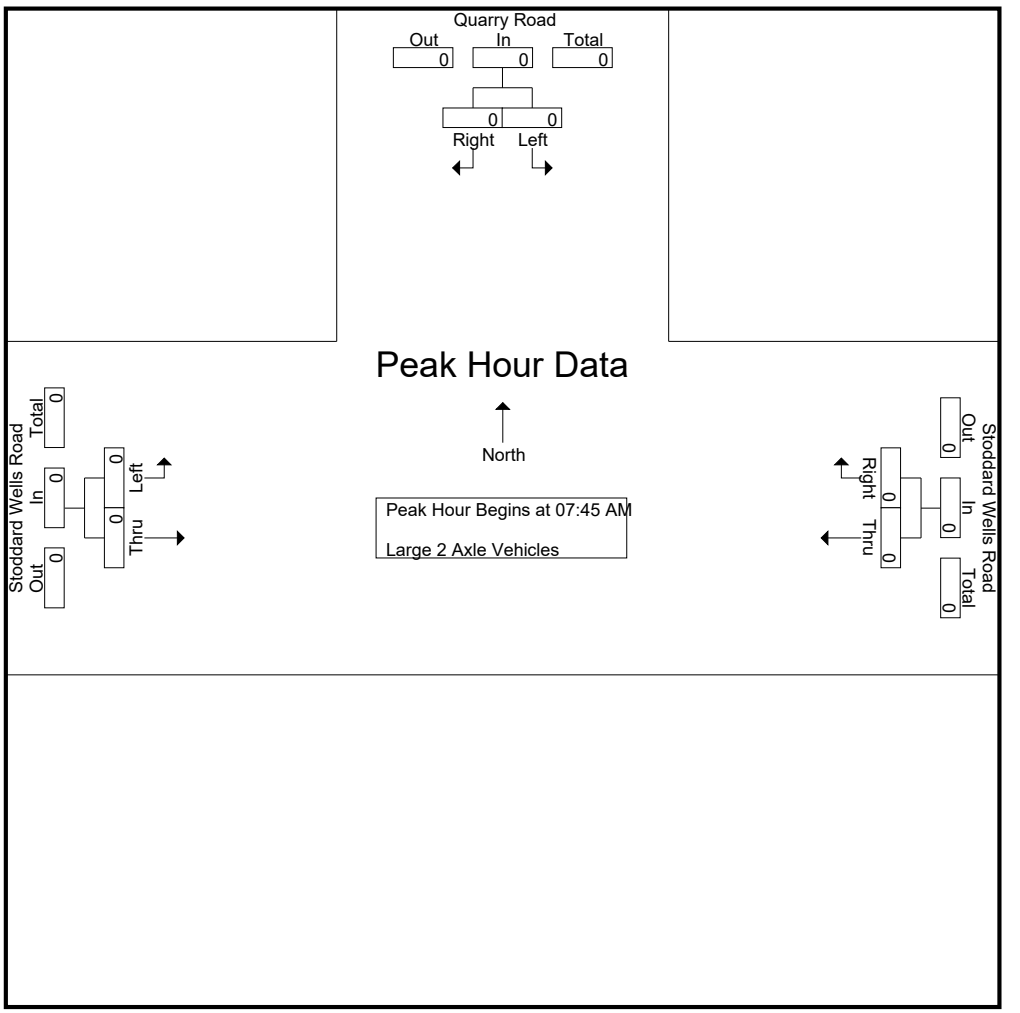
	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	1	0	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	1	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	1	0	1	0	1	1	2
Total	0	0	0	1	0	1	0	1	1	2
Grand Total	0	0	0	2	0	2	0	1	1	3
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	66.7	0	66.7	0	33.3	33.3	

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

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

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

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW AM
Site Code : 231073
Start Date : 11/8/2023

Groups Printed- 3 Axle Vehicles

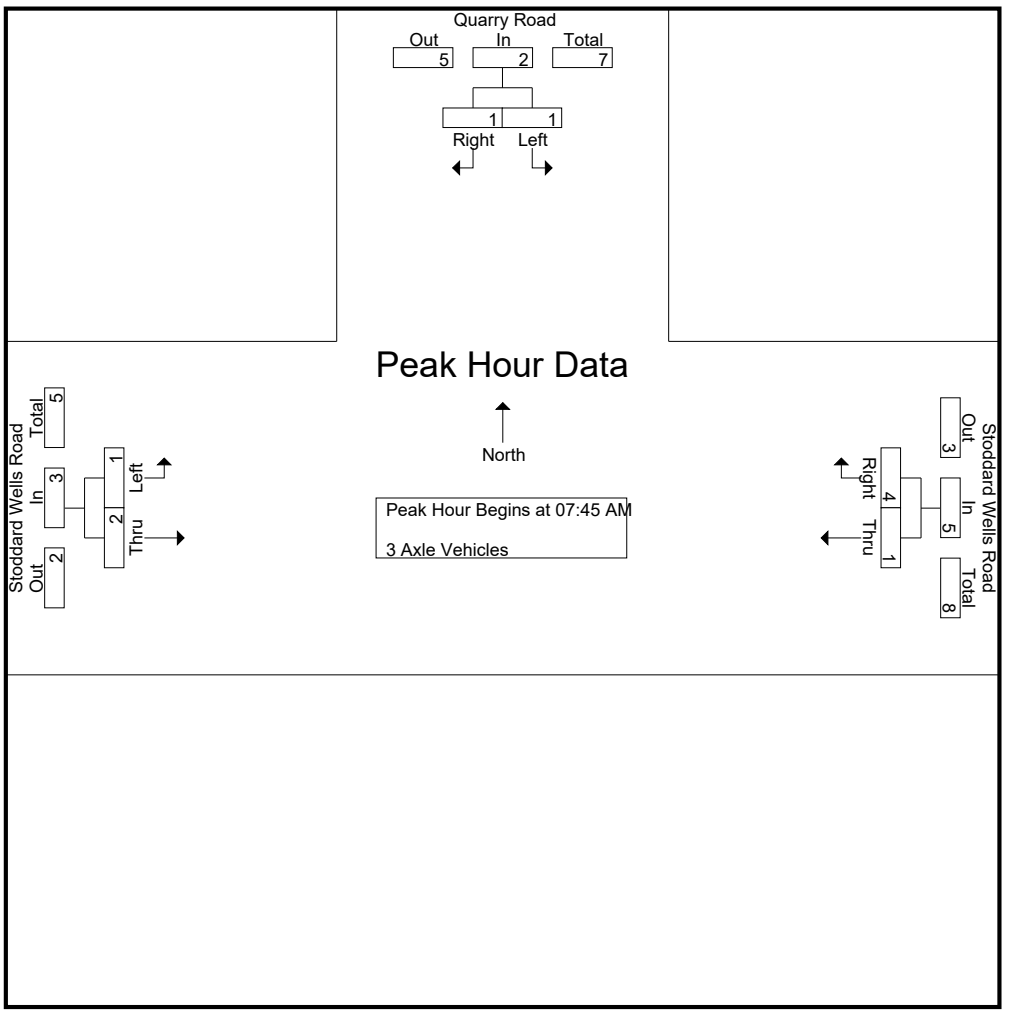
	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	1	1	2	0	0	0	2
07:15 AM	0	0	0	0	2	2	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	1	0	1	0	0	0	0	0	0	1
Total	1	0	1	1	3	4	0	0	0	5
08:00 AM	0	0	0	0	1	1	0	1	1	2
08:15 AM	0	1	1	1	2	3	0	1	1	5
08:30 AM	0	0	0	0	1	1	1	0	1	2
08:45 AM	0	0	0	0	3	3	0	1	1	4
Total	0	1	1	1	7	8	1	3	4	13
Grand Total	1	1	2	2	10	12	1	3	4	18
Apprch %	50	50		16.7	83.3		25	75		
Total %	5.6	5.6	11.1	11.1	55.6	66.7	5.6	16.7	22.2	

	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	**1**	0	**1**	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	1	1	0	**1**	**1**	2
08:15 AM	0	**1**	1	**1**	**2**	**3**	0	1	1	**5**
08:30 AM	0	0	0	0	1	1	**1**	0	1	2
Total Volume	1	1	2	1	4	5	1	2	3	10
% App. Total	50	50		20	80		33.3	66.7		
PHF	.250	.250	.500	.250	.500	.417	.250	.500	.750	.500

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	**1**	0	**1**	0	0	0	0	0	0
+15 mins.	0	0	0	0	1	1	0	**1**	**1**
+30 mins.	0	**1**	1	**1**	**2**	**3**	0	1	1
+45 mins.	0	0	0	0	1	1	**1**	0	1
Total Volume	1	1	2	1	4	5	1	2	3
% App. Total	50	50		20	80		33.3	66.7	
PHF	.250	.250	.500	.250	.500	.417	.250	.500	.750

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

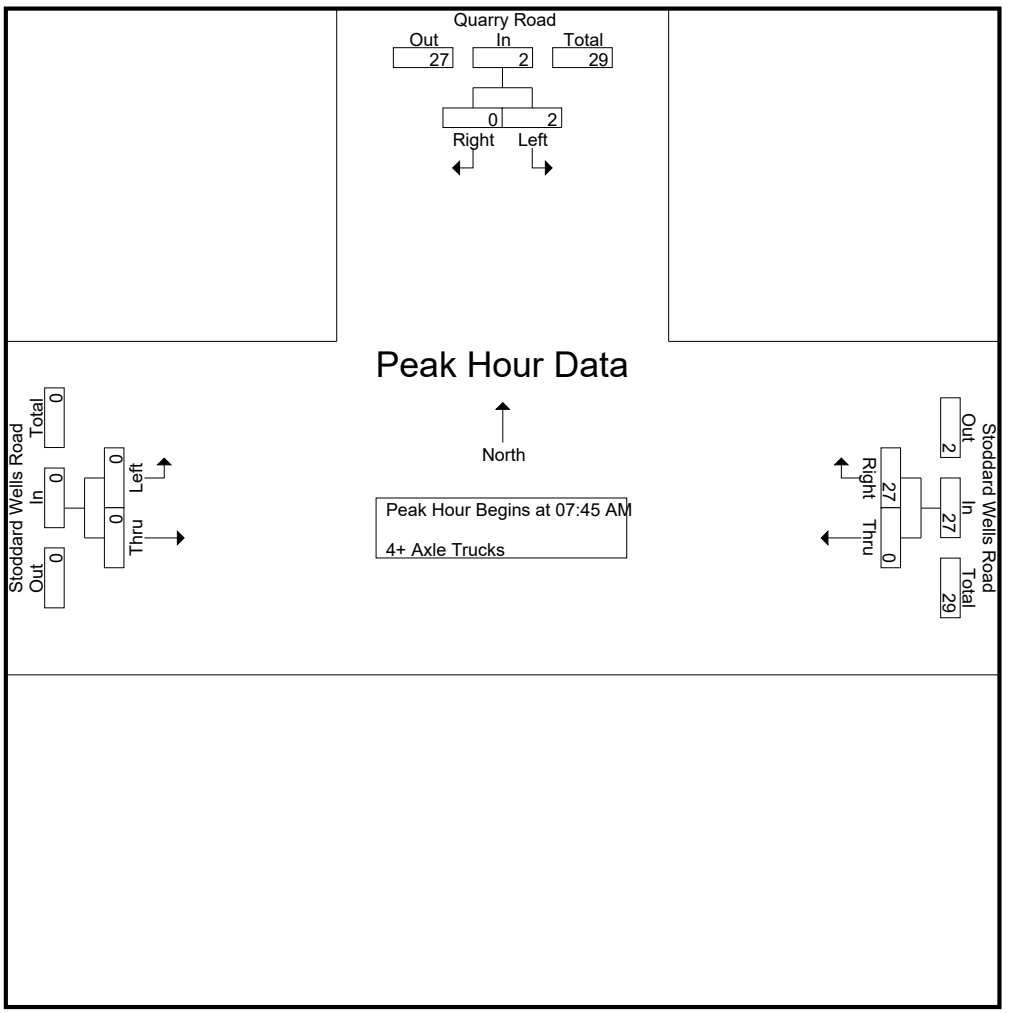
	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	0	0	0	0	4	4	0	0	0	4
07:15 AM	0	0	0	0	6	6	0	0	0	6
07:30 AM	0	0	0	0	5	5	0	0	0	5
07:45 AM	0	0	0	0	7	7	0	0	0	7
Total	0	0	0	0	22	22	0	0	0	22
08:00 AM	2	0	2	0	6	6	0	0	0	8
08:15 AM	0	0	0	0	5	5	0	0	0	5
08:30 AM	0	0	0	0	9	9	0	0	0	9
08:45 AM	0	0	0	0	6	6	0	0	0	6
Total	2	0	2	0	26	26	0	0	0	28
Grand Total	2	0	2	0	48	48	0	0	0	50
Apprch %	100	0		0	100		0	0		
Total %	4	0	4	0	96	96	0	0	0	

	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	0	7	7	0	0	0	7
08:00 AM	**2**	0	**2**	0	6	6	0	0	0	8
08:15 AM	0	0	0	0	5	5	0	0	0	5
08:30 AM	0	0	0	0	**9**	**9**	0	0	0	**9**
Total Volume	2	0	2	0	27	27	0	0	0	29
% App. Total	100	0		0	100		0	0		
PHF	.250	.000	.250	.000	.750	.750	.000	.000	.000	.806

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	0	0	0	7	7	0	0	0
+15 mins.	**2**	0	**2**	0	6	6	0	0	0
+30 mins.	0	0	0	0	5	5	0	0	0
+45 mins.	0	0	0	0	**9**	**9**	0	0	0
Total Volume	2	0	2	0	27	27	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.250	.000	.250	.000	.750	.750	.000	.000	.000

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

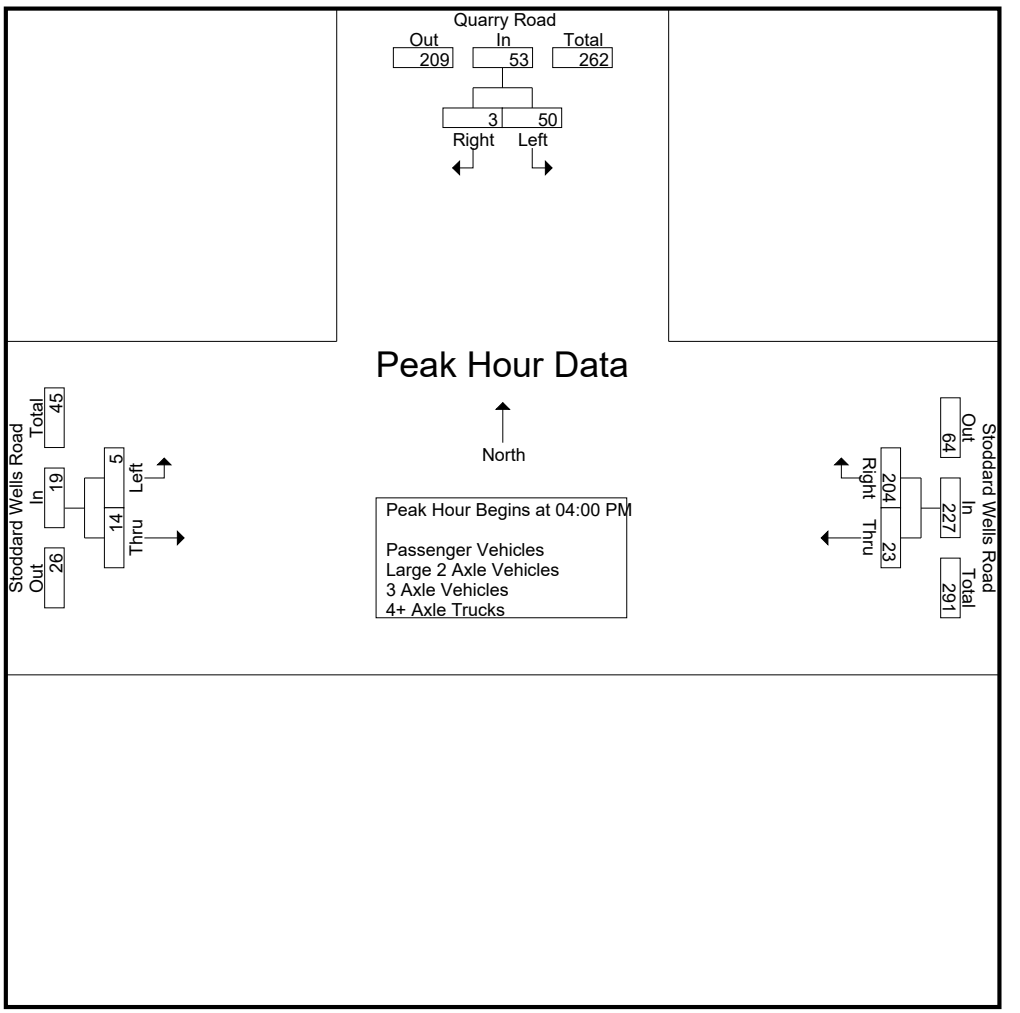
	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	10	0	10	5	99	104	2	7	9	123
04:15 PM	17	0	17	7	52	59	0	1	1	77
04:30 PM	13	1	14	5	29	34	2	2	4	52
04:45 PM	10	2	12	6	24	30	1	4	5	47
Total	50	3	53	23	204	227	5	14	19	299
05:00 PM	13	0	13	2	33	35	4	5	9	57
05:15 PM	12	2	14	0	15	15	0	3	3	32
05:30 PM	11	1	12	1	23	24	0	1	1	37
05:45 PM	7	0	7	0	25	25	2	1	3	35
Total	43	3	46	3	96	99	6	10	16	161
Grand Total	93	6	99	26	300	326	11	24	35	460
Apprch %	93.9	6.1		8	92		31.4	68.6		
Total %	20.2	1.3	21.5	5.7	65.2	70.9	2.4	5.2	7.6	
Passenger Vehicles	92	6	98	23	288	311	11	23	34	443
% Passenger Vehicles	98.9	100	99	88.5	96	95.4	100	95.8	97.1	96.3
Large 2 Axle Vehicles	0	0	0	0	2	2	0	0	0	2
% Large 2 Axle Vehicles	0	0	0	0	0.7	0.6	0	0	0	0.4
3 Axle Vehicles	1	0	1	3	1	4	0	1	1	6
% 3 Axle Vehicles	1.1	0	1	11.5	0.3	1.2	0	4.2	2.9	1.3
4+ Axle Trucks	0	0	0	0	9	9	0	0	0	9
% 4+ Axle Trucks	0	0	0	0	3	2.8	0	0	0	2

	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	10	0	10	5	**99**	**104**	**2**	**7**	**9**	**123**
04:15 PM	**17**	0	**17**	**7**	52	59	0	1	1	77
04:30 PM	13	1	14	5	29	34	2	2	4	52
04:45 PM	10	**2**	12	6	24	30	1	4	5	47
Total Volume	50	3	53	23	204	227	5	14	19	299
% App. Total	94.3	5.7		10.1	89.9		26.3	73.7		
PHF	.735	.375	.779	.821	.515	.546	.625	.500	.528	.608

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:15 PM			04:00 PM			04:30 PM		
+0 mins.	**17**	0	**17**	5	**99**	**104**	2	2	4
+15 mins.	13	1	14	**7**	52	59	1	4	5
+30 mins.	10	**2**	12	5	29	34	**4**	**5**	**9**
+45 mins.	13	0	13	6	24	30	0	3	3
Total Volume	53	3	56	23	204	227	7	14	21
% App. Total	94.6	5.4		10.1	89.9		33.3	66.7	
PHF	.779	.375	.824	.821	.515	.546	.438	.700	.583

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

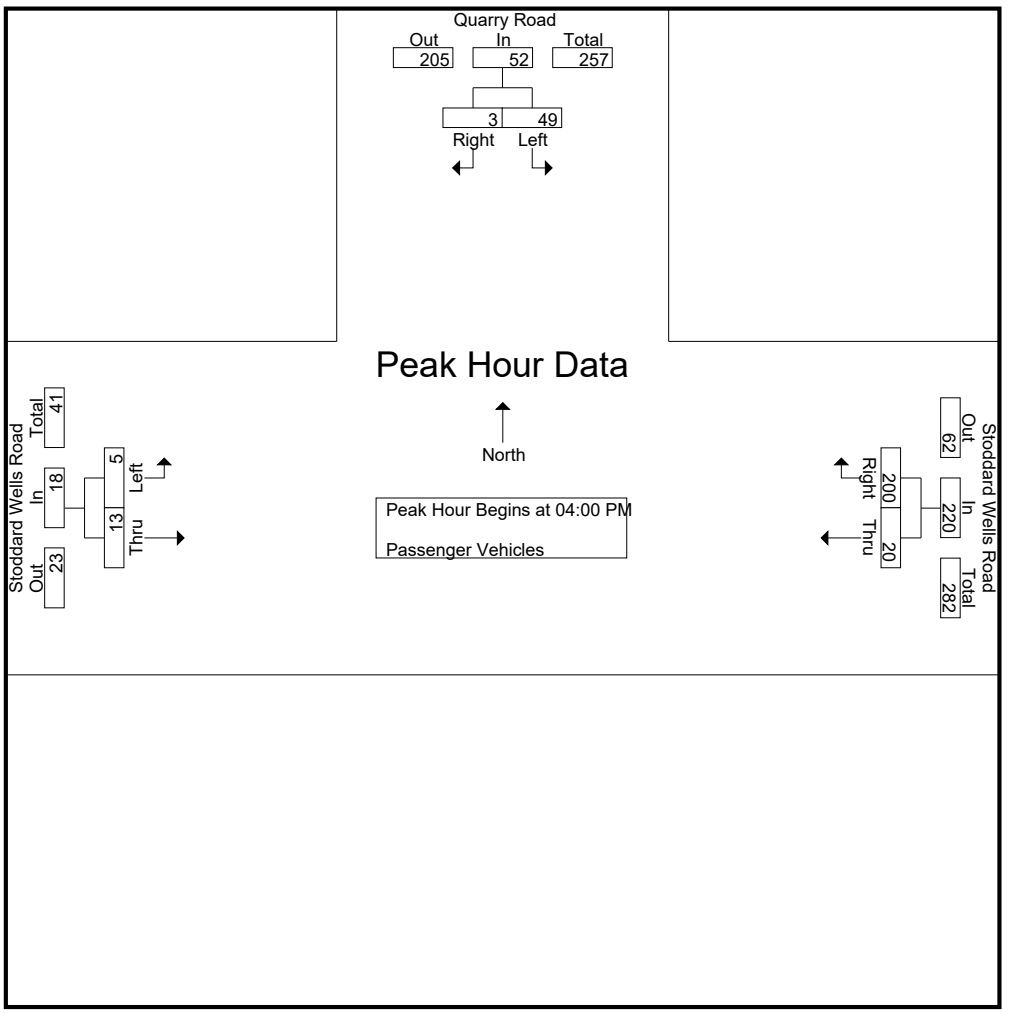
	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	10	0	10	5	99	104	2	6	8	122
04:15 PM	16	0	16	4	50	54	0	1	1	71
04:30 PM	13	1	14	5	28	33	2	2	4	51
04:45 PM	10	2	12	6	23	29	1	4	5	46
Total	49	3	52	20	200	220	5	13	18	290
05:00 PM	13	0	13	2	33	35	4	5	9	57
05:15 PM	12	2	14	0	14	14	0	3	3	31
05:30 PM	11	1	12	1	19	20	0	1	1	33
05:45 PM	7	0	7	0	22	22	2	1	3	32
Total	43	3	46	3	88	91	6	10	16	153
Grand Total	92	6	98	23	288	311	11	23	34	443
Apprch %	93.9	6.1		7.4	92.6		32.4	67.6		
Total %	20.8	1.4	22.1	5.2	65	70.2	2.5	5.2	7.7	

	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	10	0	10	5	**99**	**104**	**2**	**6**	**8**	**122**
04:15 PM	**16**	0	**16**	4	50	54	0	1	1	71
04:30 PM	13	1	14	5	28	33	2	2	4	51
04:45 PM	10	**2**	12	**6**	23	29	1	4	5	46
Total Volume	49	3	52	20	200	220	5	13	18	290
% App. Total	94.2	5.8		9.1	90.9		27.8	72.2		
PHF	.766	.375	.813	.833	.505	.529	.625	.542	.563	.594

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	10	0	10	5	**99**	**104**	**2**	**6**	**8**
+15 mins.	**16**	0	**16**	4	50	54	0	1	1
+30 mins.	13	1	14	5	28	33	2	2	4
+45 mins.	10	**2**	12	**6**	23	29	1	4	5
Total Volume	49	3	52	20	200	220	5	13	18
% App. Total	94.2	5.8		9.1	90.9		27.8	72.2	
PHF	.766	.375	.813	.833	.505	.529	.625	.542	.563

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

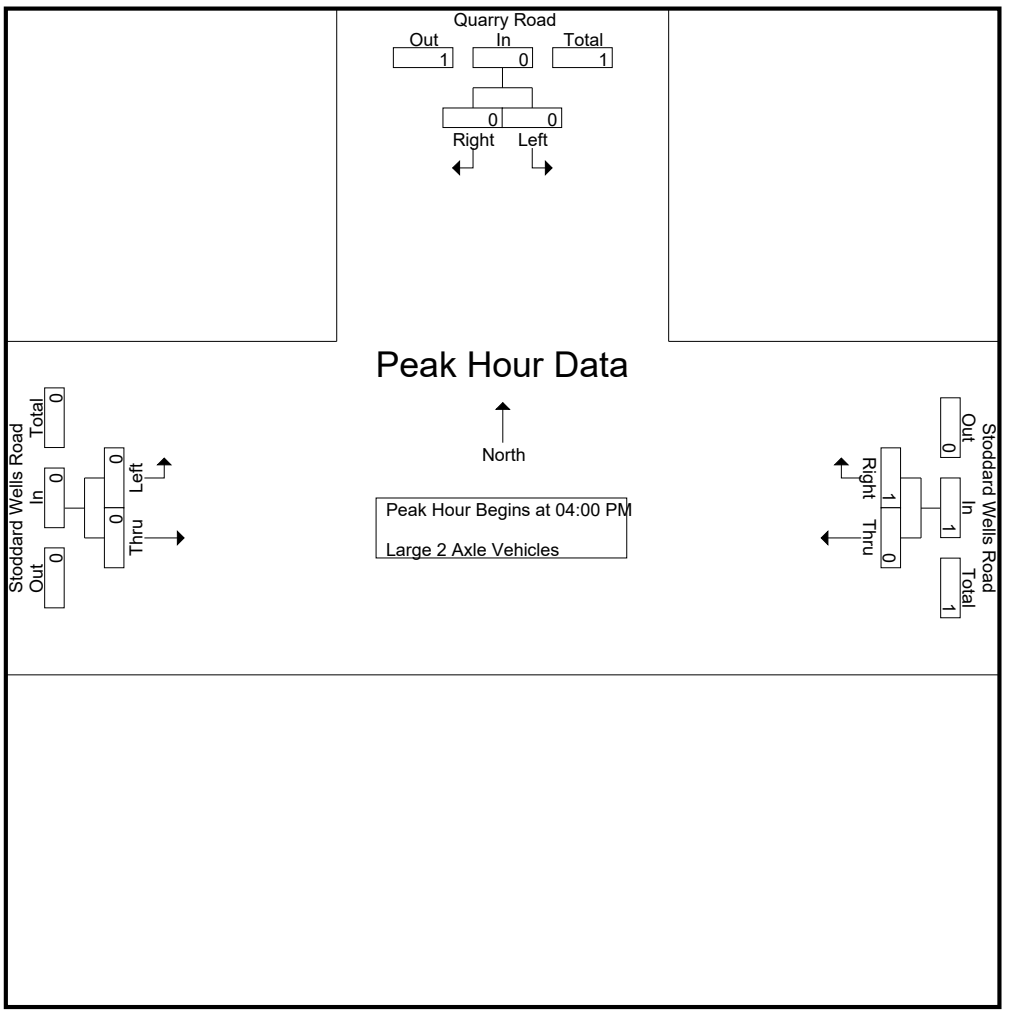
	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	1	1	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	1	1	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	0	0	0	1
Grand Total	0	0	0	0	2	2	0	0	0	2
Apprch %	0	0		0	100		0	0		
Total %	0	0	0	0	100	100	0	0	0	

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

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

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

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

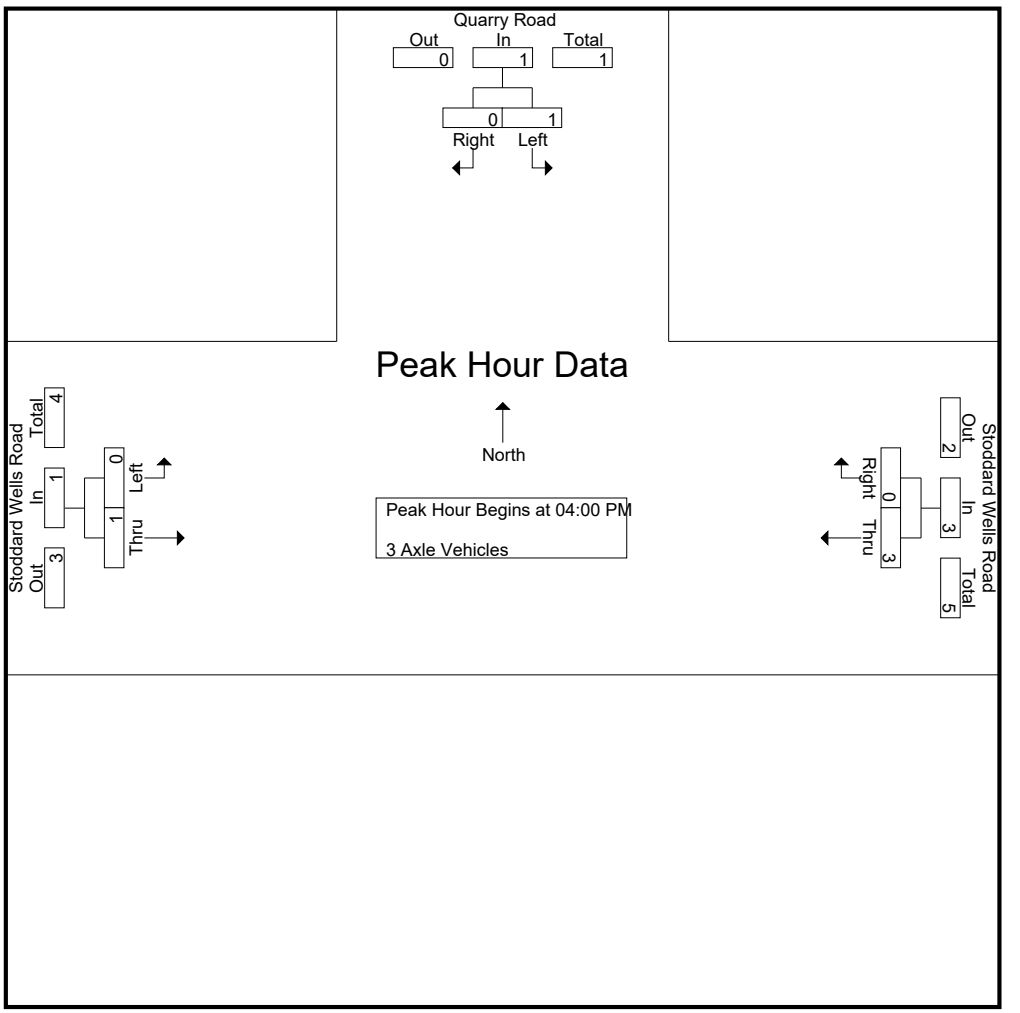
	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	1	1	1
04:15 PM	1	0	1	3	0	3	0	0	0	4
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	3	0	3	0	1	1	5
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	1	1	0	0	0	1
Total	0	0	0	0	1	1	0	0	0	1
Grand Total	1	0	1	3	1	4	0	1	1	6
Apprch %	100	0		75	25		0	100		
Total %	16.7	0	16.7	50	16.7	66.7	0	16.7	16.7	

	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 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	**1**	**1**	1
04:15 PM	**1**	0	**1**	**3**	0	**3**	0	0	0	**4**
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	3	0	3	0	1	1	5
% App. Total	100	0		100	0		0	100		
PHF	.250	.000	.250	.250	.000	.250	.000	.250	.250	.313

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	0	**1**	**1**
+15 mins.	**1**	0	**1**	**3**	0	**3**	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	3	0	3	0	1	1
% App. Total	100	0		100	0		0	100	
PHF	.250	.000	.250	.250	.000	.250	.000	.250	.250

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

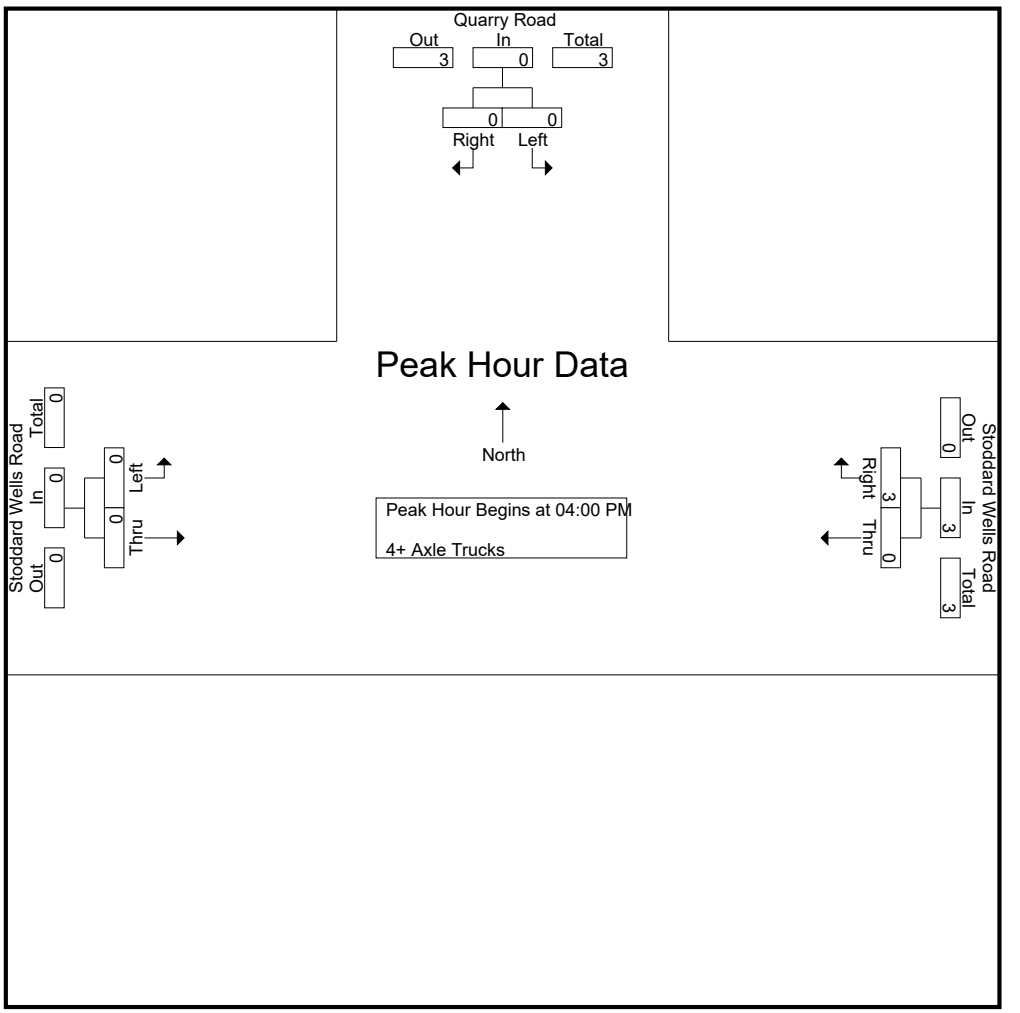
	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	1	1	0	0	0	1
04:30 PM	0	0	0	0	1	1	0	0	0	1
04:45 PM	0	0	0	0	1	1	0	0	0	1
Total	0	0	0	0	3	3	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	4	4	0	0	0	4
05:45 PM	0	0	0	0	2	2	0	0	0	2
Total	0	0	0	0	6	6	0	0	0	6
Grand Total	0	0	0	0	9	9	0	0	0	9
Apprch %	0	0		0	100		0	0		
Total %	0	0	0	0	100	100	0	0	0	

	Quarry Road Southbound			Stoddard Wells Road Westbound			Stoddard Wells Road Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	**1**	**1**	0	0	0	**1**
04:30 PM	0	0	0	0	1	1	0	0	0	1
04:45 PM	0	0	0	0	1	1	0	0	0	1
Total Volume	0	0	0	0	3	3	0	0	0	3
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.750	.750	.000	.000	.000	.750

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

City of Apple Valley
N/S: Quarry Road
E/W: Stoddard Wells Road
Weather: Clear

File Name : 05_APV_Qua_SW PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	**1**	**1**	0	0	0
+30 mins.	0	0	0	0	1	1	0	0	0
+45 mins.	0	0	0	0	1	1	0	0	0
Total Volume	0	0	0	0	3	3	0	0	0
% App. Total	0	0		0	100		0	0	
PHF	.000	.000	.000	.000	.750	.750	.000	.000	.000

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15SAM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

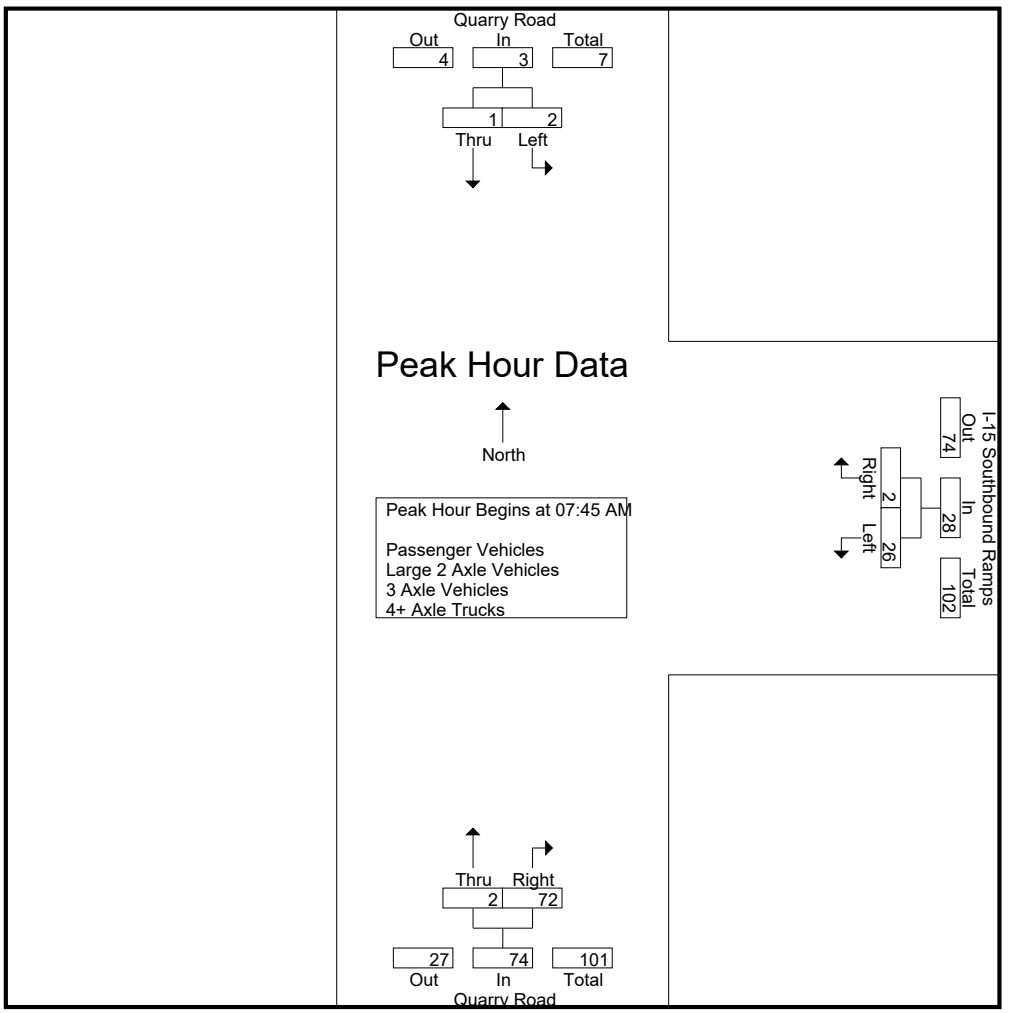
	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	3	0	3	0	14	14	17
07:15 AM	0	0	0	6	0	6	0	20	20	26
07:30 AM	0	0	0	6	0	6	0	11	11	17
07:45 AM	0	0	0	7	0	7	0	25	25	32
Total	0	0	0	22	0	22	0	70	70	92
08:00 AM	1	0	1	5	0	5	1	17	18	24
08:15 AM	0	0	0	7	0	7	0	13	13	20
08:30 AM	1	1	2	7	2	9	1	17	18	29
08:45 AM	0	0	0	10	0	10	0	14	14	24
Total	2	1	3	29	2	31	2	61	63	97
Grand Total	2	1	3	51	2	53	2	131	133	189
Apprch %	66.7	33.3		96.2	3.8		1.5	98.5		
Total %	1.1	0.5	1.6	27	1.1	28	1.1	69.3	70.4	
Passenger Vehicles	1	1	2	47	2	49	2	71	73	124
% Passenger Vehicles	50	100	66.7	92.2	100	92.5	100	54.2	54.9	65.6
Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	0
% Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	0
3 Axle Vehicles	0	0	0	1	0	1	0	6	6	7
% 3 Axle Vehicles	0	0	0	2	0	1.9	0	4.6	4.5	3.7
4+ Axle Trucks	1	0	1	3	0	3	0	54	54	58
% 4+ Axle Trucks	50	0	33.3	5.9	0	5.7	0	41.2	40.6	30.7

	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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 07:45 AM										
07:45 AM	0	0	0	**7**	0	7	0	**25**	**25**	**32**
08:00 AM	**1**	0	1	5	0	5	**1**	17	18	24
08:15 AM	0	0	0	7	0	7	0	13	13	20
08:30 AM	1	**1**	**2**	7	**2**	**9**	1	17	18	29
Total Volume	2	1	3	26	2	28	2	72	74	105
% App. Total	66.7	33.3		92.9	7.1		2.7	97.3		
PHF	.500	.250	.375	.929	.250	.778	.500	.720	.740	.820

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15SAM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:45 AM			08:00 AM			07:15 AM		
+0 mins.	0	0	0	5	0	5	0	20	20
+15 mins.	**1**	0	1	7	0	7	0	11	11
+30 mins.	0	0	0	7	**2**	9	0	**25**	**25**
+45 mins.	1	**1**	**2**	**10**	0	**10**	**1**	17	18
Total Volume	2	1	3	29	2	31	1	73	74
% App. Total	66.7	33.3		93.5	6.5		1.4	98.6	
PHF	.500	.250	.375	.725	.250	.775	.250	.730	.740

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15SAM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

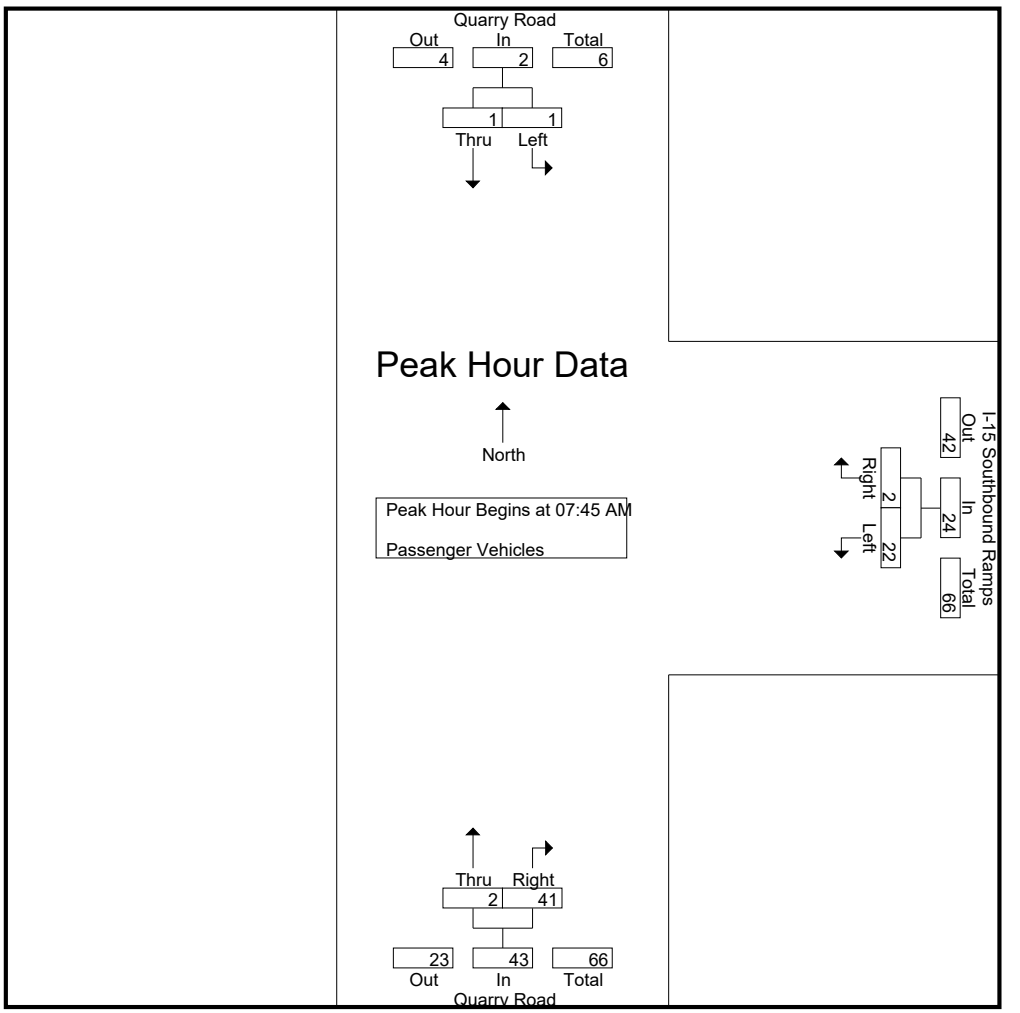
	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	3	0	3	0	8	8	11
07:15 AM	0	0	0	6	0	6	0	12	12	18
07:30 AM	0	0	0	6	0	6	0	7	7	13
07:45 AM	0	0	0	6	0	6	0	18	18	24
Total	0	0	0	21	0	21	0	45	45	66
08:00 AM	0	0	0	3	0	3	1	10	11	14
08:15 AM	0	0	0	6	0	6	0	5	5	11
08:30 AM	1	1	2	7	2	9	1	8	9	20
08:45 AM	0	0	0	10	0	10	0	3	3	13
Total	1	1	2	26	2	28	2	26	28	58
Grand Total	1	1	2	47	2	49	2	71	73	124
Apprch %	50	50		95.9	4.1		2.7	97.3		
Total %	0.8	0.8	1.6	37.9	1.6	39.5	1.6	57.3	58.9	

	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	6	0	6	0	**18**	**18**	**24**
08:00 AM	0	0	0	3	0	3	**1**	10	11	14
08:15 AM	0	0	0	6	0	6	0	5	5	11
08:30 AM	**1**	**1**	**2**	**7**	**2**	**9**	1	8	9	20
Total Volume	1	1	2	22	2	24	2	41	43	69
% App. Total	50	50		91.7	8.3		4.7	95.3		
PHF	.250	.250	.250	.786	.250	.667	.500	.569	.597	.719

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15SAM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	0	0	6	0	6	0	**18**	**18**
+15 mins.	0	0	0	3	0	3	**1**	10	11
+30 mins.	0	0	0	6	0	6	0	5	5
+45 mins.	**1**	**1**	**2**	**7**	**2**	**9**	1	8	9
Total Volume	1	1	2	22	2	24	2	41	43
% App. Total	50	50		91.7	8.3		4.7	95.3	
PHF	.250	.250	.250	.786	.250	.667	.500	.569	.597

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15SAM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

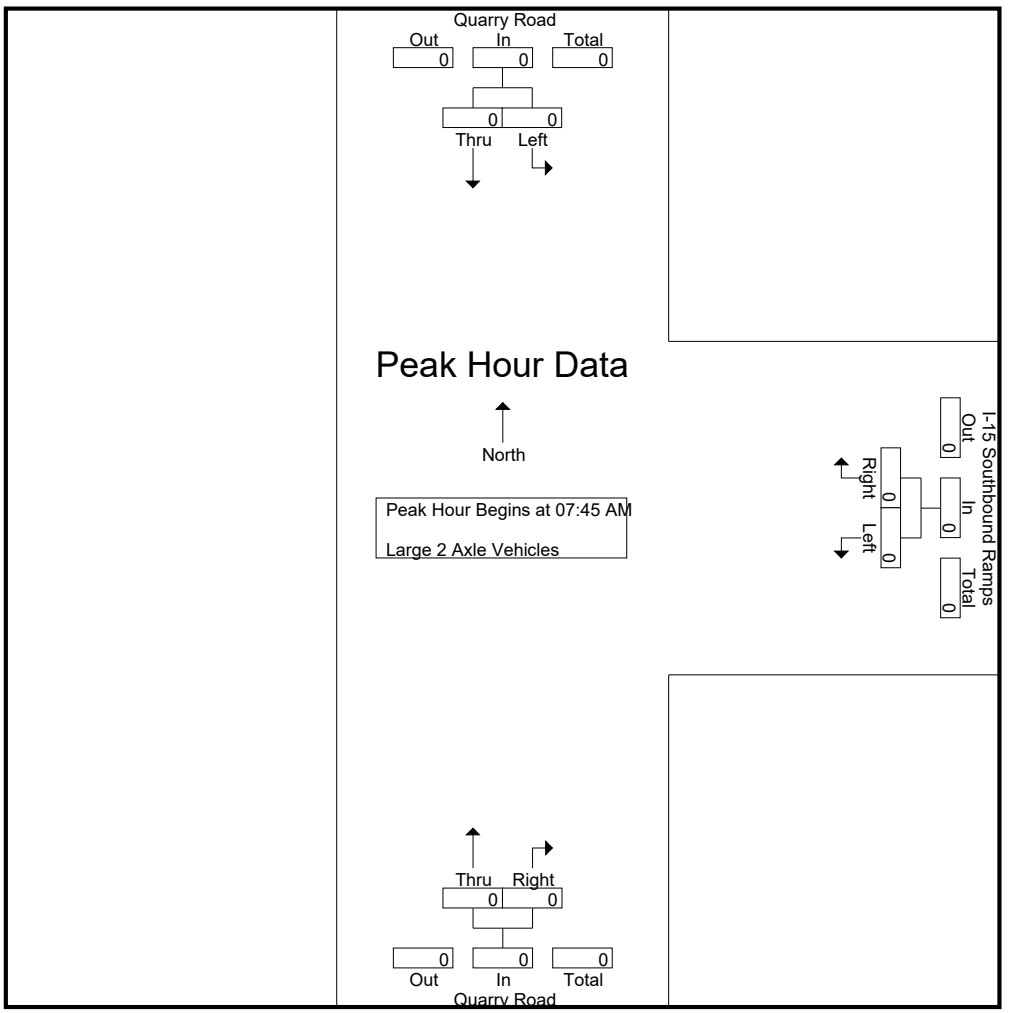
	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

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

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15SAM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

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

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15SAM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

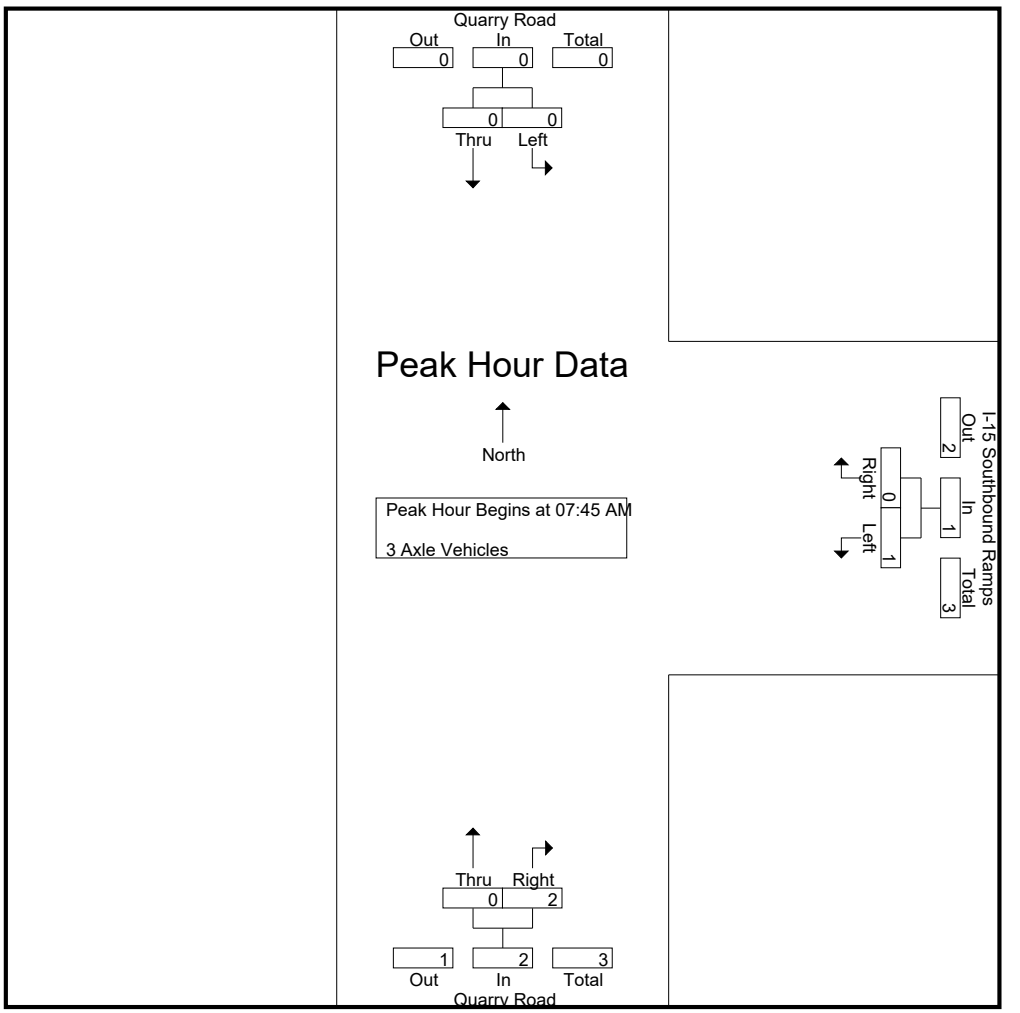
	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	2	2	2
07:15 AM	0	0	0	0	0	0	0	1	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	3	3	3
08:00 AM	0	0	0	0	0	0	0	1	1	1
08:15 AM	0	0	0	1	0	1	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	1	1	1
08:45 AM	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	1	0	1	0	3	3	4
Grand Total	0	0	0	1	0	1	0	6	6	7
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	14.3	0	14.3	0	85.7	85.7	

	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	**1**	**1**	**1**
08:15 AM	0	0	0	**1**	0	**1**	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	1	0	1	0	2	2	3
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.250	.000	.250	.000	.500	.500	.750

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15SAM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

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

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15SAM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

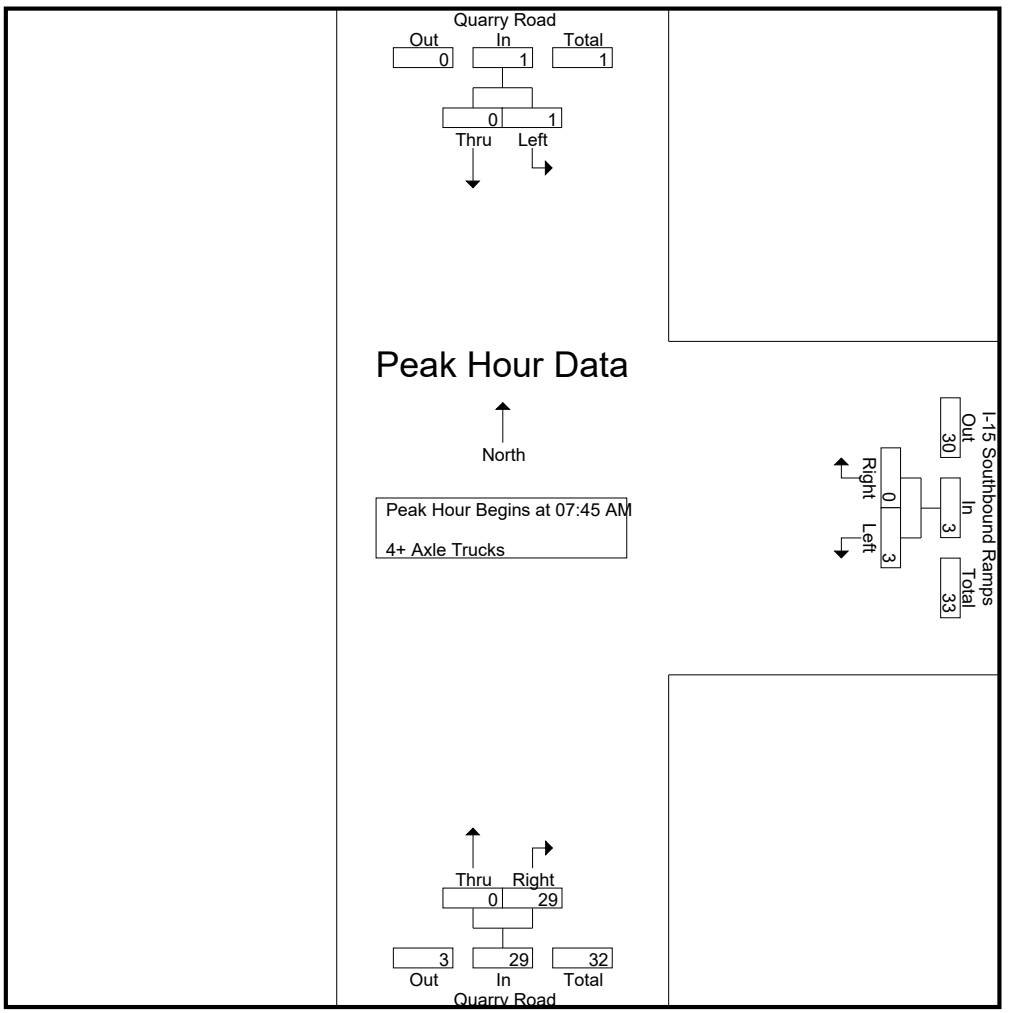
	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	4	4	4
07:15 AM	0	0	0	0	0	0	0	7	7	7
07:30 AM	0	0	0	0	0	0	0	4	4	4
07:45 AM	0	0	0	1	0	1	0	7	7	8
Total	0	0	0	1	0	1	0	22	22	23
08:00 AM	1	0	1	2	0	2	0	6	6	9
08:15 AM	0	0	0	0	0	0	0	8	8	8
08:30 AM	0	0	0	0	0	0	0	8	8	8
08:45 AM	0	0	0	0	0	0	0	10	10	10
Total	1	0	1	2	0	2	0	32	32	35
Grand Total	1	0	1	3	0	3	0	54	54	58
Apprch %	100	0		100	0		0	100		
Total %	1.7	0	1.7	5.2	0	5.2	0	93.1	93.1	

	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	1	0	1	0	7	7	8
08:00 AM	**1**	0	**1**	**2**	0	**2**	0	6	6	**9**
08:15 AM	0	0	0	0	0	0	0	**8**	**8**	8
08:30 AM	0	0	0	0	0	0	0	8	8	8
Total Volume	1	0	1	3	0	3	0	29	29	33
% App. Total	100	0		100	0		0	100		
PHF	.250	.000	.250	.375	.000	.375	.000	.906	.906	.917

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15SAM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	0	0	1	0	1	0	7	7
+15 mins.	**1**	0	**1**	**2**	0	**2**	0	6	6
+30 mins.	0	0	0	0	0	0	0	**8**	**8**
+45 mins.	0	0	0	0	0	0	0	8	8
Total Volume	1	0	1	3	0	3	0	29	29
% App. Total	100	0		100	0		0	100	
PHF	.250	.000	.250	.375	.000	.375	.000	.906	.906

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15S PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

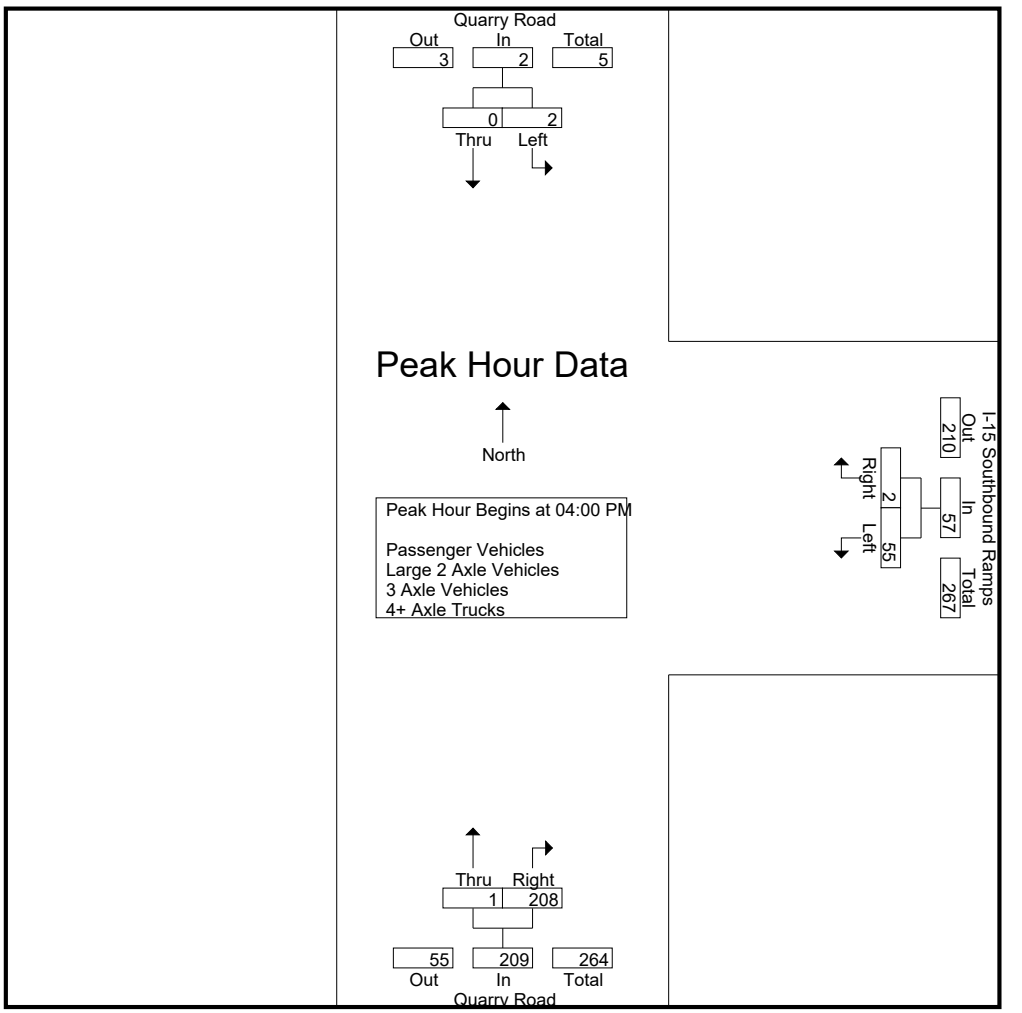
	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	11	0	11	0	100	100	111
04:15 PM	1	0	1	17	2	19	0	53	53	73
04:30 PM	1	0	1	16	0	16	0	30	30	47
04:45 PM	0	0	0	11	0	11	1	25	26	37
Total	2	0	2	55	2	57	1	208	209	268
05:00 PM	0	2	2	11	0	11	0	36	36	49
05:15 PM	0	1	1	14	1	15	0	15	15	31
05:30 PM	0	0	0	13	0	13	0	22	22	35
05:45 PM	0	0	0	6	0	6	1	27	28	34
Total	0	3	3	44	1	45	1	100	101	149
Grand Total	2	3	5	99	3	102	2	308	310	417
Apprch %	40	60		97.1	2.9		0.6	99.4		
Total %	0.5	0.7	1.2	23.7	0.7	24.5	0.5	73.9	74.3	
Passenger Vehicles	2	3	5	97	3	100	2	294	296	401
% Passenger Vehicles	100	100	100	98	100	98	100	95.5	95.5	96.2
Large 2 Axle Vehicles	0	0	0	1	0	1	0	4	4	5
% Large 2 Axle Vehicles	0	0	0	1	0	1	0	1.3	1.3	1.2
3 Axle Vehicles	0	0	0	1	0	1	0	1	1	2
% 3 Axle Vehicles	0	0	0	1	0	1	0	0.3	0.3	0.5
4+ Axle Trucks	0	0	0	0	0	0	0	9	9	9
% 4+ Axle Trucks	0	0	0	0	0	0	0	2.9	2.9	2.2

	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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	0	0	11	0	11	0	**100**	**100**	**111**
04:15 PM	**1**	0	**1**	**17**	**2**	**19**	0	53	53	73
04:30 PM	1	0	1	16	0	16	0	30	30	47
04:45 PM	0	0	0	11	0	11	**1**	25	26	37
Total Volume	2	0	2	55	2	57	1	208	209	268
% App. Total	100	0		96.5	3.5		0.5	99.5		
PHF	.500	.000	.500	.809	.250	.750	.250	.520	.523	.604

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15S PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:15 PM			04:00 PM			04:00 PM		
+0 mins.	**1**	0	1	11	0	11	0	**100**	**100**
+15 mins.	1	0	1	**17**	**2**	**19**	0	53	53
+30 mins.	0	0	0	16	0	16	0	30	30
+45 mins.	0	**2**	**2**	11	0	11	**1**	25	26
Total Volume	2	2	4	55	2	57	1	208	209
% App. Total	50	50		96.5	3.5		0.5	99.5	
PHF	.500	.250	.500	.809	.250	.750	.250	.520	.523

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15S PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

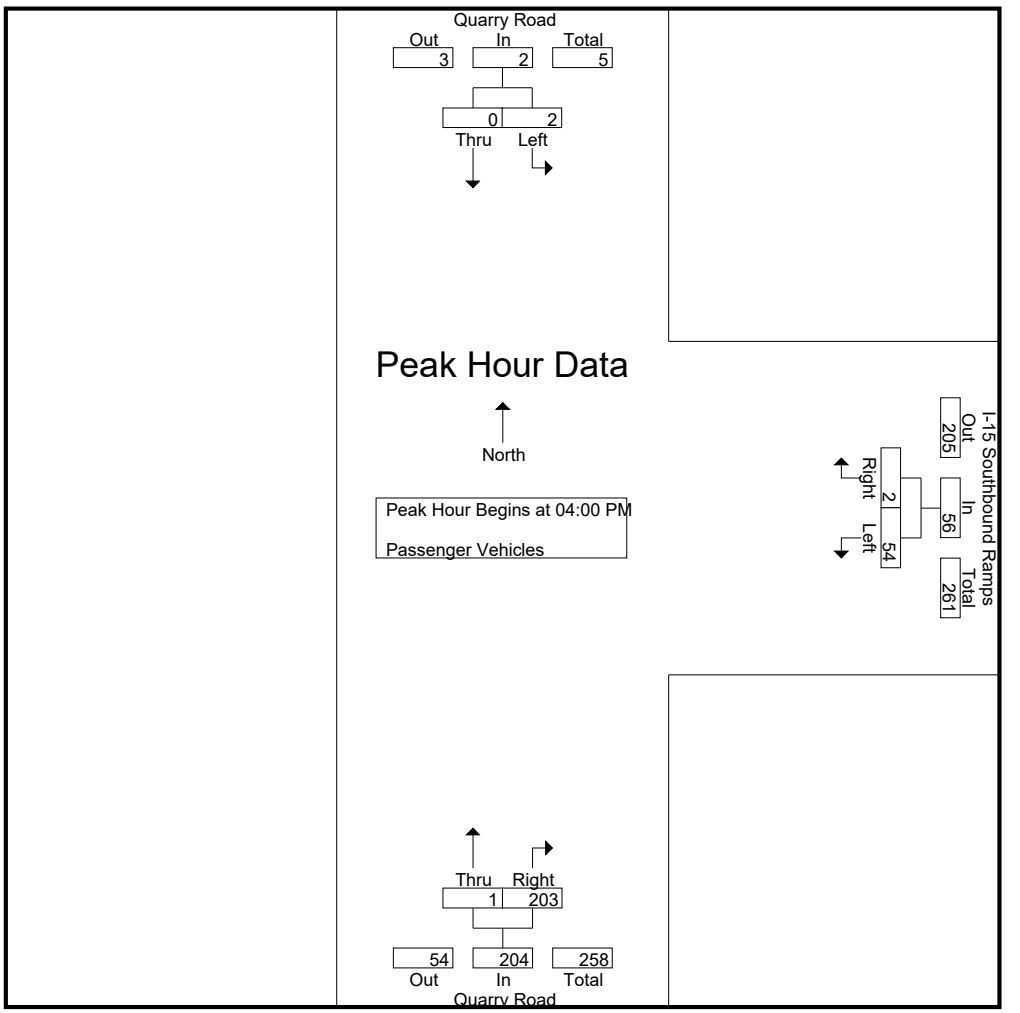
	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	11	0	11	0	100	100	111
04:15 PM	1	0	1	16	2	18	0	51	51	70
04:30 PM	1	0	1	16	0	16	0	28	28	45
04:45 PM	0	0	0	11	0	11	1	24	25	36
Total	2	0	2	54	2	56	1	203	204	262
05:00 PM	0	2	2	11	0	11	0	36	36	49
05:15 PM	0	1	1	13	1	14	0	13	13	28
05:30 PM	0	0	0	13	0	13	0	18	18	31
05:45 PM	0	0	0	6	0	6	1	24	25	31
Total	0	3	3	43	1	44	1	91	92	139
Grand Total	2	3	5	97	3	100	2	294	296	401
Apprch %	40	60		97	3		0.7	99.3		
Total %	0.5	0.7	1.2	24.2	0.7	24.9	0.5	73.3	73.8	

	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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	11	0	11	0	**100**	**100**	**111**
04:15 PM	**1**	0	**1**	**16**	**2**	**18**	0	51	51	70
04:30 PM	1	0	1	16	0	16	0	28	28	45
04:45 PM	0	0	0	11	0	11	**1**	24	25	36
Total Volume	2	0	2	54	2	56	1	203	204	262
% App. Total	100	0		96.4	3.6		0.5	99.5		
PHF	.500	.000	.500	.844	.250	.778	.250	.508	.510	.590

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15S PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	11	0	11	0	**100**	**100**
+15 mins.	**1**	0	**1**	**16**	**2**	**18**	0	51	51
+30 mins.	1	0	1	16	0	16	0	28	28
+45 mins.	0	0	0	11	0	11	**1**	24	25
Total Volume	2	0	2	54	2	56	1	203	204
% App. Total	100	0		96.4	3.6		0.5	99.5	
PHF	.500	.000	.500	.844	.250	.778	.250	.508	.510

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15S PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

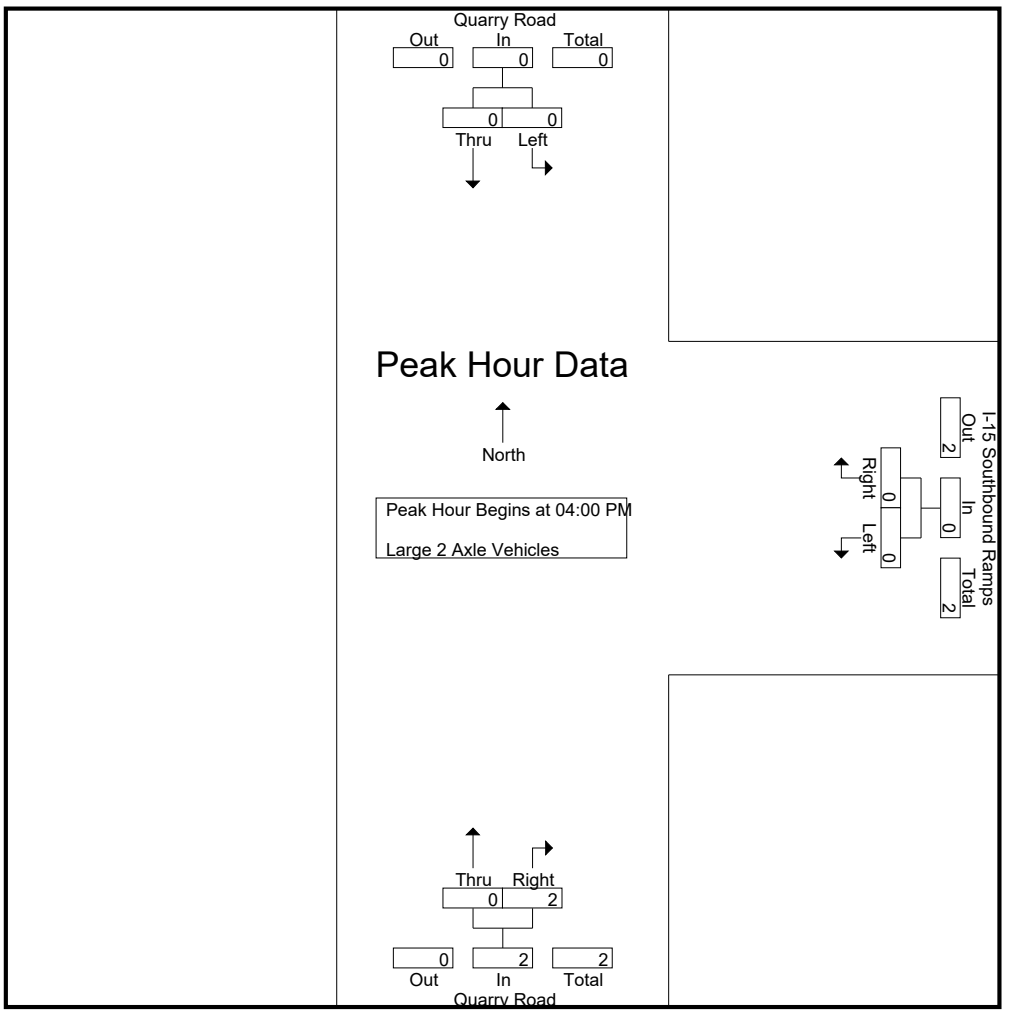
	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	1	1	1
04:30 PM	0	0	0	0	0	0	0	1	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	2	2	2
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	1	0	1	0	1	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	1	0	1	0	2	2	3
Grand Total	0	0	0	1	0	1	0	4	4	5
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	20	0	20	0	80	80	

	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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	0
04:15 PM	0	0	0	0	0	0	0	**1**	**1**	**1**
04:30 PM	0	0	0	0	0	0	0	1	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	2	2	2
% App. Total	0	0		0	0		0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.500	.500	.500

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15S PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	**1**	**1**
+30 mins.	0	0	0	0	0	0	0	1	1
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	2	2
% App. Total	0	0		0	0		0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.500	.500

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15S PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

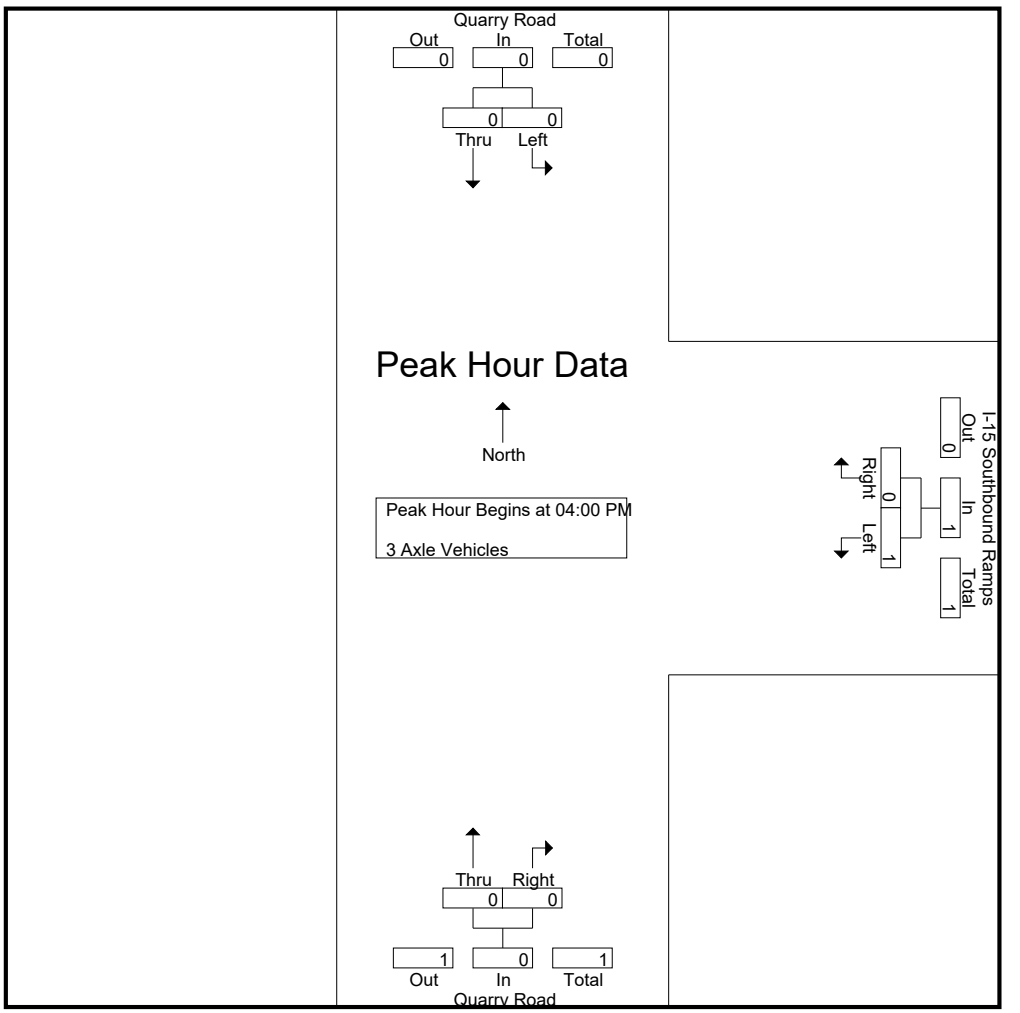
	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	1	0	1	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	1	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	1	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	1	1
Grand Total	0	0	0	1	0	1	0	1	1	2
Apprch %	0	0		100	0		0	100		
Total %	0	0	0	50	0	50	0	50	50	

	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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	0
04:15 PM	0	0	0	**1**	0	**1**	0	0	0	**1**
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	0	1	0	0	0	1
% App. Total	0	0		100	0		0	0		
PHF	.000	.000	.000	.250	.000	.250	.000	.000	.000	.250

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15S PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

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

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15S PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

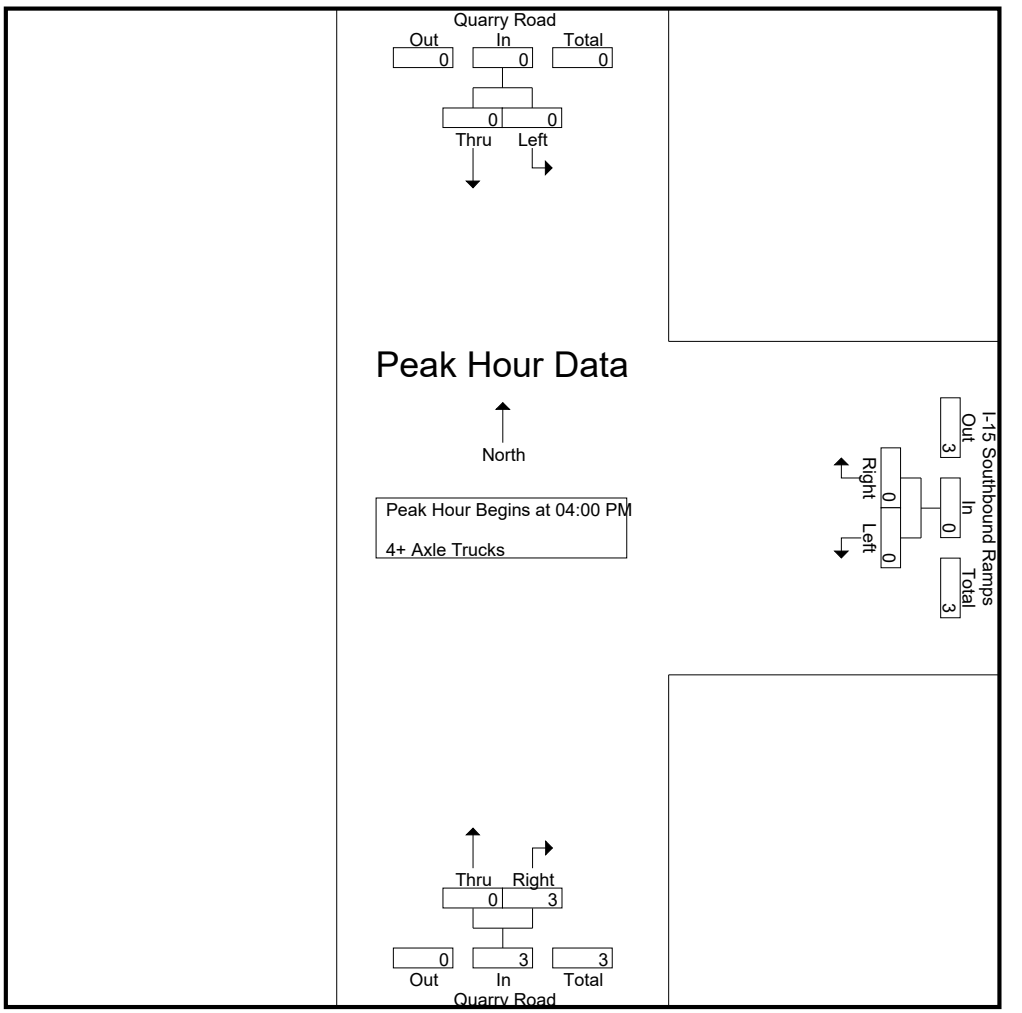
	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	1	1	1
04:30 PM	0	0	0	0	0	0	0	1	1	1
04:45 PM	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	3	3	3
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	4	4	4
05:45 PM	0	0	0	0	0	0	0	2	2	2
Total	0	0	0	0	0	0	0	6	6	6
Grand Total	0	0	0	0	0	0	0	9	9	9
Apprch %	0	0		0	0		0	100		
Total %	0	0	0	0	0	0	0	100	100	

	Quarry Road Southbound			I-15 Southbound Ramps Westbound			Quarry Road Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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	0
04:15 PM	0	0	0	0	0	0	0	**1**	**1**	**1**
04:30 PM	0	0	0	0	0	0	0	1	1	1
04:45 PM	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	0	0	0	0	3	3	3
% App. Total	0	0		0	0		0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.750	.750	.750

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

City of Apple Valley
N/S: Quarry Road
E/W: I-15 Southbound Ramps
Weather: Clear

File Name : 06_APV_Qua_15S PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	**1**	**1**
+30 mins.	0	0	0	0	0	0	0	1	1
+45 mins.	0	0	0	0	0	0	0	1	1
Total Volume	0	0	0	0	0	0	0	3	3
% App. Total	0	0		0	0		0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.750	.750

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

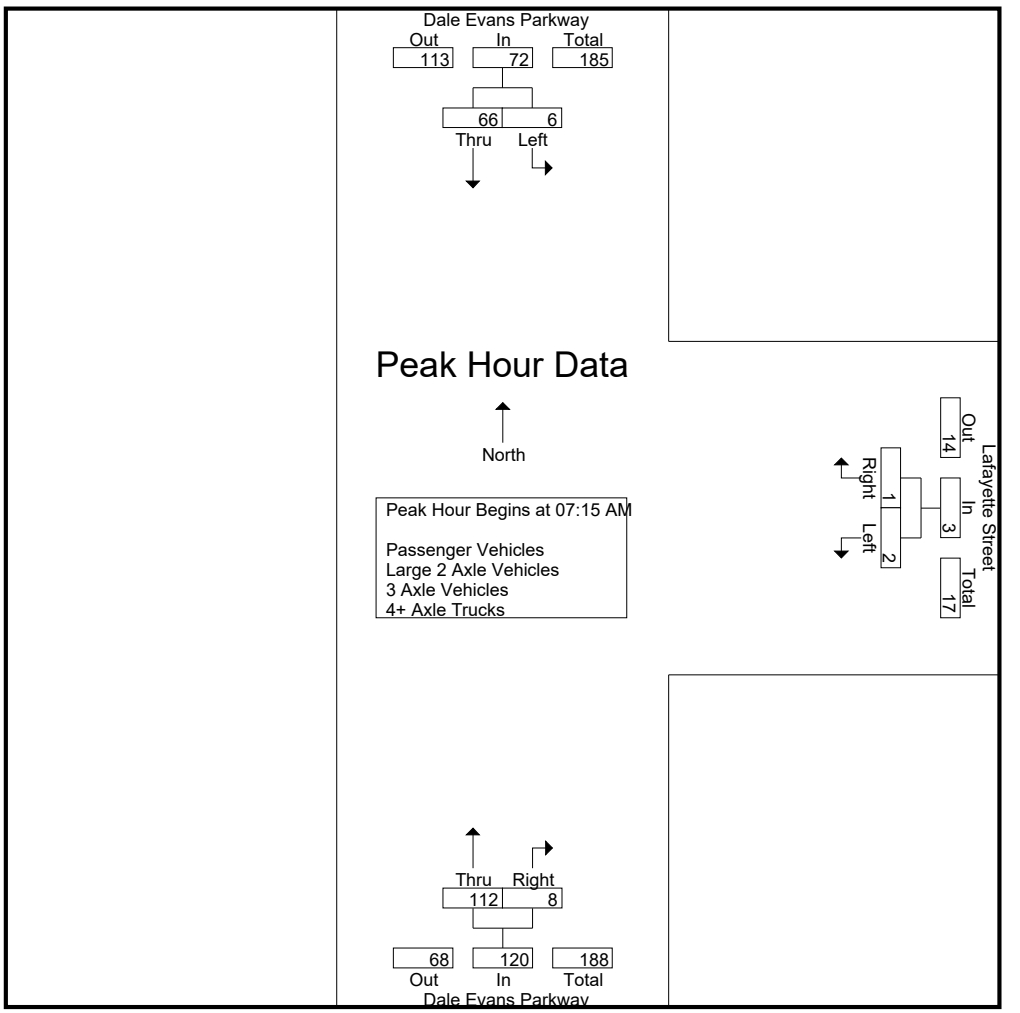
	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	1	14	15	0	0	0	28	1	29	44
07:15 AM	0	16	16	0	0	0	29	1	30	46
07:30 AM	4	20	24	0	1	1	30	1	31	56
07:45 AM	2	12	14	0	0	0	28	4	32	46
Total	7	62	69	0	1	1	115	7	122	192
08:00 AM	0	18	18	2	0	2	25	2	27	47
08:15 AM	0	12	12	4	0	4	24	0	24	40
08:30 AM	1	12	13	0	2	2	14	0	14	29
08:45 AM	2	15	17	0	1	1	24	4	28	46
Total	3	57	60	6	3	9	87	6	93	162
Grand Total	10	119	129	6	4	10	202	13	215	354
Apprch %	7.8	92.2		60	40		94	6		
Total %	2.8	33.6	36.4	1.7	1.1	2.8	57.1	3.7	60.7	
Passenger Vehicles	8	108	116	6	1	7	193	13	206	329
% Passenger Vehicles	80	90.8	89.9	100	25	70	95.5	100	95.8	92.9
Large 2 Axle Vehicles	0	9	9	0	0	0	7	0	7	16
% Large 2 Axle Vehicles	0	7.6	7	0	0	0	3.5	0	3.3	4.5
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	2	2	4	0	3	3	2	0	2	9
% 4+ Axle Trucks	20	1.7	3.1	0	75	30	1	0	0.9	2.5

	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	16	16	0	0	0	29	1	30	46
07:30 AM	**4**	**20**	**24**	0	**1**	1	**30**	1	31	**56**
07:45 AM	2	12	14	0	0	0	28	**4**	**32**	46
08:00 AM	0	18	18	**2**	0	**2**	25	2	27	47
Total Volume	6	66	72	2	1	3	112	8	120	195
% App. Total	8.3	91.7		66.7	33.3		93.3	6.7		
PHF	.375	.825	.750	.250	.250	.375	.933	.500	.938	.871

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:15 AM			08:00 AM			07:00 AM		
+0 mins.	0	16	16	2	0	2	28	1	29
+15 mins.	**4**	**20**	**24**	**4**	0	**4**	29	1	30
+30 mins.	2	12	14	0	**2**	2	**30**	1	31
+45 mins.	0	18	18	0	1	1	28	**4**	**32**
Total Volume	6	66	72	6	3	9	115	7	122
% App. Total	8.3	91.7		66.7	33.3		94.3	5.7	
PHF	.375	.825	.750	.375	.375	.563	.958	.438	.953

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

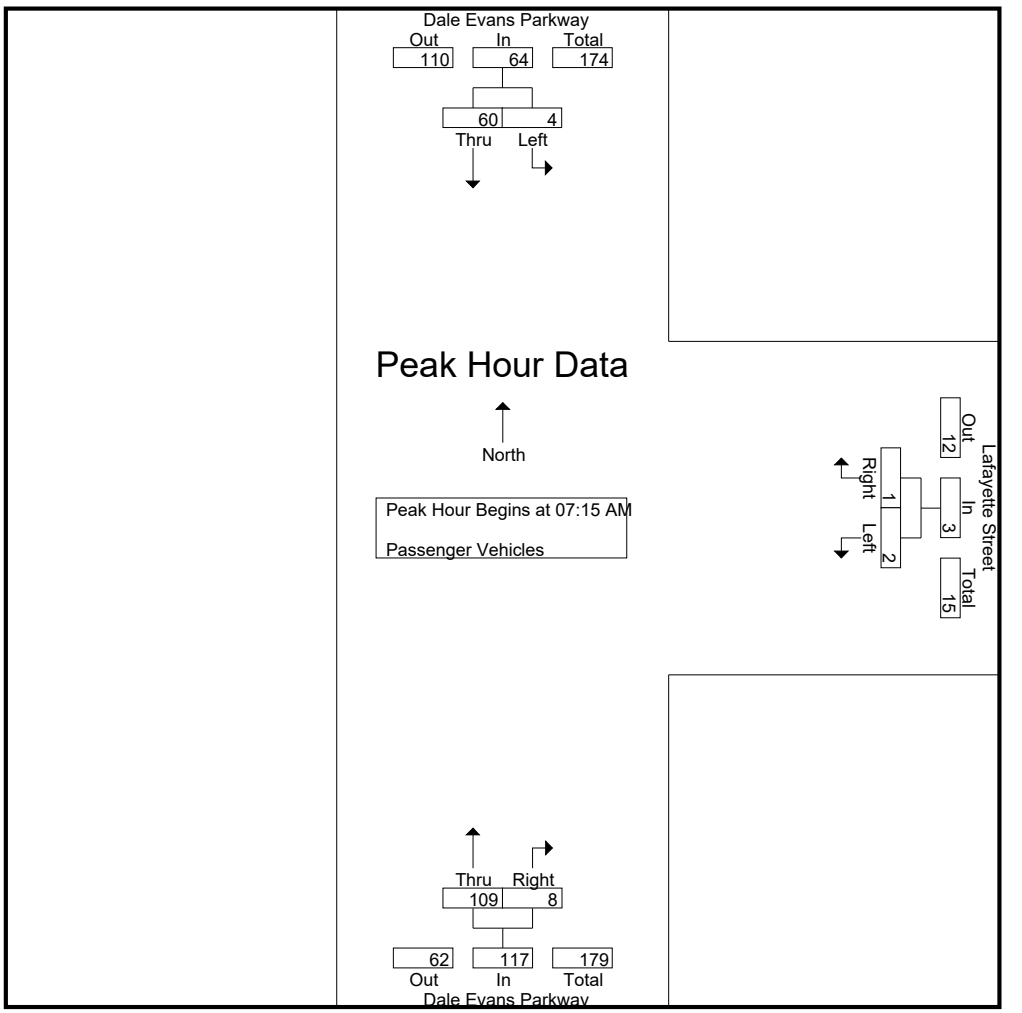
	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	1	14	15	0	0	0	27	1	28	43
07:15 AM	0	16	16	0	0	0	29	1	30	46
07:30 AM	2	18	20	0	1	1	28	1	29	50
07:45 AM	2	12	14	0	0	0	28	4	32	46
Total	5	60	65	0	1	1	112	7	119	185
08:00 AM	0	14	14	2	0	2	24	2	26	42
08:15 AM	0	11	11	4	0	4	22	0	22	37
08:30 AM	1	10	11	0	0	0	14	0	14	25
08:45 AM	2	13	15	0	0	0	21	4	25	40
Total	3	48	51	6	0	6	81	6	87	144
Grand Total	8	108	116	6	1	7	193	13	206	329
Apprch %	6.9	93.1		85.7	14.3		93.7	6.3		
Total %	2.4	32.8	35.3	1.8	0.3	2.1	58.7	4	62.6	

	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	16	16	0	0	0	**29**	1	30	46
07:30 AM	**2**	**18**	**20**	0	**1**	1	28	1	29	**50**
07:45 AM	2	12	14	0	0	0	28	**4**	**32**	46
08:00 AM	0	14	14	**2**	0	**2**	24	2	26	42
Total Volume	4	60	64	2	1	3	109	8	117	184
% App. Total	6.2	93.8		66.7	33.3		93.2	6.8		
PHF	.500	.833	.800	.250	.250	.375	.940	.500	.914	.920

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	16	16	0	0	0	**29**	1	30
+15 mins.	**2**	**18**	**20**	0	**1**	1	28	1	29
+30 mins.	2	12	14	0	0	0	28	**4**	**32**
+45 mins.	0	14	14	**2**	0	**2**	24	2	26
Total Volume	4	60	64	2	1	3	109	8	117
% App. Total	6.2	93.8		66.7	33.3		93.2	6.8	
PHF	.500	.833	.800	.250	.250	.375	.940	.500	.914

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

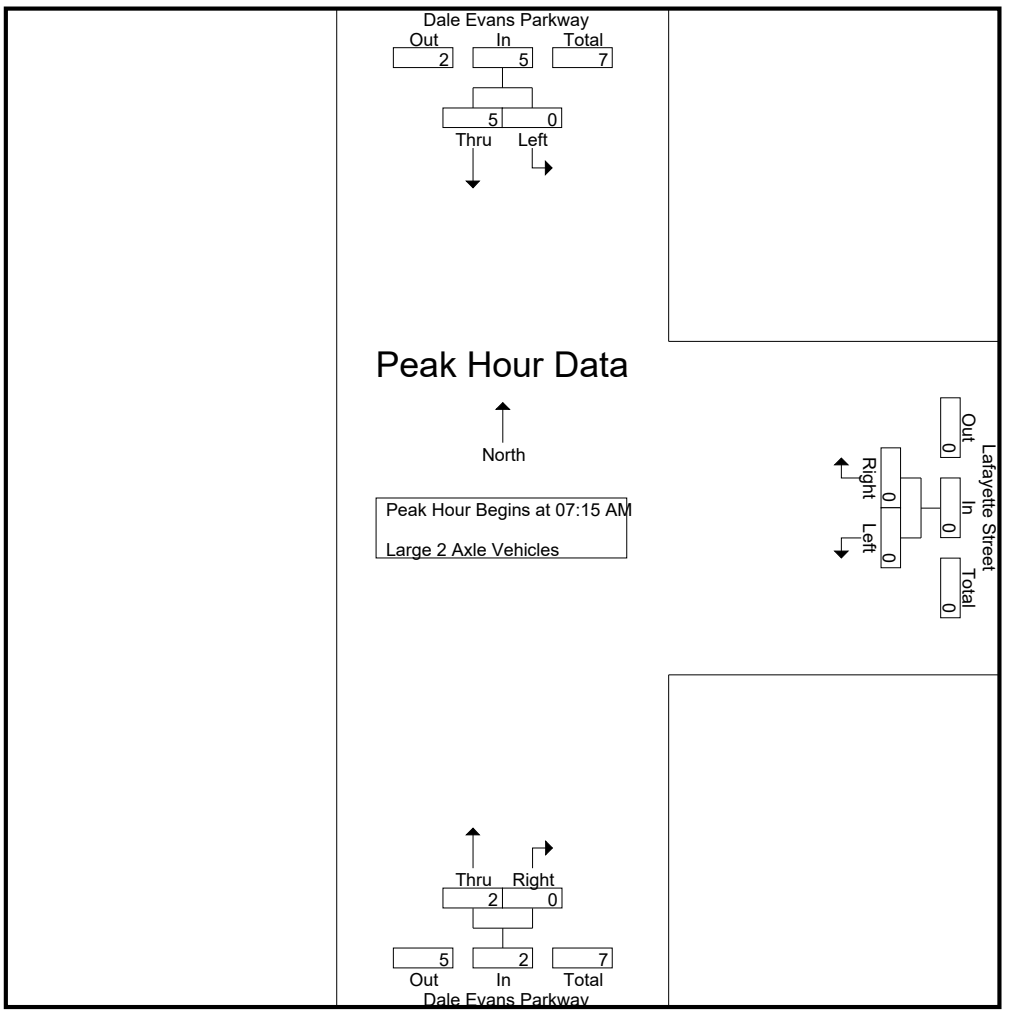
	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	2	2	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	2	2	0	0	0	2	0	2	4
08:00 AM	0	3	3	0	0	0	1	0	1	4
08:15 AM	0	1	1	0	0	0	1	0	1	2
08:30 AM	0	2	2	0	0	0	0	0	0	2
08:45 AM	0	1	1	0	0	0	3	0	3	4
Total	0	7	7	0	0	0	5	0	5	12
Grand Total	0	9	9	0	0	0	7	0	7	16
Apprch %	0	100		0	0		100	0		
Total %	0	56.2	56.2	0	0	0	43.8	0	43.8	

	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	2	2	0	0	0	**1**	0	**1**	3
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	**3**	**3**	0	0	0	1	0	1	**4**
Total Volume	0	5	5	0	0	0	2	0	2	7
% App. Total	0	100		0	0		100	0		
PHF	.000	.417	.417	.000	.000	.000	.500	.000	.500	.438

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	2	2	0	0	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	**3**	**3**	0	0	0	1	0	1
Total Volume	0	5	5	0	0	0	2	0	2
% App. Total	0	100		0	0		100	0	
PHF	.000	.417	.417	.000	.000	.000	.500	.000	.500

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

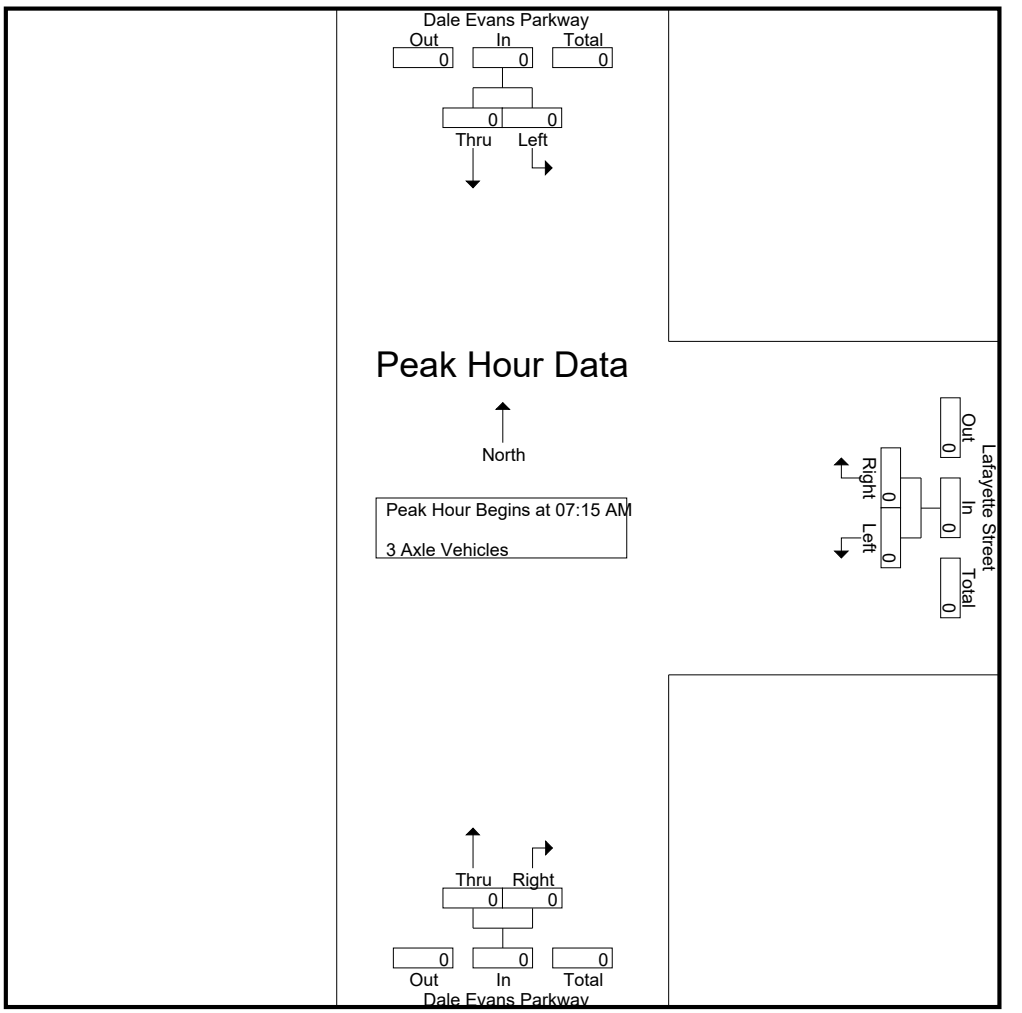
	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total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

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

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

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

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

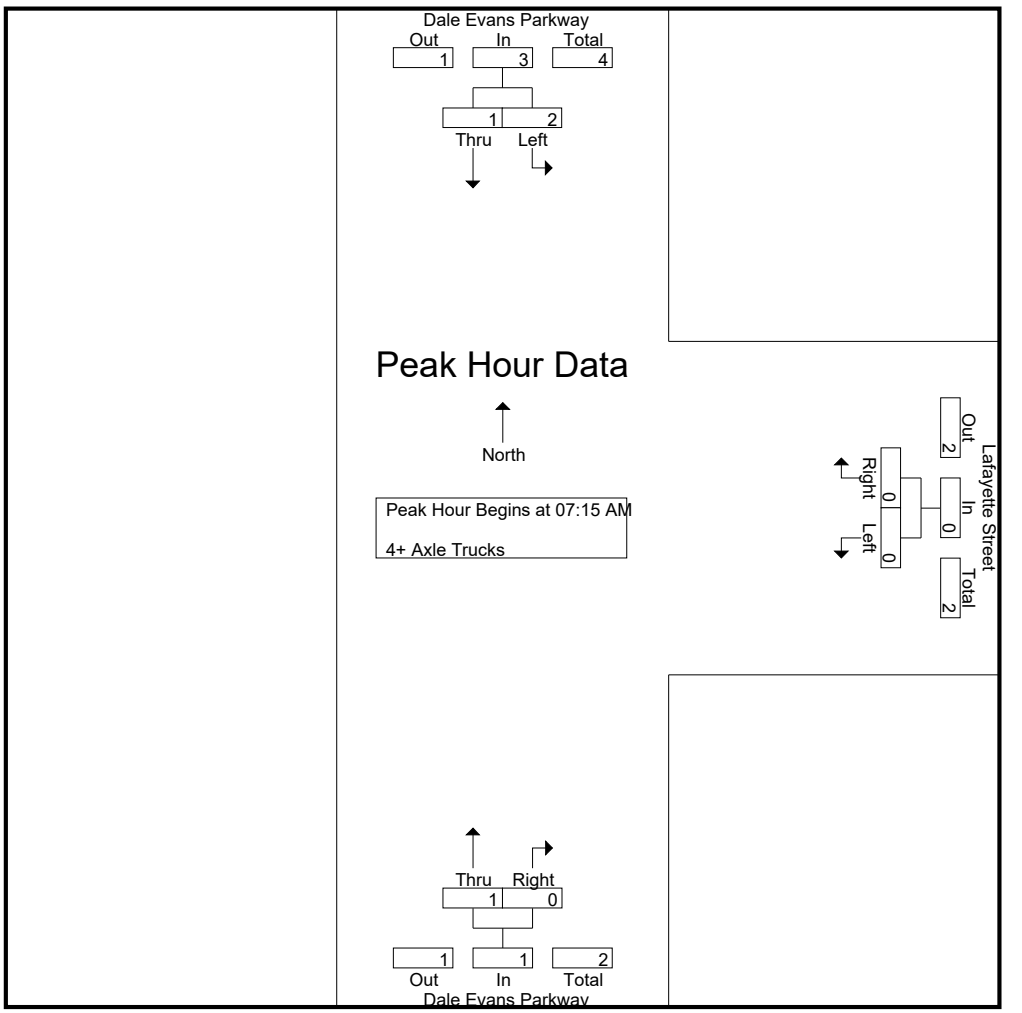
	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	2	0	2	0	0	0	1	0	1	3
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	2	0	2	0	0	0	1	0	1	3
08:00 AM	0	1	1	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	2	2	0	0	0	2
08:45 AM	0	1	1	0	1	1	0	0	0	2
Total	0	2	2	0	3	3	1	0	1	6
Grand Total	2	2	4	0	3	3	2	0	2	9
Apprch %	50	50		0	100		100	0		
Total %	22.2	22.2	44.4	0	33.3	33.3	22.2	0	22.2	

	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	**2**	0	**2**	0	0	0	**1**	0	**1**	**3**
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	**1**	1	0	0	0	0	0	0	1
Total Volume	2	1	3	0	0	0	1	0	1	4
% App. Total	66.7	33.3		0	0		100	0		
PHF	.250	.250	.375	.000	.000	.000	.250	.000	.250	.333

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:15 AM			07:15 AM			07:15 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	**2**	0	**2**	0	0	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	**1**	1	0	0	0	0	0	0
Total Volume	2	1	3	0	0	0	1	0	1
% App. Total	66.7	33.3		0	0		100	0	
PHF	.250	.250	.375	.000	.000	.000	.250	.000	.250

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

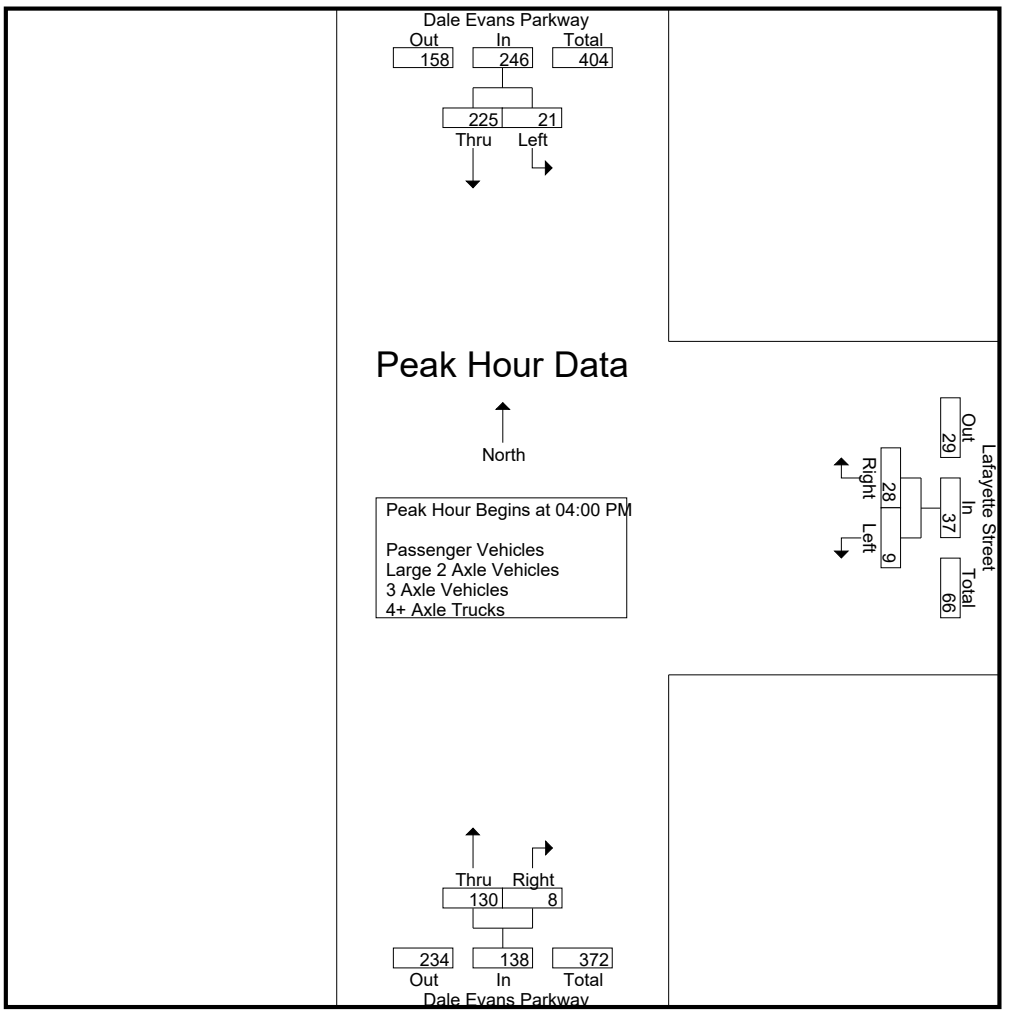
	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	13	62	75	3	18	21	39	4	43	139
04:15 PM	5	48	53	3	8	11	48	1	49	113
04:30 PM	2	54	56	2	1	3	23	1	24	83
04:45 PM	1	61	62	1	1	2	20	2	22	86
Total	21	225	246	9	28	37	130	8	138	421
05:00 PM	1	51	52	3	1	4	20	2	22	78
05:15 PM	0	52	52	1	11	12	22	5	27	91
05:30 PM	3	49	52	2	2	4	8	1	9	65
05:45 PM	1	24	25	2	0	2	14	1	15	42
Total	5	176	181	8	14	22	64	9	73	276
Grand Total	26	401	427	17	42	59	194	17	211	697
Apprch %	6.1	93.9		28.8	71.2		91.9	8.1		
Total %	3.7	57.5	61.3	2.4	6	8.5	27.8	2.4	30.3	
Passenger Vehicles	22	395	417	17	41	58	188	17	205	680
% Passenger Vehicles	84.6	98.5	97.7	100	97.6	98.3	96.9	100	97.2	97.6
Large 2 Axle Vehicles	1	3	4	0	0	0	4	0	4	8
% Large 2 Axle Vehicles	3.8	0.7	0.9	0	0	0	2.1	0	1.9	1.1
3 Axle Vehicles	0	1	1	0	0	0	2	0	2	3
% 3 Axle Vehicles	0	0.2	0.2	0	0	0	1	0	0.9	0.4
4+ Axle Trucks	3	2	5	0	1	1	0	0	0	6
% 4+ Axle Trucks	11.5	0.5	1.2	0	2.4	1.7	0	0	0	0.9

	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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	**13**	**62**	**75**	**3**	**18**	**21**	39	**4**	43	**139**
04:15 PM	5	48	53	3	8	11	**48**	1	**49**	113
04:30 PM	2	54	56	2	1	3	23	1	24	83
04:45 PM	1	61	62	1	1	2	20	2	22	86
Total Volume	21	225	246	9	28	37	130	8	138	421
% App. Total	8.5	91.5		24.3	75.7		94.2	5.8		
PHF	.404	.907	.820	.750	.389	.440	.677	.500	.704	.757

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	**13**	**62**	**75**	**3**	**18**	**21**	39	**4**	43
+15 mins.	5	48	53	3	8	11	**48**	1	**49**
+30 mins.	2	54	56	2	1	3	23	1	24
+45 mins.	1	61	62	1	1	2	20	2	22
Total Volume	21	225	246	9	28	37	130	8	138
% App. Total	8.5	91.5		24.3	75.7		94.2	5.8	
PHF	.404	.907	.820	.750	.389	.440	.677	.500	.704

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

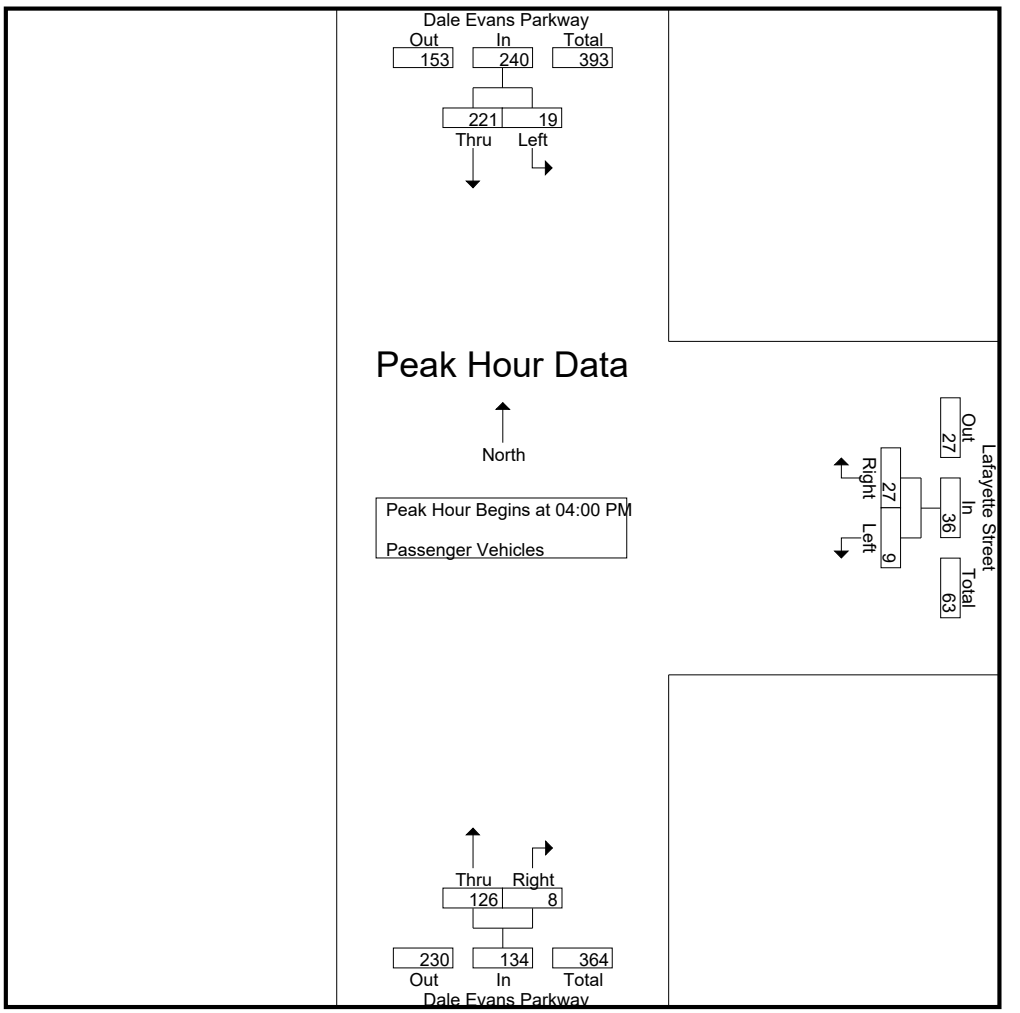
	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	12	61	73	3	17	20	37	4	41	134
04:15 PM	5	48	53	3	8	11	47	1	48	112
04:30 PM	1	52	53	2	1	3	23	1	24	80
04:45 PM	1	60	61	1	1	2	19	2	21	84
Total	19	221	240	9	27	36	126	8	134	410
05:00 PM	1	50	51	3	1	4	19	2	21	76
05:15 PM	0	52	52	1	11	12	21	5	26	90
05:30 PM	2	48	50	2	2	4	8	1	9	63
05:45 PM	0	24	24	2	0	2	14	1	15	41
Total	3	174	177	8	14	22	62	9	71	270
Grand Total	22	395	417	17	41	58	188	17	205	680
Apprch %	5.3	94.7		29.3	70.7		91.7	8.3		
Total %	3.2	58.1	61.3	2.5	6	8.5	27.6	2.5	30.1	

	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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	**12**	**61**	**73**	**3**	**17**	**20**	37	**4**	41	**134**
04:15 PM	5	48	53	3	8	11	**47**	1	**48**	112
04:30 PM	1	52	53	2	1	3	23	1	24	80
04:45 PM	1	60	61	1	1	2	19	2	21	84
Total Volume	19	221	240	9	27	36	126	8	134	410
% App. Total	7.9	92.1		25	75		94	6		
PHF	.396	.906	.822	.750	.397	.450	.670	.500	.698	.765

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	**12**	**61**	**73**	**3**	**17**	**20**	37	**4**	41
+15 mins.	5	48	53	3	8	11	**47**	1	**48**
+30 mins.	1	52	53	2	1	3	23	1	24
+45 mins.	1	60	61	1	1	2	19	2	21
Total Volume	19	221	240	9	27	36	126	8	134
% App. Total	7.9	92.1		25	75		94	6	
PHF	.396	.906	.822	.750	.397	.450	.670	.500	.698

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

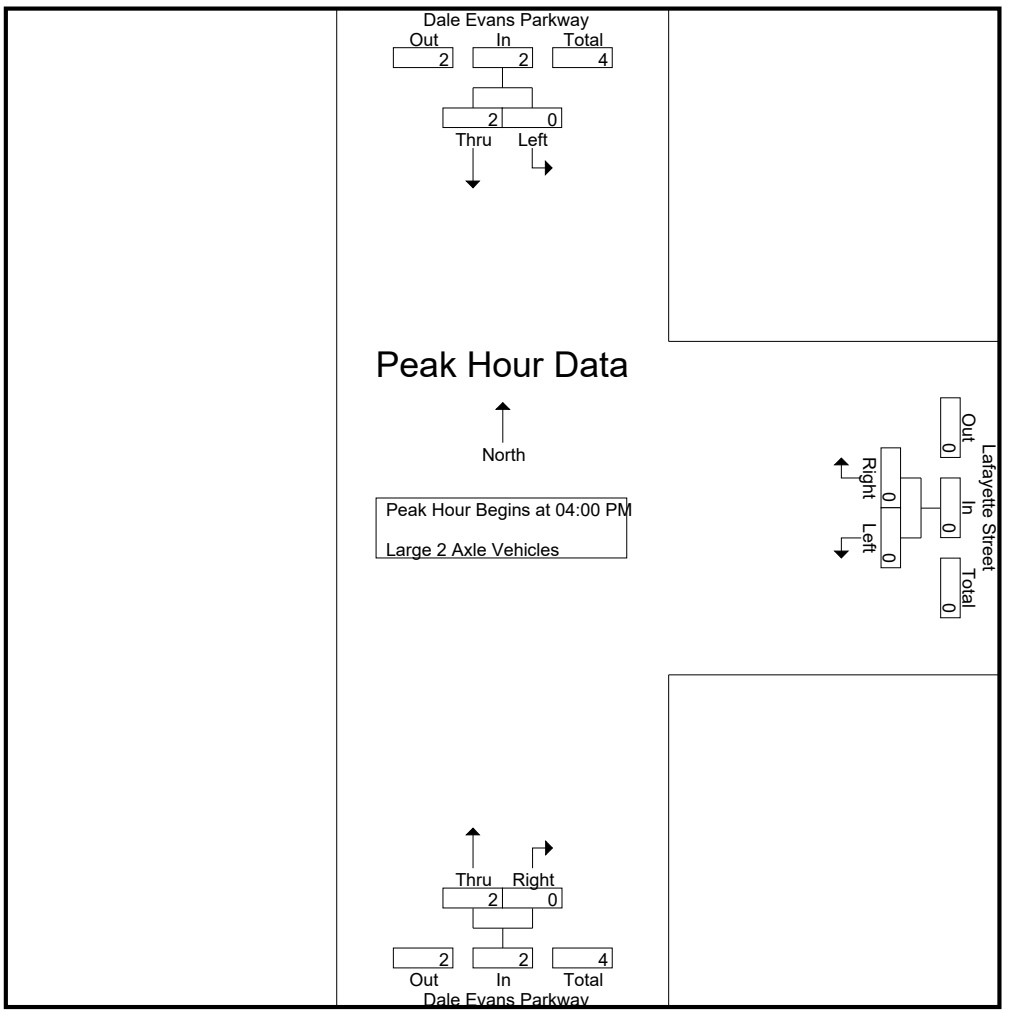
	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	2	2	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	1	0	1	1
Total	0	2	2	0	0	0	2	0	2	4
05:00 PM	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	1	0	1	1
05:30 PM	1	1	2	0	0	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	1	1	2	0	0	0	2	0	2	4
Grand Total	1	3	4	0	0	0	4	0	4	8
Apprch %	25	75		0	0		100	0		
Total %	12.5	37.5	50	0	0	0	50	0	50	

	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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	**1**	0	**1**	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	**2**	**2**	0	0	0	0	0	0	**2**
04:45 PM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	2	2	0	0	0	2	0	2	4
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500	.500

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	**2**	**2**	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	2	2	0	0	0	2	0	2
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf PM
Site Code : 231073
Start Date : 11/8/2023

Groups Printed- 3 Axle Vehicles

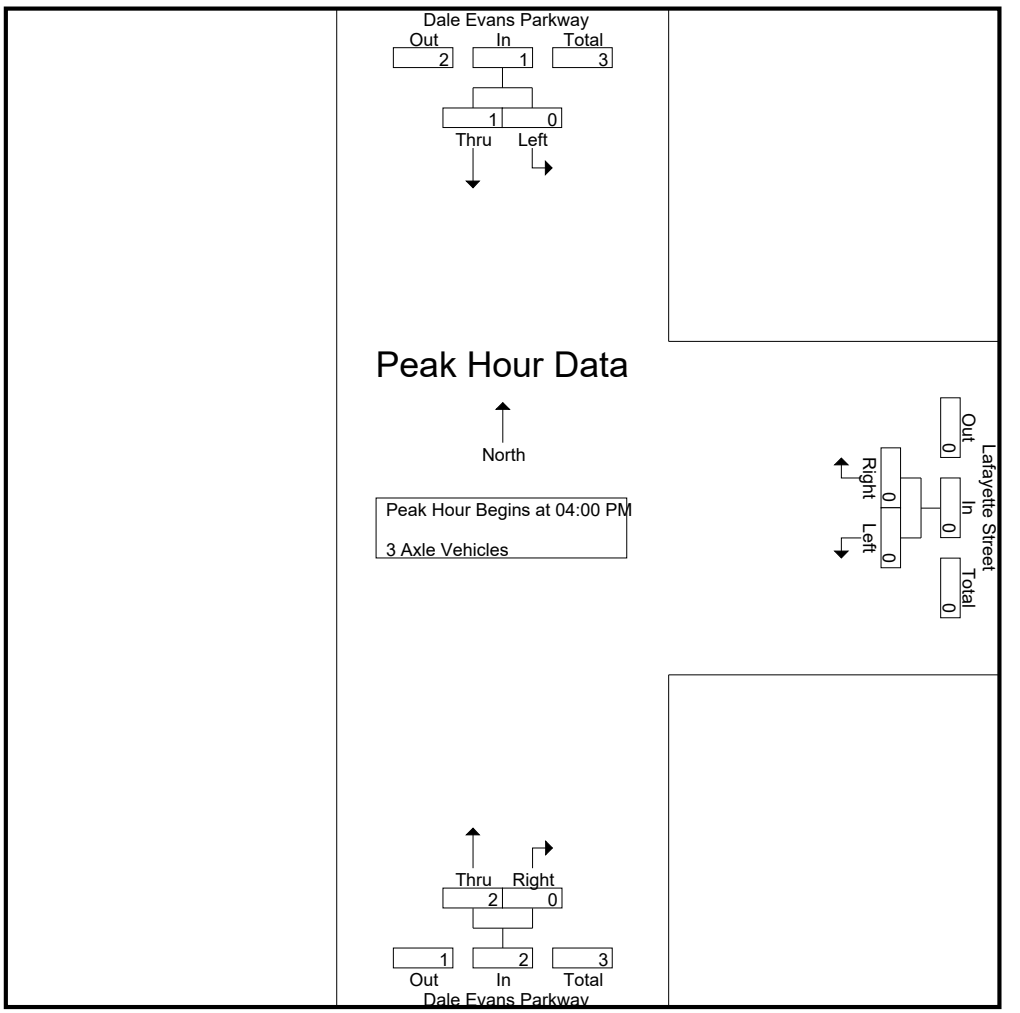
	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	1	0	0	0	1	0	1	2
04:15 PM	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	2	0	2	3
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	1	0	0	0	2	0	2	3
Apprch %	0	100		0	0		100	0		
Total %	0	33.3	33.3	0	0	0	66.7	0	66.7	

	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	**1**	**1**	0	0	0	**1**	0	**1**	**2**
04:15 PM	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	2	0	2	3
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500	.375

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	**1**	**1**	0	0	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	2	0	2
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.500	.000	.500

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

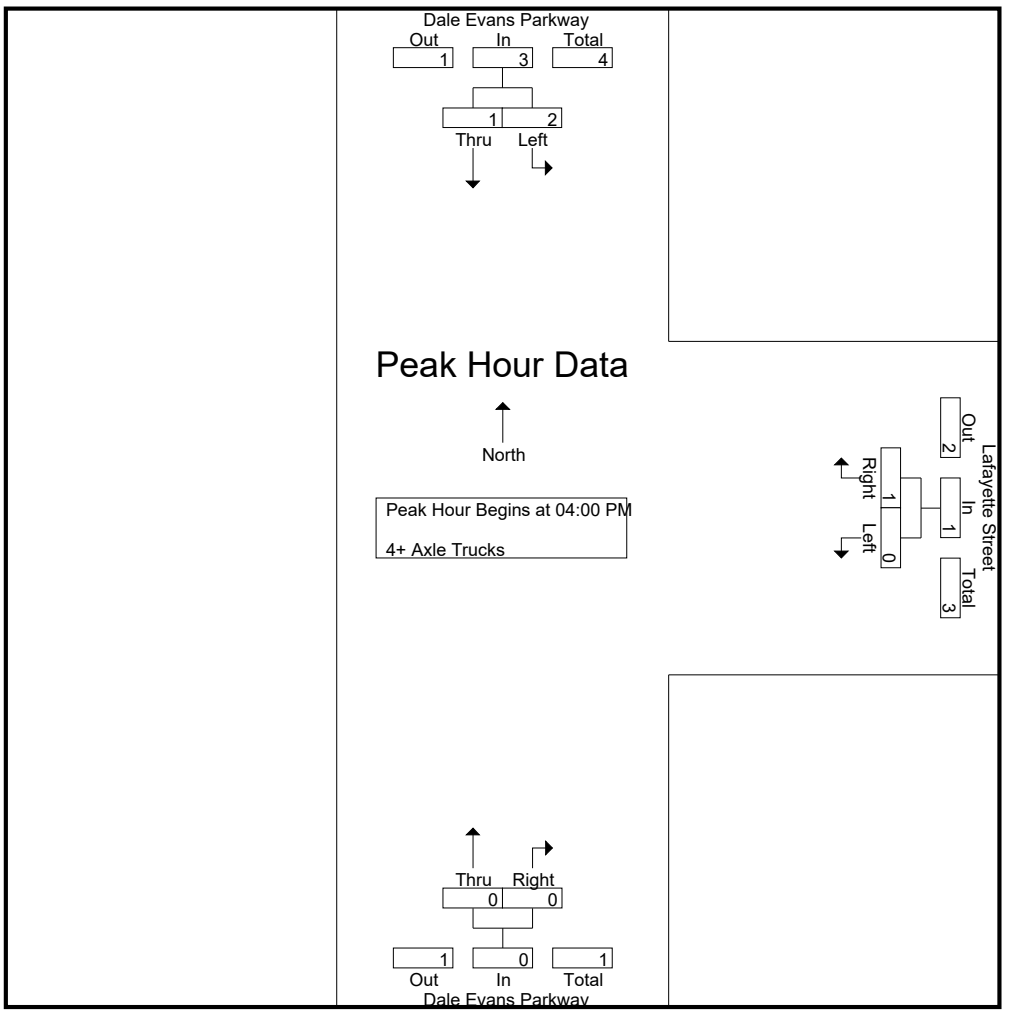
	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	1	0	1	1	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	0	1	0	0	0	0	0	0	1
04:45 PM	0	1	1	0	0	0	0	0	0	1
Total	2	1	3	0	1	1	0	0	0	4
05:00 PM	0	1	1	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	1	0	1	0	0	0	0	0	0	1
Total	1	1	2	0	0	0	0	0	0	2
Grand Total	3	2	5	0	1	1	0	0	0	6
Apprch %	60	40		0	100		0	0		
Total %	50	33.3	83.3	0	16.7	16.7	0	0	0	

	Dale Evans Parkway Southbound			Lafayette Street Westbound			Dale Evans Parkway Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	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	**1**	0	**1**	0	**1**	**1**	0	0	0	**2**
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	0	1	0	0	0	0	0	0	1
04:45 PM	0	**1**	1	0	0	0	0	0	0	1
Total Volume	2	1	3	0	1	1	0	0	0	4
% App. Total	66.7	33.3		0	100		0	0		
PHF	.500	.250	.750	.000	.250	.250	.000	.000	.000	.500

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Lafayette Street
Weather: Clear

File Name : 07_APV_DEP_Laf PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	**1**	0	**1**	0	**1**	**1**	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	1	0	1	0	0	0	0	0	0
+45 mins.	0	**1**	1	0	0	0	0	0	0
Total Volume	2	1	3	0	1	1	0	0	0
% App. Total	66.7	33.3		0	100		0	0	
PHF	.500	.250	.750	.000	.250	.250	.000	.000	.000

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

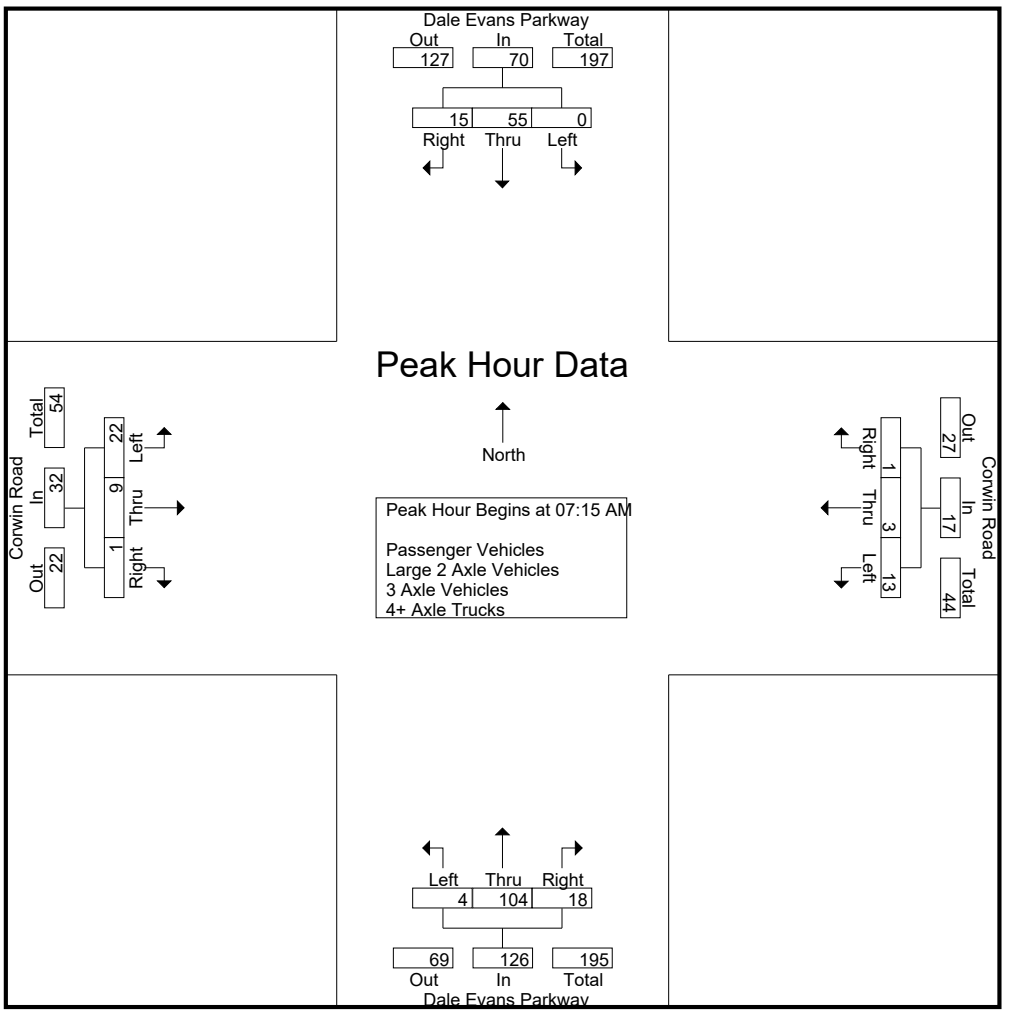
	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	10	2	13	0	0	1	1	0	17	6	23	3	3	0	6	43
07:15 AM	0	15	3	18	0	0	1	1	1	27	2	30	6	4	0	10	59
07:30 AM	0	16	3	19	7	0	0	7	1	32	2	35	5	1	0	6	67
07:45 AM	0	11	4	15	2	2	0	4	2	19	8	29	5	1	1	7	55
Total	1	52	12	65	9	2	2	13	4	95	18	117	19	9	1	29	224
08:00 AM	0	13	5	18	4	1	0	5	0	26	6	32	6	3	0	9	64
08:15 AM	0	5	7	12	1	5	0	6	0	16	3	19	3	0	1	4	41
08:30 AM	2	18	8	28	1	2	0	3	0	14	3	17	5	2	2	9	57
08:45 AM	0	11	8	19	1	2	2	5	4	18	5	27	6	6	1	13	64
Total	2	47	28	77	7	10	2	19	4	74	17	95	20	11	4	35	226
Grand Total	3	99	40	142	16	12	4	32	8	169	35	212	39	20	5	64	450
Apprch %	2.1	69.7	28.2		50	37.5	12.5		3.8	79.7	16.5		60.9	31.2	7.8		
Total %	0.7	22	8.9	31.6	3.6	2.7	0.9	7.1	1.8	37.6	7.8	47.1	8.7	4.4	1.1	14.2	
Passenger Vehicles	3	92	35	130	11	8	2	21	2	161	35	198	38	19	3	60	409
% Passenger Vehicles	100	92.9	87.5	91.5	68.8	66.7	50	65.6	25	95.3	100	93.4	97.4	95	60	93.8	90.9
Large 2 Axle Vehicles	0	5	4	9	3	2	2	7	4	6	0	10	0	0	1	1	27
% Large 2 Axle Vehicles	0	5.1	10	6.3	18.8	16.7	50	21.9	50	3.6	0	4.7	0	0	20	1.6	6
3 Axle Vehicles	0	1	0	1	2	2	0	4	2	1	0	3	0	1	1	2	10
% 3 Axle Vehicles	0	1	0	0.7	12.5	16.7	0	12.5	25	0.6	0	1.4	0	5	20	3.1	2.2
4+ Axle Trucks	0	1	1	2	0	0	0	0	0	1	0	1	1	0	0	1	4
% 4+ Axle Trucks	0	1	2.5	1.4	0	0	0	0	0	0.6	0	0.5	2.6	0	0	1.6	0.9

	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	15	3	18	0	0	**1**	1	1	27	2	30	**6**	**4**	0	**10**	59
07:30 AM	0	**16**	3	**19**	**7**	0	0	**7**	1	**32**	2	**35**	5	1	0	6	**67**
07:45 AM	0	11	4	15	2	**2**	0	4	**2**	19	**8**	29	5	1	**1**	7	55
08:00 AM	0	13	**5**	18	4	1	0	5	0	26	6	32	6	3	0	9	64
Total Volume	0	55	15	70	13	3	1	17	4	104	18	126	22	9	1	32	245
% App. Total	0	78.6	21.4		76.5	17.6	5.9		3.2	82.5	14.3		68.8	28.1	3.1		
PHF	.000	.859	.750	.921	.464	.375	.250	.607	.500	.813	.563	.900	.917	.563	.250	.800	.914

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	08:00 AM				07:30 AM				07:15 AM				08:00 AM			
+0 mins.	0	13	5	18	**7**	0	0	**7**	1	27	2	30	**6**	3	0	9
+15 mins.	0	5	7	12	2	2	0	4	1	**32**	2	**35**	3	0	1	4
+30 mins.	**2**	**18**	**8**	**28**	4	1	0	5	**2**	19	**8**	29	5	2	**2**	9
+45 mins.	0	11	8	19	1	**5**	0	6	0	26	6	32	6	**6**	1	**13**
Total Volume	2	47	28	77	14	8	0	22	4	104	18	126	20	11	4	35
% App. Total	2.6	61	36.4		63.6	36.4	0		3.2	82.5	14.3		57.1	31.4	11.4	
PHF	.250	.653	.875	.688	.500	.400	.000	.786	.500	.813	.563	.900	.833	.458	.500	.673

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

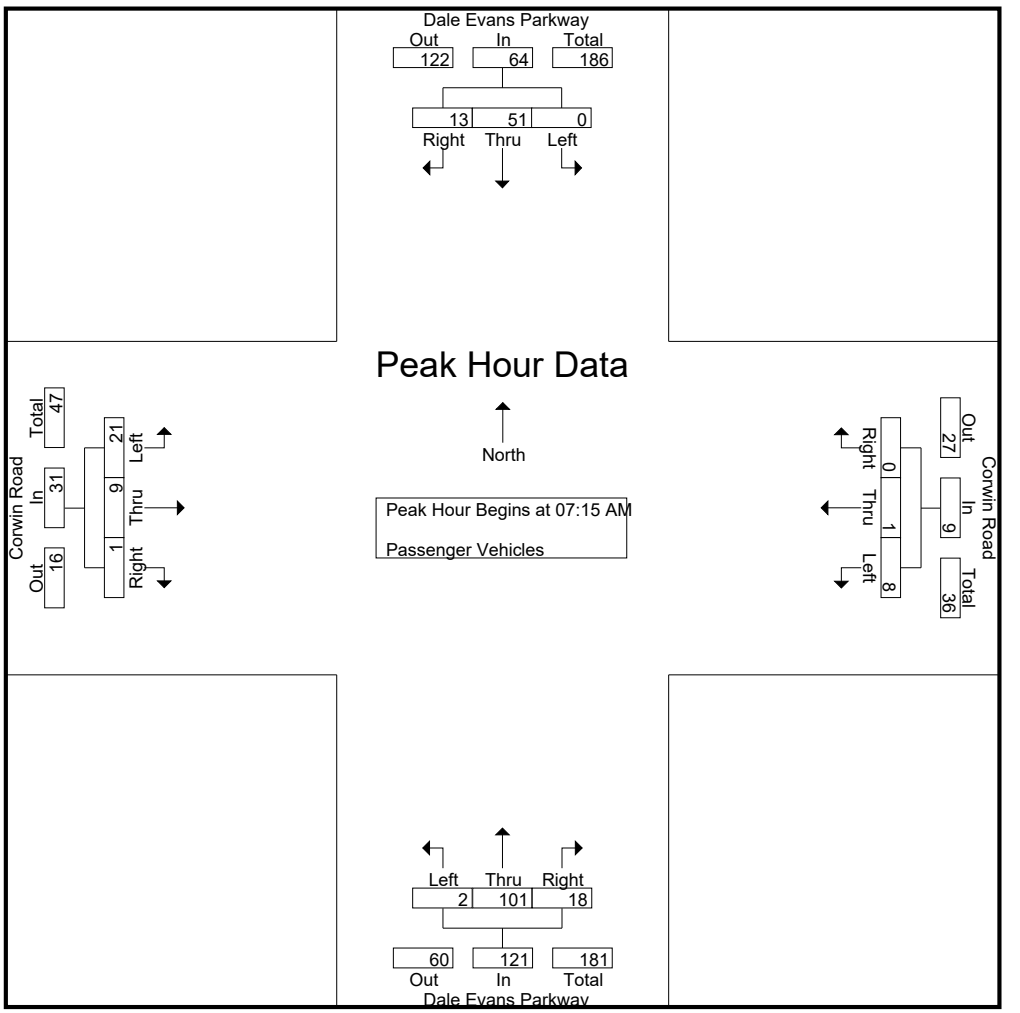
	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	10	2	13	0	0	1	1	0	16	6	22	3	3	0	6	42
07:15 AM	0	15	3	18	0	0	0	0	1	27	2	30	6	4	0	10	58
07:30 AM	0	15	2	17	4	0	0	4	1	31	2	34	4	1	0	5	60
07:45 AM	0	11	4	15	1	0	0	1	0	19	8	27	5	1	1	7	50
Total	1	51	11	63	5	0	1	6	2	93	18	113	18	9	1	28	210
08:00 AM	0	10	4	14	3	1	0	4	0	24	6	30	6	3	0	9	57
08:15 AM	0	5	6	11	1	4	0	5	0	14	3	17	3	0	0	3	36
08:30 AM	2	17	7	26	1	2	0	3	0	14	3	17	5	1	2	8	54
08:45 AM	0	9	7	16	1	1	1	3	0	16	5	21	6	6	0	12	52
Total	2	41	24	67	6	8	1	15	0	68	17	85	20	10	2	32	199
Grand Total	3	92	35	130	11	8	2	21	2	161	35	198	38	19	3	60	409
Apprch %	2.3	70.8	26.9		52.4	38.1	9.5		1	81.3	17.7		63.3	31.7	5		
Total %	0.7	22.5	8.6	31.8	2.7	2	0.5	5.1	0.5	39.4	8.6	48.4	9.3	4.6	0.7	14.7	

	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**15**	3	**18**	0	0	0	0	**1**	27	2	30	**6**	**4**	0	**10**	58
07:30 AM	0	15	2	17	**4**	0	0	**4**	1	**31**	2	**34**	4	1	0	5	**60**
07:45 AM	0	11	**4**	15	1	0	0	1	0	19	**8**	27	5	1	**1**	7	50
08:00 AM	0	10	4	14	3	**1**	0	4	0	24	6	30	6	3	0	9	57
Total Volume	0	51	13	64	8	1	0	9	2	101	18	121	21	9	1	31	225
% App. Total	0	79.7	20.3		88.9	11.1	0		1.7	83.5	14.9		67.7	29	3.2		
PHF	.000	.850	.813	.889	.500	.250	.000	.563	.500	.815	.563	.890	.875	.563	.250	.775	.938

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**15**	3	**18**	0	0	0	0	**1**	27	2	30	**6**	**4**	0	**10**
+15 mins.	0	15	2	17	**4**	0	0	**4**	1	**31**	2	**34**	4	1	0	5
+30 mins.	0	11	**4**	15	1	0	0	1	0	19	**8**	27	5	1	**1**	7
+45 mins.	0	10	4	14	3	**1**	0	4	0	24	6	30	6	3	0	9
Total Volume	0	51	13	64	8	1	0	9	2	101	18	121	21	9	1	31
% App. Total	0	79.7	20.3		88.9	11.1	0		1.7	83.5	14.9		67.7	29	3.2	
PHF	.000	.850	.813	.889	.500	.250	.000	.563	.500	.815	.563	.890	.875	.563	.250	.775

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

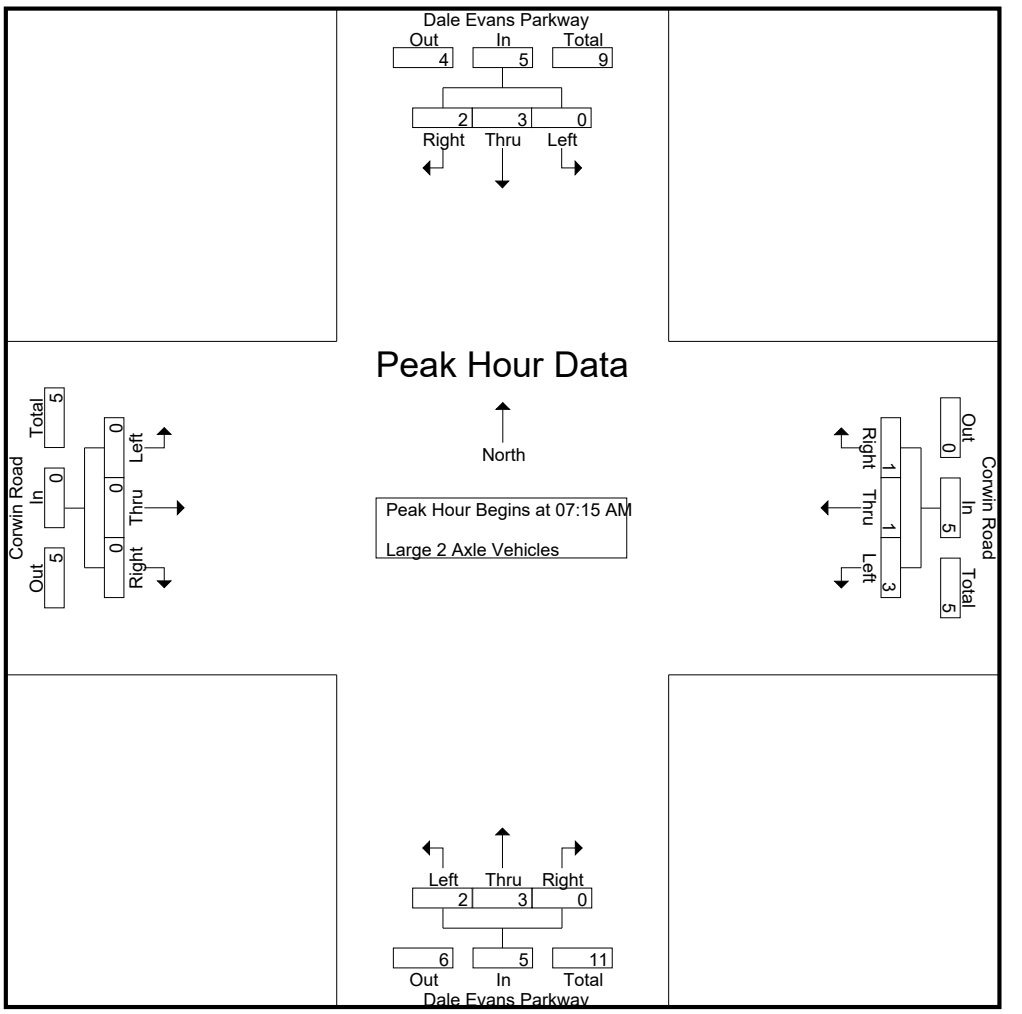
	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	1	1	2	2	0	0	2	0	1	0	1	0	0	0	0	5
07:45 AM	0	0	0	0	0	1	0	1	2	0	0	2	0	0	0	0	3
Total	0	1	1	2	2	1	1	4	2	2	0	4	0	0	0	0	10
08:00 AM	0	2	1	3	1	0	0	1	0	2	0	2	0	0	0	0	6
08:15 AM	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	2
08:30 AM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:45 AM	0	1	0	1	0	0	1	1	2	2	0	4	0	0	1	1	7
Total	0	4	3	7	1	1	1	3	2	4	0	6	0	0	1	1	17
Grand Total	0	5	4	9	3	2	2	7	4	6	0	10	0	0	1	1	27
Apprch %	0	55.6	44.4		42.9	28.6	28.6		40	60	0		0	0	100		
Total %	0	18.5	14.8	33.3	11.1	7.4	7.4	25.9	14.8	22.2	0	37	0	0	3.7	3.7	

	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	1	**1**	2	**2**	0	0	**2**	0	1	0	1	0	0	0	0	5
07:45 AM	0	0	0	0	0	**1**	0	1	**2**	0	0	**2**	0	0	0	0	3
08:00 AM	0	**2**	1	**3**	1	0	0	1	0	**2**	0	2	0	0	0	0	**6**
Total Volume	0	3	2	5	3	1	1	5	2	3	0	5	0	0	0	0	15
% App. Total	0	60	40		60	20	20		40	60	0		0	0	0		
PHF	.000	.375	.500	.417	.375	.250	.250	.625	.250	.375	.000	.625	.000	.000	.000	.000	.625

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	**1**	1	0	0	0	0	0	0	0	0
+15 mins.	0	1	**1**	2	**2**	0	0	**2**	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	**1**	0	1	**2**	0	0	**2**	0	0	0	0
+45 mins.	0	**2**	1	**3**	1	0	0	1	0	**2**	0	2	0	0	0	0
Total Volume	0	3	2	5	3	1	1	5	2	3	0	5	0	0	0	0
% App. Total	0	60	40		60	20	20		40	60	0		0	0	0	
PHF	.000	.375	.500	.417	.375	.250	.250	.625	.250	.375	.000	.625	.000	.000	.000	.000

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

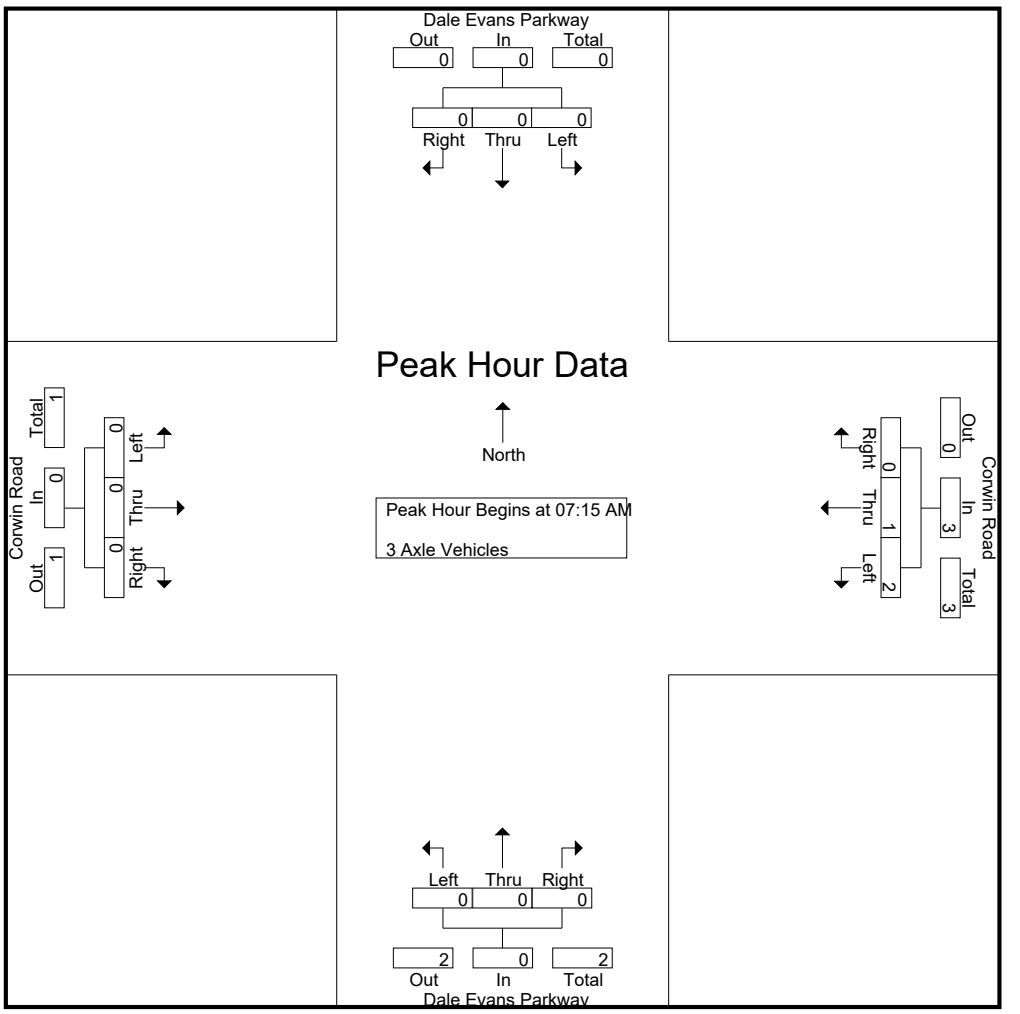
	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	1	0	1	0	1	0	1	2	0	0	2	0	0	0	0	4
Total	0	1	0	1	0	1	0	1	2	1	0	3	0	1	1	2	7
Grand Total	0	1	0	1	2	2	0	4	2	1	0	3	0	1	1	2	10
Apprch %	0	100	0		50	50	0		66.7	33.3	0		0	50	50		
Total %	0	10	0	10	20	20	0	40	20	10	0	30	0	10	10	20	

	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	**1**	0	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	1	**1**	0	**2**	0	0	0	0	0	0	0	0	**2**
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	3
% App. Total	0	0	0		66.7	33.3	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.500	.250	.000	.375	.000	.000	.000	.000	.000	.000	.000	.000	.375

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	**1**	0	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	1	**1**	0	**2**	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0
% App. Total	0	0	0		66.7	33.3	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.500	.250	.000	.375	.000	.000	.000	.000	.000	.000	.000	.000

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

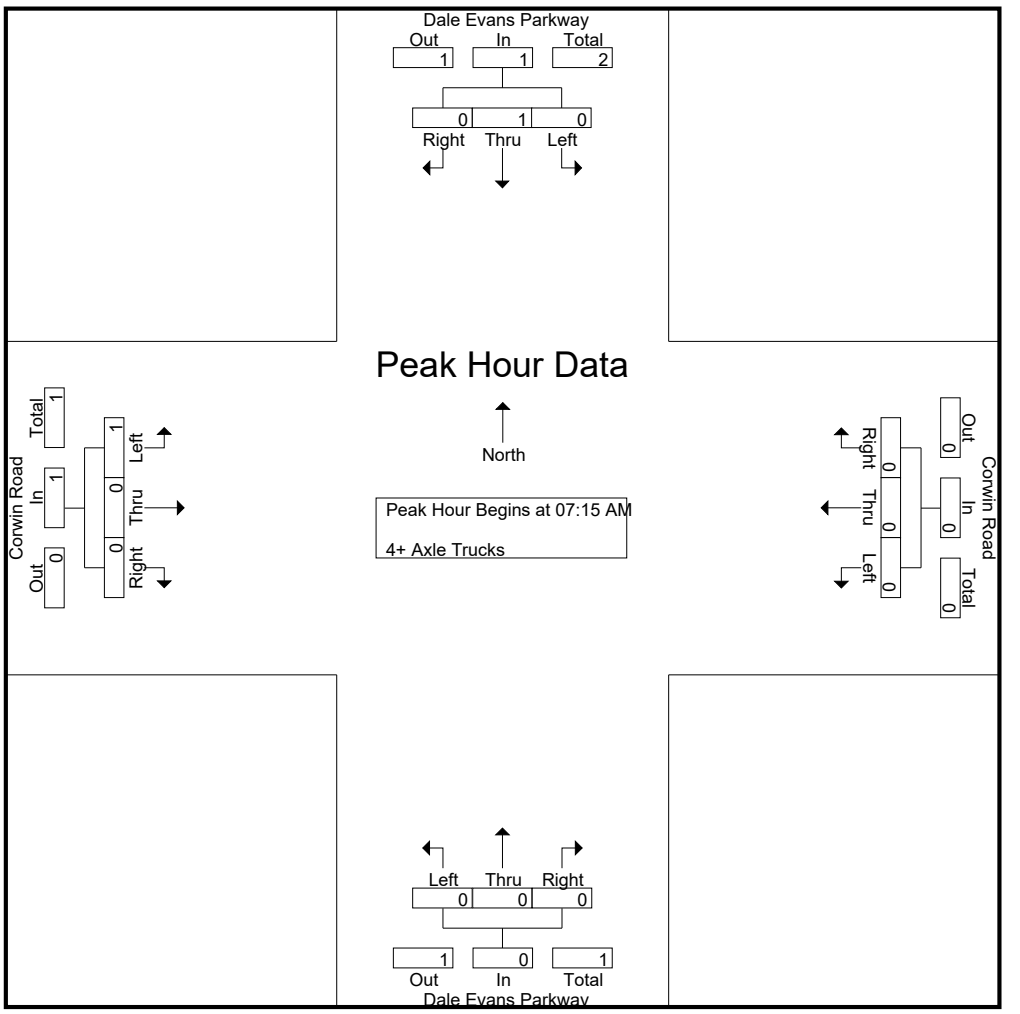
	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0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

	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**	**1**
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
% App. Total	0	100	0		0	0	0		0	0	0		100	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.500

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw AM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

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

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

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

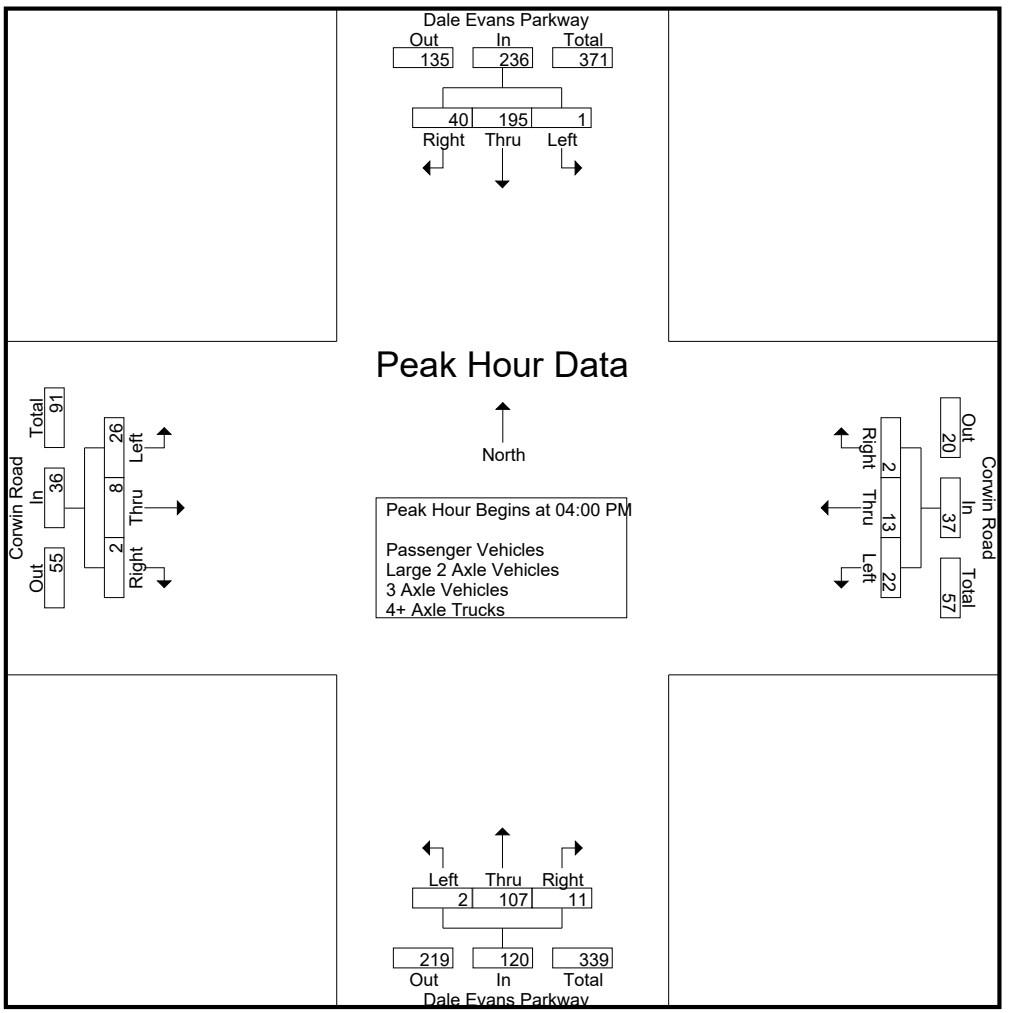
	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	56	21	77	8	7	1	16	0	31	3	34	12	5	1	18	145
04:15 PM	1	44	5	50	7	1	0	8	0	39	4	43	8	1	1	10	111
04:30 PM	0	47	5	52	3	3	1	7	0	19	1	20	3	1	0	4	83
04:45 PM	0	48	9	57	4	2	0	6	2	18	3	23	3	1	0	4	90
Total	1	195	40	236	22	13	2	37	2	107	11	120	26	8	2	36	429
05:00 PM	0	56	10	66	4	3	0	7	0	17	0	17	9	2	0	11	101
05:15 PM	0	42	11	53	7	2	0	9	0	17	1	18	5	3	0	8	88
05:30 PM	0	39	12	51	4	0	0	4	0	9	0	9	2	0	0	2	66
05:45 PM	0	22	9	31	2	0	0	2	2	12	1	15	1	0	0	1	49
Total	0	159	42	201	17	5	0	22	2	55	2	59	17	5	0	22	304
Grand Total	1	354	82	437	39	18	2	59	4	162	13	179	43	13	2	58	733
Apprch %	0.2	81	18.8		66.1	30.5	3.4		2.2	90.5	7.3		74.1	22.4	3.4		
Total %	0.1	48.3	11.2	59.6	5.3	2.5	0.3	8	0.5	22.1	1.8	24.4	5.9	1.8	0.3	7.9	
Passenger Vehicles	1	347	80	428	37	18	2	57	2	156	13	171	43	13	2	58	714
% Passenger Vehicles	100	98	97.6	97.9	94.9	100	100	96.6	50	96.3	100	95.5	100	100	100	100	97.4
Large 2 Axle Vehicles	0	3	2	5	2	0	0	2	2	3	0	5	0	0	0	0	12
% Large 2 Axle Vehicles	0	0.8	2.4	1.1	5.1	0	0	3.4	50	1.9	0	2.8	0	0	0	0	1.6
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
% 3 Axle Vehicles	0	0.3	0	0.2	0	0	0	0	0	1.9	0	1.7	0	0	0	0	0.5
4+ Axle Trucks	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
% 4+ Axle Trucks	0	0.8	0	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0.4

	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**56**	**21**	**77**	**8**	**7**	**1**	**16**	0	31	3	34	**12**	**5**	**1**	**18**	**145**
04:15 PM	**1**	44	5	50	7	1	0	8	0	**39**	**4**	**43**	8	1	1	10	111
04:30 PM	0	47	5	52	3	3	1	7	0	19	1	20	3	1	0	4	83
04:45 PM	0	48	9	57	4	2	0	6	**2**	18	3	23	3	1	0	4	90
Total Volume	1	195	40	236	22	13	2	37	2	107	11	120	26	8	2	36	429
% App. Total	0.4	82.6	16.9		59.5	35.1	5.4		1.7	89.2	9.2		72.2	22.2	5.6		
PHF	.250	.871	.476	.766	.688	.464	.500	.578	.250	.686	.688	.698	.542	.400	.500	.500	.740

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**56**	**21**	**77**	**8**	**7**	**1**	**16**	0	31	3	34	**12**	**5**	**1**	**18**
+15 mins.	**1**	44	5	50	7	1	0	8	0	**39**	**4**	**43**	8	1	1	10
+30 mins.	0	47	5	52	3	3	1	7	0	19	1	20	3	1	0	4
+45 mins.	0	48	9	57	4	2	0	6	**2**	18	3	23	3	1	0	4
Total Volume	1	195	40	236	22	13	2	37	2	107	11	120	26	8	2	36
% App. Total	0.4	82.6	16.9		59.5	35.1	5.4		1.7	89.2	9.2		72.2	22.2	5.6	
PHF	.250	.871	.476	.766	.688	.464	.500	.578	.250	.686	.688	.698	.542	.400	.500	.500

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Passenger Vehicles

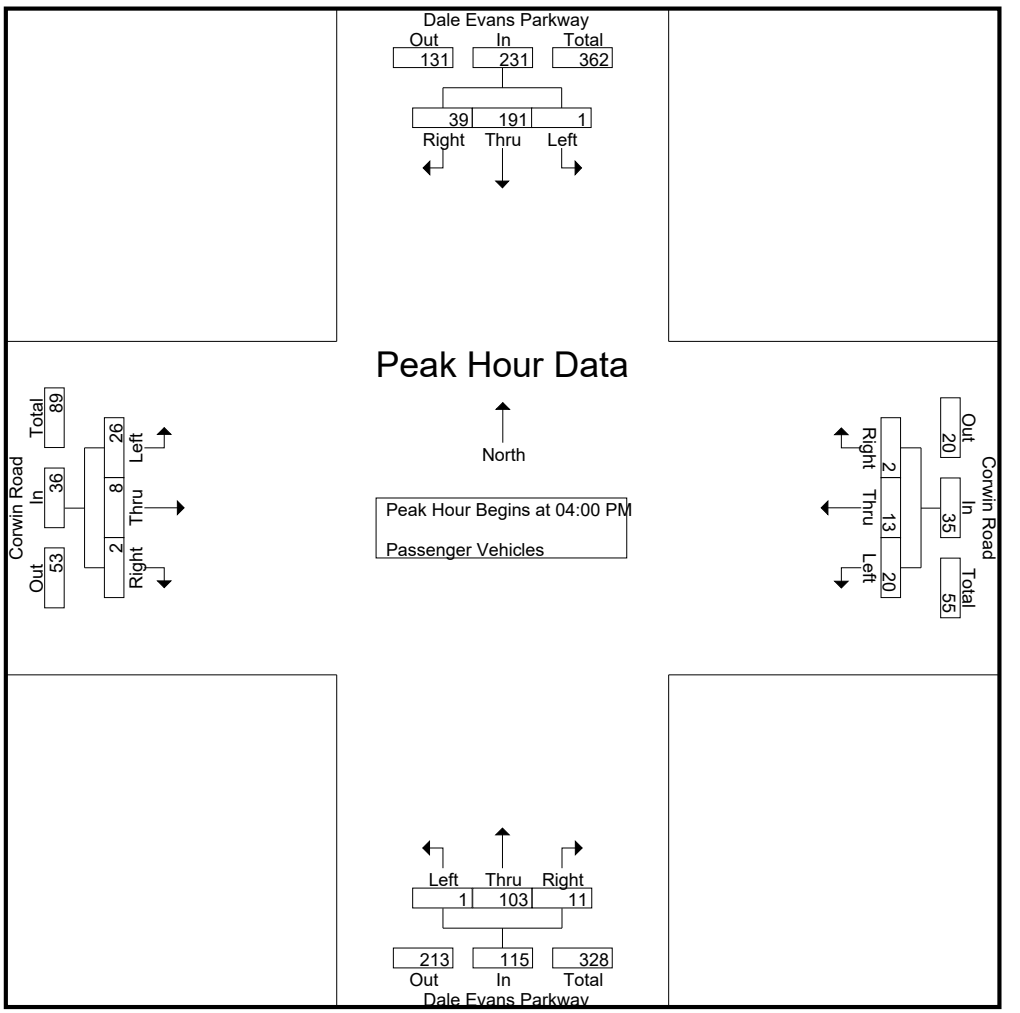
	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	54	21	75	7	7	1	15	0	29	3	32	12	5	1	18	140
04:15 PM	1	43	5	49	6	1	0	7	0	38	4	42	8	1	1	10	108
04:30 PM	0	46	4	50	3	3	1	7	0	19	1	20	3	1	0	4	81
04:45 PM	0	48	9	57	4	2	0	6	1	17	3	21	3	1	0	4	88
Total	1	191	39	231	20	13	2	35	1	103	11	115	26	8	2	36	417
05:00 PM	0	55	10	65	4	3	0	7	0	16	0	16	9	2	0	11	99
05:15 PM	0	41	11	52	7	2	0	9	0	16	1	17	5	3	0	8	86
05:30 PM	0	39	12	51	4	0	0	4	0	9	0	9	2	0	0	2	66
05:45 PM	0	21	8	29	2	0	0	2	1	12	1	14	1	0	0	1	46
Total	0	156	41	197	17	5	0	22	1	53	2	56	17	5	0	22	297
Grand Total	1	347	80	428	37	18	2	57	2	156	13	171	43	13	2	58	714
Apprch %	0.2	81.1	18.7		64.9	31.6	3.5		1.2	91.2	7.6		74.1	22.4	3.4		
Total %	0.1	48.6	11.2	59.9	5.2	2.5	0.3	8	0.3	21.8	1.8	23.9	6	1.8	0.3	8.1	

	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**54**	**21**	**75**	**7**	**7**	**1**	**15**	0	29	3	32	**12**	**5**	**1**	**18**	**140**
04:15 PM	**1**	43	5	49	6	1	0	7	0	**38**	**4**	**42**	8	1	1	10	108
04:30 PM	0	46	4	50	3	3	1	7	0	19	1	20	3	1	0	4	81
04:45 PM	0	48	9	57	4	2	0	6	**1**	17	3	21	3	1	0	4	88
Total Volume	1	191	39	231	20	13	2	35	1	103	11	115	26	8	2	36	417
% App. Total	0.4	82.7	16.9		57.1	37.1	5.7		0.9	89.6	9.6		72.2	22.2	5.6		
PHF	.250	.884	.464	.770	.714	.464	.500	.583	.250	.678	.688	.685	.542	.400	.500	.500	.745

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw PM
Site Code : 231073
Start Date : 11/8/2023
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	**54**	**21**	**75**	**7**	**7**	**1**	**15**	0	29	3	32	**12**	**5**	**1**	**18**
+15 mins.	**1**	43	5	49	6	1	0	7	0	**38**	**4**	**42**	8	1	1	10
+30 mins.	0	46	4	50	3	3	1	7	0	19	1	20	3	1	0	4
+45 mins.	0	48	9	57	4	2	0	6	**1**	17	3	21	3	1	0	4
Total Volume	1	191	39	231	20	13	2	35	1	103	11	115	26	8	2	36
% App. Total	0.4	82.7	16.9		57.1	37.1	5.7		0.9	89.6	9.6		72.2	22.2	5.6	
PHF	.250	.884	.464	.770	.714	.464	.500	.583	.250	.678	.688	.685	.542	.400	.500	.500

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- Large 2 Axle Vehicles

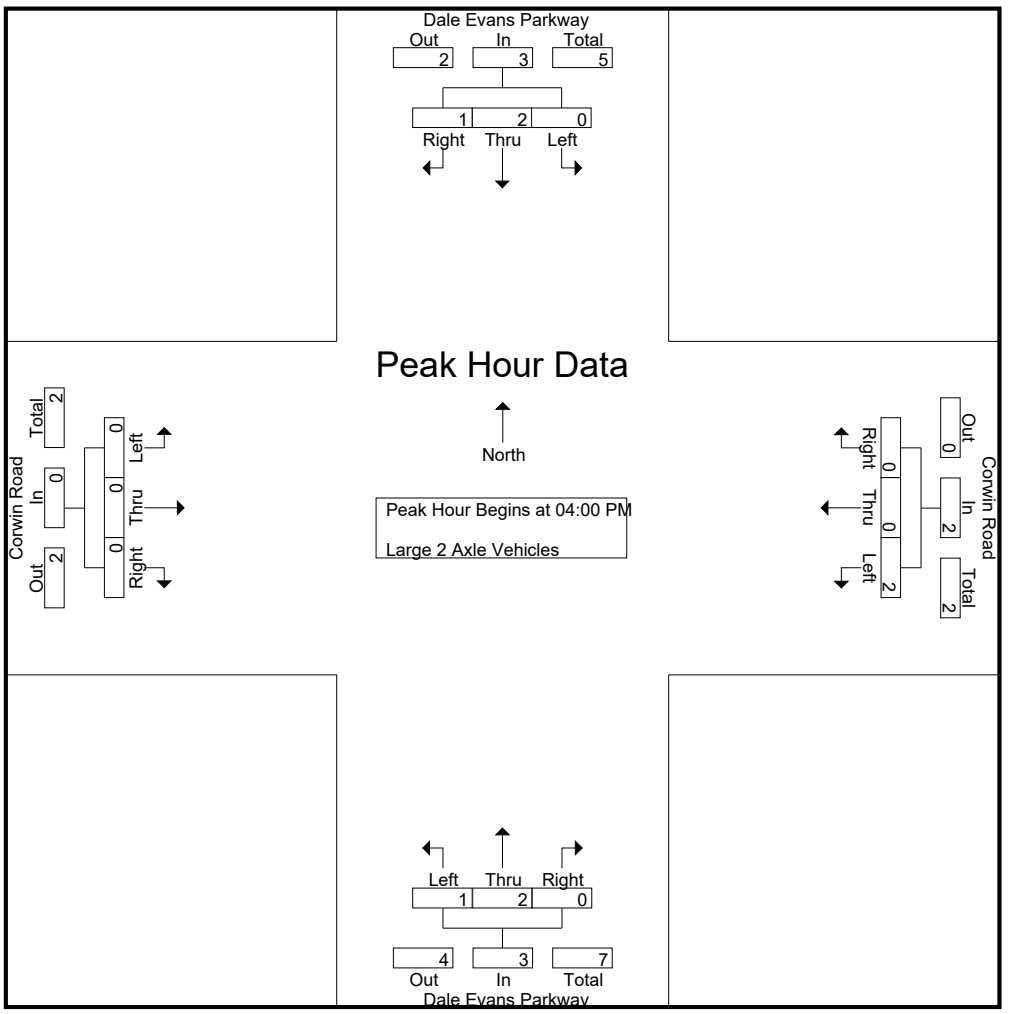
	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	2
04:15 PM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
04:30 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	2
Total	0	2	1	3	2	0	0	2	1	2	0	3	0	0	0	0	8
05:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
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	1	1	0	0	0	0	1	0	0	1	0	0	0	0	2
Total	0	1	1	2	0	0	0	0	1	1	0	2	0	0	0	0	4
Grand Total	0	3	2	5	2	0	0	2	2	3	0	5	0	0	0	0	12
Apprch %	0	60	40		100	0	0		40	60	0		0	0	0		
Total %	0	25	16.7	41.7	16.7	0	0	16.7	16.7	25	0	41.7	0	0	0	0	

	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	**1**	0	0	**1**	0	**1**	0	1	0	0	0	0	**2**
04:15 PM	0	**1**	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
04:30 PM	0	1	**1**	**2**	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	**1**	1	0	**2**	0	0	0	0	2
Total Volume	0	2	1	3	2	0	0	2	1	2	0	3	0	0	0	0	8
% App. Total	0	66.7	33.3		100	0	0		33.3	66.7	0		0	0	0		
PHF	.000	.500	.250	.375	.500	.000	.000	.500	.250	.500	.000	.375	.000	.000	.000	.000	1.00

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw PM
Site Code : 231073
Start Date : 11/8/2023
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	**1**	0	0	**1**	0	**1**	0	1	0	0	0	0
+15 mins.	0	**1**	0	1	1	0	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	1	**1**	**2**	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	**1**	1	0	**2**	0	0	0	0
Total Volume	0	2	1	3	2	0	0	2	1	2	0	3	0	0	0	0
% App. Total	0	66.7	33.3		100	0	0		33.3	66.7	0		0	0	0	
PHF	.000	.500	.250	.375	.500	.000	.000	.500	.250	.500	.000	.375	.000	.000	.000	.000

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 3 Axle Vehicles

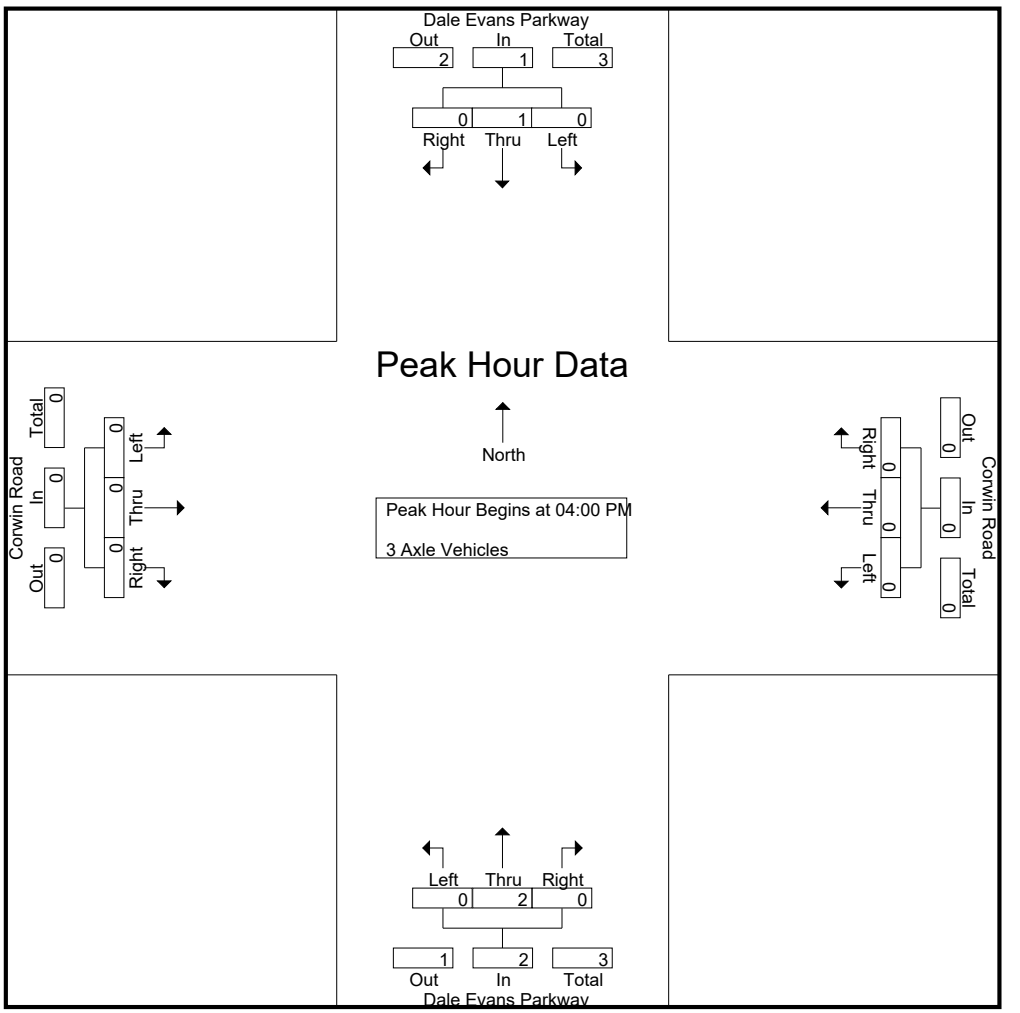
	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	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	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	25	0	25	0	0	0	0	0	75	0	75	0	0	0	0	

	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**2**
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total 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	.375

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw PM
Site Code : 231073
Start Date : 11/8/2023
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	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	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

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw PM
Site Code : 231073
Start Date : 11/8/2023
Page No : 1

Groups Printed- 4+ Axle Trucks

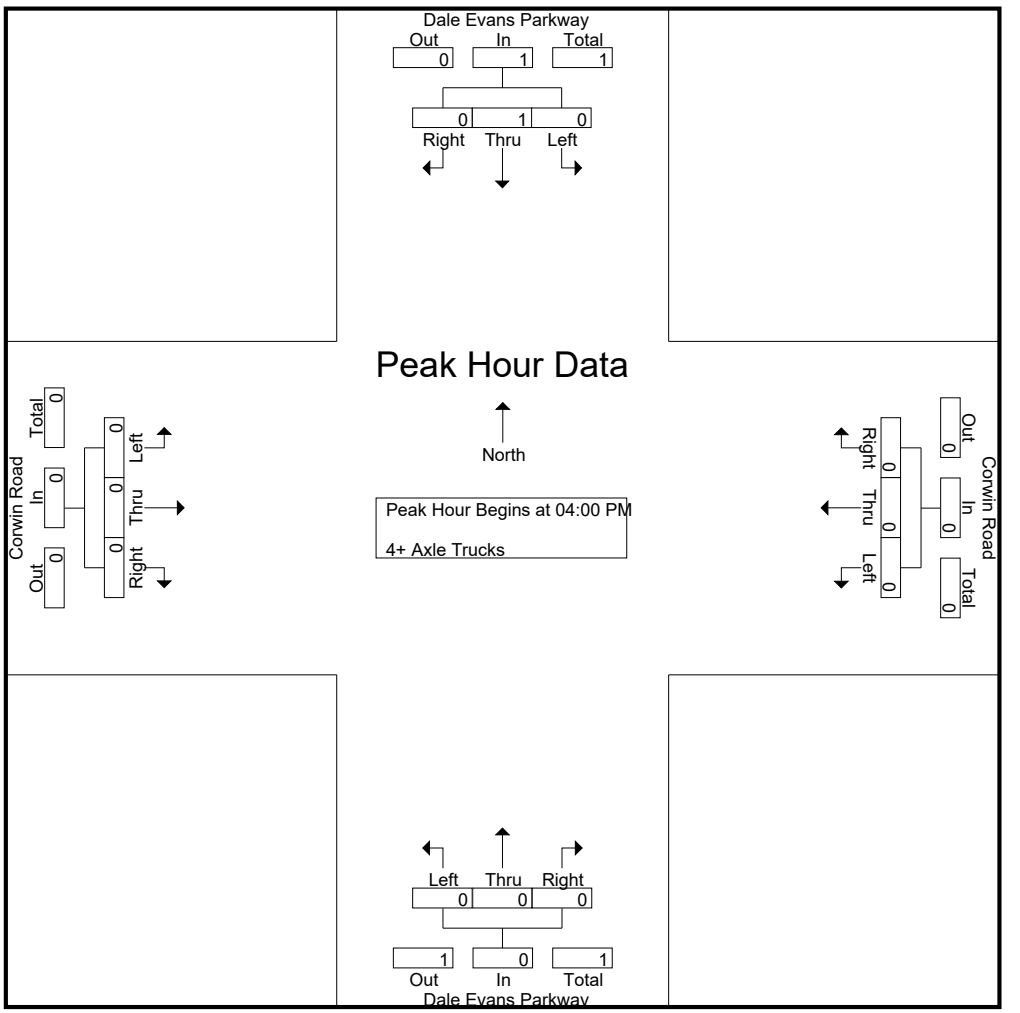
	Dale Evans Parkway Southbound				Corwin Road Westbound				Dale Evans Parkway Northbound				Corwin Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Apprch %	0	100	0		0	0	0		0	0	0		0	0	0		
Total %	0	100	0	100	0	0	0	0	0	0	0	0	0	0	0	0	

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

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

City of Apple Valley
N/S: Dale Evans Parkway
E/W: Corwin Road
Weather: Clear

File Name : 08_APV_DEP_Corw PM
Site Code : 231073
Start Date : 11/8/2023
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	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Counts Unlimited, Inc.

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

Town of Apple Valley
Dale Evans Parkway
N/ Johnson Road
24 Hour Directional Classification Count

APV001
Site Code: 051-231073

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
11/08/23	0	16	0	0	0	0	0	0	3	0	0	0	0	19
01:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	10	0	0	0	0	0	0	2	0	0	0	0	12
03:00	0	27	0	0	1	0	0	0	1	0	0	0	0	29
04:00	0	51	0	0	2	0	0	0	14	0	0	0	0	67
05:00	0	**121**	**15**	0	**3**	0	0	0	14	0	0	0	0	**153**
06:00	0	115	12	1	1	0	0	0	9	0	0	0	0	138
07:00	0	87	12	1	0	0	0	0	8	0	0	0	0	108
08:00	0	57	11	**3**	2	**1**	0	0	10	0	0	0	0	84
09:00	0	53	10	0	1	0	0	0	**15**	0	0	0	0	79
10:00	0	49	10	0	0	0	0	0	10	0	0	0	0	69
11:00	0	50	11	0	1	0	0	**1**	8	0	0	0	0	71
12 PM	0	50	5	2	**2**	0	0	1	**17**	0	0	0	0	77
13:00	0	61	8	**4**	2	0	0	0	15	0	0	0	0	**90**
14:00	0	57	**11**	2	0	0	0	0	12	0	0	0	0	82
15:00	0	49	5	0	0	0	0	**2**	14	0	0	0	0	70
16:00	0	**65**	8	0	1	0	0	0	5	0	0	0	0	79
17:00	0	56	2	0	0	0	0	0	7	0	0	0	0	65
18:00	0	41	2	0	0	0	0	0	3	0	0	0	0	46
19:00	0	21	0	1	1	0	0	0	4	0	0	0	0	27
20:00	0	28	0	0	2	0	0	0	1	0	0	0	0	31
21:00	0	12	0	0	0	0	0	0	4	0	0	0	0	16
22:00	0	16	0	0	0	0	0	0	2	0	0	0	0	18
23:00	0	11	0	0	0	0	0	0	5	0	0	0	0	16
Total	0	1107	122	14	19	1	0	4	183	0	0	0	0	1450
Percent	0.0%	76.3%	8.4%	1.0%	1.3%	0.1%	0.0%	0.3%	12.6%	0.0%	0.0%	0.0%	0.0%	
AM Peak		05:00	05:00	08:00	05:00	08:00		11:00	09:00					05:00
Vol.		121	15	3	3	1		1	15					153
PM Peak		16:00	14:00	13:00	12:00			15:00	12:00					13:00
Vol.		65	11	4	2			2	17					90
Grand Total	0	1107	122	14	19	1	0	4	183	0	0	0	0	1450
Percent	0.0%	76.3%	8.4%	1.0%	1.3%	0.1%	0.0%	0.3%	12.6%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

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

Town of Apple Valley
Dale Evans Parkway
N/ Johnson Road
24 Hour Directional Classification Count

APV001
Site Code: 051-231073

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
11/08/23	0	10	1	0	0	0	0	0	10	0	0	0	0	21
01:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
02:00	0	8	0	0	1	0	0	0	2	0	0	0	0	11
03:00	0	11	2	0	0	0	0	0	1	0	0	0	0	14
04:00	0	14	2	0	0	0	0	0	1	0	0	0	0	17
05:00	0	23	0	0	1	0	0	1	7	0	0	0	0	32
06:00	0	39	3	0	0	0	0	0	4	0	0	0	0	46
07:00	0	46	9	1	2	0	0	1	11	0	0	0	0	70
08:00	0	45	8	**2**	**4**	0	0	**2**	12	0	0	0	0	73
09:00	0	34	9	0	1	1	0	0	7	0	0	0	0	52
10:00	0	**50**	4	0	4	**2**	0	1	**17**	0	0	0	0	78
11:00	0	48	**13**	0	4	0	0	1	15	0	0	0	0	**81**
12 PM	0	61	9	1	**5**	**1**	0	0	11	0	0	0	0	88
13:00	0	59	10	**3**	1	0	0	0	12	0	0	**1**	0	86
14:00	0	73	23	1	0	0	0	0	**15**	0	0	0	0	112
15:00	0	125	24	0	2	0	0	0	11	0	0	0	0	162
16:00	**1**	**137**	**37**	0	2	0	0	0	10	0	0	0	0	**187**
17:00	1	135	16	0	0	0	**1**	**1**	12	0	0	0	0	166
18:00	0	78	3	0	2	0	0	0	14	0	0	0	0	97
19:00	0	51	1	1	2	0	0	1	12	0	0	0	0	68
20:00	0	31	1	0	0	0	0	1	9	0	0	0	0	42
21:00	0	23	1	0	0	0	0	0	13	0	0	0	0	37
22:00	0	21	0	0	0	0	0	1	7	0	0	0	0	29
23:00	0	32	0	0	1	0	0	0	8	0	0	0	0	41
Total	2	1161	177	9	32	4	1	10	221	0	0	1	0	1618
Percent	0.1%	71.8%	10.9%	0.6%	2.0%	0.2%	0.1%	0.6%	13.7%	0.0%	0.0%	0.1%	0.0%	
AM Peak		10:00	11:00	08:00	08:00	10:00		08:00	10:00					11:00
Vol.		50	13	2	4	2		2	17					81
PM Peak	16:00	16:00	16:00	13:00	12:00	12:00	17:00	17:00	14:00			13:00		16:00
Vol.	1	137	37	3	5	1	1	1	15			1		187
Grand Total	2	1161	177	9	32	4	1	10	221	0	0	1	0	1618
Percent	0.1%	71.8%	10.9%	0.6%	2.0%	0.2%	0.1%	0.6%	13.7%	0.0%	0.0%	0.1%	0.0%	

Counts Unlimited, Inc.

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

Town of Apple Valley
Dale Evans Parkway
N/ Johnson Road
24 Hour Directional Classification Count
Northbound, Southbound

APV001
Site Code: 051-231073

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
11/08/23	0	26	1	0	0	0	0	0	13	0	0	0	0	40
01:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
02:00	0	18	0	0	1	0	0	0	4	0	0	0	0	23
03:00	0	38	2	0	1	0	0	0	2	0	0	0	0	43
04:00	0	65	2	0	2	0	0	0	15	0	0	0	0	84
05:00	0	144	15	0	4	0	0	1	21	0	0	0	0	**185**
06:00	0	**154**	15	1	1	0	0	0	13	0	0	0	0	184
07:00	0	133	21	2	2	0	0	1	19	0	0	0	0	178
08:00	0	102	19	**5**	**6**	1	0	**2**	22	0	0	0	0	157
09:00	0	87	19	0	2	1	0	0	22	0	0	0	0	131
10:00	0	99	14	0	4	**2**	0	1	**27**	0	0	0	0	147
11:00	0	98	**24**	0	5	0	0	2	23	0	0	0	0	152
12 PM	0	111	14	3	**7**	**1**	0	1	**28**	0	0	0	0	165
13:00	0	120	18	**7**	3	0	0	0	27	0	0	**1**	0	176
14:00	0	130	34	3	0	0	0	0	27	0	0	0	0	194
15:00	0	174	29	0	2	0	0	**2**	25	0	0	0	0	232
16:00	**1**	**202**	**45**	0	3	0	0	0	15	0	0	0	0	**266**
17:00	1	191	18	0	0	0	**1**	1	19	0	0	0	0	231
18:00	0	119	5	0	2	0	0	0	17	0	0	0	0	143
19:00	0	72	1	2	3	0	0	1	16	0	0	0	0	95
20:00	0	59	1	0	2	0	0	1	10	0	0	0	0	73
21:00	0	35	1	0	0	0	0	0	17	0	0	0	0	53
22:00	0	37	0	0	0	0	0	1	9	0	0	0	0	47
23:00	0	43	0	0	1	0	0	0	13	0	0	0	0	57
Total	2	2268	299	23	51	5	1	14	404	0	0	1	0	3068
Percent	0.1%	73.9%	9.7%	0.7%	1.7%	0.2%	0.0%	0.5%	13.2%	0.0%	0.0%	0.0%	0.0%	
AM Peak		06:00	11:00	08:00	08:00	10:00		08:00	10:00					05:00
Vol.		154	24	5	6	2		2	27					185
PM Peak	16:00	16:00	16:00	13:00	12:00	12:00	17:00	15:00	12:00			13:00		16:00
Vol.	1	202	45	7	7	1	1	2	28			1		266
Grand Total	2	2268	299	23	51	5	1	14	404	0	0	1	0	3068
Percent	0.1%	73.9%	9.7%	0.7%	1.7%	0.2%	0.0%	0.5%	13.2%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

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

Town of Apple Valley
Johnson Road
E/ Dale Evans Parkway
24 Hour Directional Classification Count

APV002
Site Code: 051-231073

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/08/23	0	7	0	0	0	0	0	0	13	0	0	0	0	20
01:00	0	10	0	0	0	0	0	1	0	0	0	0	0	11
02:00	0	14	0	0	0	0	0	1	8	0	0	0	0	23
03:00	0	29	0	0	0	0	0	1	3	0	0	0	0	33
04:00	0	120	4	0	0	0	0	1	3	0	0	0	0	128
05:00	0	**155**	5	0	0	0	0	2	12	0	0	0	0	**174**
06:00	0	51	**8**	**1**	2	0	0	3	19	0	0	0	0	84
07:00	**1**	73	3	1	3	0	0	2	24	0	0	0	0	107
08:00	0	44	6	1	1	**3**	0	**5**	30	0	0	0	0	90
09:00	0	20	4	1	1	0	0	0	24	0	0	0	0	50
10:00	0	35	2	1	**5**	0	0	2	**36**	0	0	0	0	81
11:00	0	32	7	1	1	2	0	4	32	0	0	0	0	79
12 PM	**1**	32	6	1	0	**1**	0	**4**	15	0	0	0	0	60
13:00	0	39	8	**2**	1	1	0	1	22	0	0	**1**	0	75
14:00	0	30	8	2	0	0	0	1	**28**	0	0	0	0	69
15:00	0	71	10	1	**2**	1	0	3	18	0	0	0	0	106
16:00	0	**207**	**21**	1	1	1	0	3	14	0	0	0	0	**248**
17:00	0	70	5	1	0	0	0	4	17	0	0	0	0	97
18:00	0	34	0	1	0	0	0	0	24	0	0	0	0	59
19:00	0	26	0	0	1	0	0	0	17	0	0	0	0	44
20:00	0	24	0	0	2	0	0	0	19	0	0	0	0	45
21:00	0	31	0	0	1	0	0	0	20	0	0	0	0	52
22:00	0	9	0	0	0	0	0	0	14	0	0	0	0	23
23:00	0	8	0	0	0	0	0	0	13	0	0	0	0	21
Total	2	1171	97	15	21	9	0	38	425	0	0	1	0	1779
Percent	0.1%	65.8%	5.5%	0.8%	1.2%	0.5%	0.0%	2.1%	23.9%	0.0%	0.0%	0.1%	0.0%	
AM Peak	07:00	05:00	06:00	06:00	10:00	08:00		08:00	10:00					05:00
Vol.	1	155	8	1	5	3		5	36					174
PM Peak	12:00	16:00	16:00	13:00	15:00	12:00		12:00	14:00			13:00		16:00
Vol.	1	207	21	2	2	1		4	28			1		248
Grand Total	2	1171	97	15	21	9	0	38	425	0	0	1	0	1779
Percent	0.1%	65.8%	5.5%	0.8%	1.2%	0.5%	0.0%	2.1%	23.9%	0.0%	0.0%	0.1%	0.0%	

Counts Unlimited, Inc.

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

Town of Apple Valley
Johnson Road
E/ Dale Evans Parkway
24 Hour Directional Classification Count

APV002
Site Code: 051-231073

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/08/23	0	14	0	0	0	**1**	0	0	9	0	0	0	0	24
01:00	0	8	0	0	0	0	0	0	6	0	0	0	0	14
02:00	0	51	2	0	0	0	0	0	8	0	0	0	0	61
03:00	0	**150**	1	0	0	0	0	0	5	0	0	0	0	**156**
04:00	0	20	0	0	0	0	0	0	21	0	0	0	0	41
05:00	0	29	3	0	0	0	0	0	17	0	0	0	0	49
06:00	0	25	6	**2**	0	0	0	0	16	0	0	0	0	49
07:00	0	32	6	2	0	1	0	2	20	0	0	0	0	63
08:00	0	14	2	1	**2**	1	0	**3**	25	0	0	0	0	48
09:00	0	14	6	1	1	1	0	0	**40**	0	0	0	0	63
10:00	0	30	7	1	2	0	0	0	26	0	0	0	0	66
11:00	0	12	**8**	1	1	1	0	2	26	0	0	0	0	51
12 PM	**1**	27	5	1	**1**	2	0	**4**	**36**	0	0	0	0	77
13:00	0	41	6	**2**	1	0	0	2	34	0	0	0	0	86
14:00	0	48	7	1	0	1	0	1	21	0	0	0	0	79
15:00	0	117	15	1	0	2	0	3	19	0	0	**1**	0	158
16:00	0	**183**	**19**	1	0	1	0	0	6	0	0	0	0	**210**
17:00	0	102	4	0	0	**3**	0	1	10	0	0	0	0	120
18:00	0	40	1	0	1	2	0	0	9	0	0	0	0	53
19:00	0	27	0	1	1	2	0	0	7	0	0	0	0	38
20:00	0	49	0	0	1	0	0	0	9	0	0	0	0	59
21:00	0	32	0	0	0	0	0	0	8	0	0	0	0	40
22:00	0	21	0	0	1	0	0	0	6	0	0	0	0	28
23:00	0	8	0	0	0	0	0	0	9	0	0	0	0	17
Total	1	1094	98	15	12	18	0	18	393	0	0	1	0	1650
Percent	0.1%	66.3%	5.9%	0.9%	0.7%	1.1%	0.0%	1.1%	23.8%	0.0%	0.0%	0.1%	0.0%	
AM Peak		03:00	11:00	06:00	08:00	00:00		08:00	09:00					03:00
Vol.		150	8	2	2	1		3	40					156
PM Peak	12:00	16:00	16:00	13:00	12:00	17:00		12:00	12:00			15:00		16:00
Vol.	1	183	19	2	1	3		4	36			1		210
Grand Total	1	1094	98	15	12	18	0	18	393	0	0	1	0	1650
Percent	0.1%	66.3%	5.9%	0.9%	0.7%	1.1%	0.0%	1.1%	23.8%	0.0%	0.0%	0.1%	0.0%	

Counts Unlimited, Inc.

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

Town of Apple Valley
Johnson Road
E/ Dale Evans Parkway
24 Hour Directional Classification Count

APV002
Site Code: 051-231073

Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/08/23	0	21	0	0	0	1	0	0	22	0	0	0	0	44
01:00	0	18	0	0	0	0	0	1	6	0	0	0	0	25
02:00	0	65	2	0	0	0	0	1	16	0	0	0	0	84
03:00	0	179	1	0	0	0	0	1	8	0	0	0	0	189
04:00	0	140	4	0	0	0	0	1	24	0	0	0	0	169
05:00	0	**184**	8	0	0	0	0	2	29	0	0	0	0	**223**
06:00	0	76	14	**3**	2	0	0	3	35	0	0	0	0	133
07:00	**1**	105	9	3	3	1	0	4	44	0	0	0	0	170
08:00	0	58	8	2	3	**4**	0	**8**	55	0	0	0	0	138
09:00	0	34	10	2	2	1	0	0	**64**	0	0	0	0	113
10:00	0	65	9	2	**7**	0	0	2	62	0	0	0	0	147
11:00	0	44	**15**	2	2	3	0	6	58	0	0	0	0	130
12 PM	**2**	59	11	2	1	**3**	0	**8**	51	0	0	0	0	137
13:00	0	80	14	**4**	2	1	0	3	**56**	0	0	**1**	0	161
14:00	0	78	15	3	0	1	0	2	49	0	0	0	0	148
15:00	0	188	25	2	2	3	0	6	37	0	0	1	0	264
16:00	0	**390**	**40**	2	1	2	0	3	20	0	0	0	0	**458**
17:00	0	172	9	1	0	3	0	5	27	0	0	0	0	217
18:00	0	74	1	1	1	2	0	0	33	0	0	0	0	112
19:00	0	53	0	1	2	2	0	0	24	0	0	0	0	82
20:00	0	73	0	0	**3**	0	0	0	28	0	0	0	0	104
21:00	0	63	0	0	1	0	0	0	28	0	0	0	0	92
22:00	0	30	0	0	1	0	0	0	20	0	0	0	0	51
23:00	0	16	0	0	0	0	0	0	22	0	0	0	0	38
Total	3	2265	195	30	33	27	0	56	818	0	0	2	0	3429
Percent	0.1%	66.1%	5.7%	0.9%	1.0%	0.8%	0.0%	1.6%	23.9%	0.0%	0.0%	0.1%	0.0%	
AM Peak	07:00	05:00	11:00	06:00	10:00	08:00		08:00	09:00					05:00
Vol.	1	184	15	3	7	4		8	64					223
PM Peak	12:00	16:00	16:00	13:00	20:00	12:00		12:00	13:00			13:00		16:00
Vol.	2	390	40	4	3	3		8	56			1		458
Grand Total	3	2265	195	30	33	27	0	56	818	0	0	2	0	3429
Percent	0.1%	66.1%	5.7%	0.9%	1.0%	0.8%	0.0%	1.6%	23.9%	0.0%	0.0%	0.1%	0.0%	

Counts Unlimited, Inc.

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

Town of Apple Valley
Stoddard Wells Road
S/ Johnson Road
24 Hour Directional Classification Count

APV003
Site Code: 051-231073

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
11/08/23	0	5	2	0	0	1	0	1	3	0	0	0	0	12
01:00	0	8	0	0	0	0	0	1	1	0	0	0	0	10
02:00	0	16	2	0	0	0	0	2	6	0	0	0	0	26
03:00	0	31	4	0	0	0	0	1	1	0	0	0	0	37
04:00	0	**130**	23	0	2	1	0	0	9	0	0	0	0	165
05:00	0	130	**33**	0	2	0	0	1	13	0	0	0	0	**179**
06:00	0	68	19	0	2	0	0	**4**	21	0	0	0	0	114
07:00	**1**	66	7	0	1	0	0	1	30	0	0	0	0	106
08:00	0	41	11	0	0	**3**	0	4	**37**	0	0	0	0	96
09:00	0	28	7	0	**5**	0	0	0	31	0	0	0	0	71
10:00	0	23	9	0	3	0	0	3	35	0	0	0	0	73
11:00	0	31	17	0	3	3	0	3	30	0	0	0	0	87
12 PM	**1**	31	11	0	0	**2**	0	3	14	0	0	0	0	62
13:00	0	44	15	0	0	2	0	1	16	0	0	0	0	78
14:00	0	37	12	0	0	0	0	1	**21**	0	0	0	0	71
15:00	0	98	10	0	**4**	1	0	4	13	0	0	0	0	130
16:00	1	**187**	**20**	0	1	2	0	**5**	9	0	0	0	0	**225**
17:00	0	72	7	0	0	0	0	3	12	0	0	0	0	94
18:00	0	33	5	0	1	0	0	1	11	0	0	0	0	51
19:00	0	25	6	0	0	0	0	1	5	0	0	0	0	37
20:00	0	22	2	0	0	0	0	1	10	0	0	0	0	35
21:00	0	19	1	0	0	0	0	2	9	0	0	0	0	31
22:00	0	7	1	0	0	0	0	1	5	0	0	0	0	14
23:00	0	7	0	0	0	0	0	0	4	0	0	0	0	11
Total	3	1159	224	0	24	15	0	44	346	0	0	0	0	1815
Percent	0.2%	63.9%	12.3%	0.0%	1.3%	0.8%	0.0%	2.4%	19.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	04:00	05:00		09:00	08:00		06:00	08:00					05:00
Vol.	1	130	33		5	3		4	37					179
PM Peak	12:00	16:00	16:00		15:00	12:00		16:00	14:00					16:00
Vol.	1	187	20		4	2		5	21					225
Grand Total	3	1159	224	0	24	15	0	44	346	0	0	0	0	1815
Percent	0.2%	63.9%	12.3%	0.0%	1.3%	0.8%	0.0%	2.4%	19.1%	0.0%	0.0%	0.0%	0.0%	

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

Town of Apple Valley
Stoddard Wells Road
S/ Johnson Road
24 Hour Directional Classification Count

APV003
Site Code: 051-231073

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
11/08/23	0	5	0	0	0	0	0	0	3	0	0	0	0	8
01:00	0	10	0	0	0	0	0	0	8	0	0	0	0	18
02:00	0	26	8	0	0	0	0	**3**	5	0	0	0	0	42
03:00	0	**38**	14	0	0	0	0	0	6	0	0	0	0	58
04:00	0	20	6	0	0	0	0	2	8	0	0	0	0	36
05:00	0	19	4	0	0	**4**	0	0	4	0	0	**1**	0	32
06:00	0	29	5	0	2	2	0	0	15	0	0	0	0	53
07:00	0	33	**15**	0	0	1	0	2	23	0	0	0	0	74
08:00	0	21	9	0	**3**	1	0	2	34	0	0	0	0	70
09:00	0	19	14	0	0	1	**1**	0	**44**	0	0	0	0	**79**
10:00	0	23	13	0	2	0	0	1	33	0	0	0	0	72
11:00	0	21	7	0	0	2	0	1	31	0	0	0	0	62
12 PM	0	31	8	0	2	**3**	0	2	**27**	0	0	0	0	73
13:00	0	31	16	0	2	2	0	2	24	0	0	0	0	77
14:00	0	82	16	0	**3**	2	0	2	17	0	0	0	0	122
15:00	0	116	35	0	1	1	**1**	**3**	18	0	0	0	0	175
16:00	0	**181**	**44**	0	1	3	0	0	4	0	0	0	0	**233**
17:00	**1**	71	24	0	0	0	0	3	7	0	0	0	0	106
18:00	0	17	5	0	1	0	0	3	8	0	0	0	0	34
19:00	0	20	2	0	1	0	0	3	7	0	0	0	0	33
20:00	0	27	5	0	0	0	0	0	8	0	0	0	0	40
21:00	0	18	4	0	0	0	0	0	4	0	0	0	0	26
22:00	0	16	3	0	0	0	0	1	7	0	0	0	0	27
23:00	0	3	4	0	0	0	0	1	3	0	0	0	0	11
Total	1	877	261	0	18	22	2	31	348	0	0	1	0	1561
Percent	0.1%	56.2%	16.7%	0.0%	1.2%	1.4%	0.1%	2.0%	22.3%	0.0%	0.0%	0.1%	0.0%	
AM Peak		03:00	07:00		08:00	05:00	09:00	02:00	09:00			05:00		09:00
Vol.		38	15		3	4	1	3	44			1		79
PM Peak	17:00	16:00	16:00		14:00	12:00	15:00	15:00	12:00					16:00
Vol.	1	181	44		3	3	1	3	27					233
Grand Total	1	877	261	0	18	22	2	31	348	0	0	1	0	1561
Percent	0.1%	56.2%	16.7%	0.0%	1.2%	1.4%	0.1%	2.0%	22.3%	0.0%	0.0%	0.1%	0.0%	

Counts Unlimited, Inc.

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

Town of Apple Valley
Stoddard Wells Road
S/ Johnson Road
24 Hour Directional Classification Count
Northbound, Southbound

APV003
Site Code: 051-231073

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
11/08/23	0	10	2	0	0	1	0	1	6	0	0	0	0	20
01:00	0	18	0	0	0	0	0	1	9	0	0	0	0	28
02:00	0	42	10	0	0	0	0	5	11	0	0	0	0	68
03:00	0	69	18	0	0	0	0	1	7	0	0	0	0	95
04:00	0	**150**	29	0	2	1	0	2	17	0	0	0	0	201
05:00	0	149	**37**	0	2	4	0	1	17	0	0	**1**	0	**211**
06:00	0	97	24	0	4	2	0	4	36	0	0	0	0	167
07:00	**1**	99	22	0	1	1	0	3	53	0	0	0	0	180
08:00	0	62	20	0	3	4	0	**6**	71	0	0	0	0	166
09:00	0	47	21	0	**5**	1	**1**	0	**75**	0	0	0	0	150
10:00	0	46	22	0	5	0	0	4	68	0	0	0	0	145
11:00	0	52	24	0	3	**5**	0	4	61	0	0	0	0	149
12 PM	**1**	62	19	0	2	**5**	0	5	**41**	0	0	0	0	135
13:00	0	75	31	0	2	4	0	3	40	0	0	0	0	155
14:00	0	119	28	0	3	2	0	3	38	0	0	0	0	193
15:00	0	214	45	0	**5**	2	**1**	**7**	31	0	0	0	0	305
16:00	1	**368**	**64**	0	2	5	0	5	13	0	0	0	0	**458**
17:00	1	143	31	0	0	0	0	6	19	0	0	0	0	200
18:00	0	50	10	0	2	0	0	4	19	0	0	0	0	85
19:00	0	45	8	0	1	0	0	4	12	0	0	0	0	70
20:00	0	49	7	0	0	0	0	1	18	0	0	0	0	75
21:00	0	37	5	0	0	0	0	2	13	0	0	0	0	57
22:00	0	23	4	0	0	0	0	2	12	0	0	0	0	41
23:00	0	10	4	0	0	0	0	1	7	0	0	0	0	22
Total	4	2036	485	0	42	37	2	75	694	0	0	1	0	3376
Percent	0.1%	60.3%	14.4%	0.0%	1.2%	1.1%	0.1%	2.2%	20.6%	0.0%	0.0%	0.0%	0.0%	
AM Peak	07:00	04:00	05:00		09:00	11:00	09:00	08:00	09:00			05:00		05:00
Vol.	1	150	37		5	5	1	6	75			1		211
PM Peak	12:00	16:00	16:00		15:00	12:00	15:00	15:00	12:00					16:00
Vol.	1	368	64		5	5	1	7	41					458
Grand Total	4	2036	485	0	42	37	2	75	694	0	0	1	0	3376
Percent	0.1%	60.3%	14.4%	0.0%	1.2%	1.1%	0.1%	2.2%	20.6%	0.0%	0.0%	0.0%	0.0%	

This Page Intentionally Left Blank

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

This Page Intentionally Left Blank

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	136	22	4	101	6	7
Future Volume (vph)	136	22	4	101	6	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	0		0	100
Storage Lanes		0	0		1	1
Taper Length (ft)			90		90	
Link Speed (mph)	45			45	30	
Link Distance (ft)	2660			1835	433	
Travel Time (s)	40.3			27.8	9.8	
Confl. Peds. (#/hr)		5	5		5	5
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

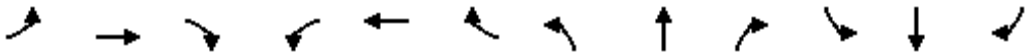
Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	136	22	4	101	6	7
Future Vol, veh/h	136	22	4	101	6	7
Conflicting Peds, #/hr	0	5	5	0	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	170	28	5	126	8	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	203	0	330	194
Stage 1	-	-	-	-	189	-
Stage 2	-	-	-	-	141	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1369	-	665	847
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	886	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1362	-	656	839
Mov Cap-2 Maneuver	-	-	-	-	656	-
Stage 1	-	-	-	-	839	-
Stage 2	-	-	-	-	878	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	9.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	656	839	-	-	1362	-
HCM Lane V/C Ratio	0.011	0.01	-	-	0.004	-
HCM Control Delay (s)	10.6	9.3	-	-	7.7	0
HCM Lane LOS	B	A	-	-	A	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	101	21	8	70	29	11	101	13	44	52	2
Future Volume (vph)	4	101	21	8	70	29	11	101	13	44	52	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		165	100		0	325		0
Storage Lanes	0		0	0		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		7616			2660			2620			1074	
Travel Time (s)		115.4			40.3			32.5			13.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	101	21	8	70	29	11	101	13	44	52	2
Future Vol, veh/h	4	101	21	8	70	29	11	101	13	44	52	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	109	23	9	75	31	12	109	14	47	56	2
Number of Lanes	0	1	0	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	9.5	8.8	9.2	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	3%	10%	0%	100%	0%
Vol Thru, %	0%	100%	0%	80%	90%	0%	0%	96%
Vol Right, %	0%	0%	100%	17%	0%	100%	0%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	101	13	126	78	29	44	54
LT Vol	11	0	0	4	8	0	44	0
Through Vol	0	101	0	101	70	0	0	52
RT Vol	0	0	13	21	0	29	0	2
Lane Flow Rate	12	109	14	135	84	31	47	58
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.02	0.166	0.019	0.202	0.13	0.042	0.08	0.089
Departure Headway (Hd)	6.009	5.505	4.8	5.369	5.571	4.818	6.067	5.536
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	593	647	740	664	640	737	587	643
Service Time	3.776	3.272	2.567	3.134	3.34	2.586	3.84	3.309
HCM Lane V/C Ratio	0.02	0.168	0.019	0.203	0.131	0.042	0.08	0.09
HCM Control Delay	8.9	9.4	7.7	9.5	9.2	7.8	9.4	8.9
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.6	0.1	0.8	0.4	0.1	0.3	0.3

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	82	1	67	124	2	57
Future Volume (vph)	82	1	67	124	2	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	7616		549			661
Travel Time (s)	115.4		8.3			10.0
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

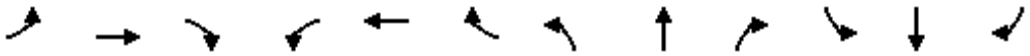
Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	82	1	67	124	2	57
Future Vol, veh/h	82	1	67	124	2	57
Conflicting Peds, #/hr	5	5	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	1	82	151	2	70

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	242	168	0	0	238	0
Stage 1	163	-	-	-	-	-
Stage 2	79	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	746	876	-	-	1329	-
Stage 1	866	-	-	-	-	-
Stage 2	944	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	737	868	-	-	1323	-
Mov Cap-2 Maneuver	737	-	-	-	-	-
Stage 1	862	-	-	-	-	-
Stage 2	937	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	738	1323	-
HCM Lane V/C Ratio	-	-	0.137	0.002	-
HCM Control Delay (s)	-	-	10.7	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	2	35	2	132	1	3	32	8	167	1	15
Future Volume (vph)	4	2	35	2	132	1	3	32	8	167	1	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

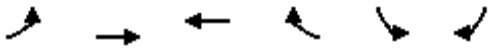
Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	2	35	2	132	1	3	32	8	167	1	15
Future Vol, veh/h	4	2	35	2	132	1	3	32	8	167	1	15
Conflicting Peds, #/hr	5	0	5	5	0	5	5	0	5	5	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	3	45	3	169	1	4	41	10	214	1	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	175	0	0	53	0	0	232	222	36	247	244	180
Stage 1	-	-	-	-	-	-	41	41	-	181	181	-
Stage 2	-	-	-	-	-	-	191	181	-	66	63	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1401	-	-	1553	-	-	723	677	1037	707	658	863
Stage 1	-	-	-	-	-	-	974	861	-	821	750	-
Stage 2	-	-	-	-	-	-	811	750	-	945	842	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1394	-	-	1546	-	-	696	666	1027	658	647	855
Mov Cap-2 Maneuver	-	-	-	-	-	-	696	666	-	658	647	-
Stage 1	-	-	-	-	-	-	965	853	-	814	745	-
Stage 2	-	-	-	-	-	-	786	745	-	883	834	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.1	10.5	13.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	715	1394	-	-	1546	-	-	671
HCM Lane V/C Ratio	0.077	0.004	-	-	0.002	-	-	0.35
HCM Control Delay (s)	10.5	7.6	0	-	7.3	0	-	13.2
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	1.6



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	6	9	22	128	32	2
Future Volume (vph)	6	9	22	128	32	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			0	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	9	22	128	32	2
Future Vol, veh/h	6	9	22	128	32	2
Conflicting Peds, #/hr	5	0	0	5	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	12	28	164	41	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	33	0	-	0	148	120
Stage 1	-	-	-	-	115	-
Stage 2	-	-	-	-	33	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1579	-	-	-	844	931
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	989	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1571	-	-	-	831	922
Mov Cap-2 Maneuver	-	-	-	-	831	-
Stage 1	-	-	-	-	901	-
Stage 2	-	-	-	-	984	-

Approach	EB	WB	SB
HCM Control Delay, s	2.9	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1571	-	-	-	836
HCM Lane V/C Ratio	0.005	-	-	-	0.052
HCM Control Delay (s)	7.3	0	-	-	9.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	33	2	2	132	4	1
Future Volume (vph)	33	2	2	132	4	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	2	2	132	4	1
Future Vol, veh/h	33	2	2	132	4	1
Conflicting Peds, #/hr	5	5	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	2	2	161	5	1

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	104	93	0	0	168	0
Stage 1	88	-	-	-	-	-
Stage 2	16	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	894	964	-	-	1410	-
Stage 1	935	-	-	-	-	-
Stage 2	1007	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	881	955	-	-	1403	-
Mov Cap-2 Maneuver	881	-	-	-	-	-
Stage 1	930	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	6.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	885	1403	-
HCM Lane V/C Ratio	-	-	0.048	0.003	-
HCM Control Delay (s)	-	-	9.3	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	1	124	8	10	71
Future Volume (vph)	5	1	124	8	10	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		400	415	
Storage Lanes	1	0		1	1	
Taper Length (ft)	90				90	
Link Speed (mph)	45		55			55
Link Distance (ft)	304		1385			2620
Travel Time (s)	4.6		17.2			32.5
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

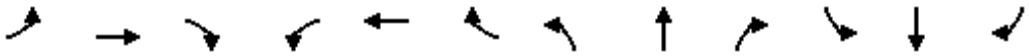
Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	1	124	8	10	71
Future Vol, veh/h	5	1	124	8	10	71
Conflicting Peds, #/hr	5	5	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	400	415	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	1	143	9	11	82

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	257	153	0	0	157	0
Stage 1	148	-	-	-	-	-
Stage 2	109	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	732	893	-	-	1423	-
Stage 1	880	-	-	-	-	-
Stage 2	916	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	719	885	-	-	1416	-
Mov Cap-2 Maneuver	719	-	-	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	904	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	742	1416	-
HCM Lane V/C Ratio	-	-	0.009	0.008	-
HCM Control Delay (s)	-	-	9.9	7.6	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	9	1	17	5	2	5	106	18	1	59	16
Future Volume (vph)	24	9	1	17	5	2	5	106	18	1	59	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	9	1	17	5	2	5	106	18	1	59	16
Future Vol, veh/h	24	9	1	17	5	2	5	106	18	1	59	16
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	10	1	19	5	2	5	116	20	1	65	18
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	7.7	7.9	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	71%	71%	1%
Vol Thru, %	82%	26%	21%	78%
Vol Right, %	14%	3%	8%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	129	34	24	76
LT Vol	5	24	17	1
Through Vol	106	9	5	59
RT Vol	18	1	2	16
Lane Flow Rate	142	37	26	84
Geometry Grp	1	1	1	1
Degree of Util (X)	0.159	0.047	0.033	0.093
Departure Headway (Hd)	4.031	4.574	4.554	4.027
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	882	788	791	879
Service Time	2.094	2.574	2.555	2.104
HCM Lane V/C Ratio	0.161	0.047	0.033	0.096
HCM Control Delay	7.9	7.8	7.7	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.1	0.1	0.3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	123	159	29	70	152	27
Future Volume (vph)	123	159	29	70	152	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	0		0	100
Storage Lanes		0	0		1	1
Taper Length (ft)			90		90	
Link Speed (mph)	45			45	30	
Link Distance (ft)	2660			1835	433	
Travel Time (s)	40.3			27.8	9.8	
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

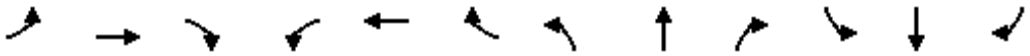
Intersection	
Int Delay, s/veh	5.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	123	159	29	70	152	27
Future Vol, veh/h	123	159	29	70	152	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	186	241	44	106	230	41

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	427	0	501	307
Stage 1	-	-	-	-	307	-
Stage 2	-	-	-	-	194	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1132	-	530	733
Stage 1	-	-	-	-	746	-
Stage 2	-	-	-	-	839	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1132	-	508	733
Mov Cap-2 Maneuver	-	-	-	-	508	-
Stage 1	-	-	-	-	746	-
Stage 2	-	-	-	-	805	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	16.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	508	733	-	-	1132	-
HCM Lane V/C Ratio	0.453	0.056	-	-	0.039	-
HCM Control Delay (s)	17.8	10.2	-	-	8.3	0
HCM Lane LOS	C	B	-	-	A	A
HCM 95th %tile Q(veh)	2.3	0.2	-	-	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	180	52	52	147	23	50	67	57	45	158	2
Future Volume (vph)	3	180	52	52	147	23	50	67	57	45	158	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		165	100		0	325		0
Storage Lanes	0		0	0		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		7616			2660			2620			1074	
Travel Time (s)		115.4			40.3			32.5			13.3	
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	18.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	180	52	52	147	23	50	67	57	45	158	2
Future Vol, veh/h	3	180	52	52	147	23	50	67	57	45	158	2
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	247	71	71	201	32	68	92	78	62	216	3
Number of Lanes	0	1	0	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	23.8	20.2	12.5	16.7
HCM LOS	C	C	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	1%	26%	0%	100%	0%
Vol Thru, %	0%	100%	0%	77%	74%	0%	0%	99%
Vol Right, %	0%	0%	100%	22%	0%	100%	0%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	50	67	57	235	199	23	45	160
LT Vol	50	0	0	3	52	0	45	0
Through Vol	0	67	0	180	147	0	0	158
RT Vol	0	0	57	52	0	23	0	2
Lane Flow Rate	68	92	78	322	273	32	62	219
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.163	0.205	0.159	0.664	0.59	0.061	0.144	0.48
Departure Headway (Hd)	8.553	8.038	7.316	7.422	7.787	6.939	8.403	7.877
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	417	444	487	486	461	513	425	456
Service Time	6.345	5.829	5.107	5.201	5.569	4.72	6.189	5.662
HCM Lane V/C Ratio	0.163	0.207	0.16	0.663	0.592	0.062	0.146	0.48
HCM Control Delay	13	12.9	11.5	23.8	21.3	10.2	12.6	17.8
HCM Lane LOS	B	B	B	C	C	B	B	C
HCM 95th-tile Q	0.6	0.8	0.6	4.8	3.7	0.2	0.5	2.5

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	198	1	21	233	2	44
Future Volume (vph)	198	1	21	233	2	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	7616		549			661
Travel Time (s)	115.4		8.3			10.0
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

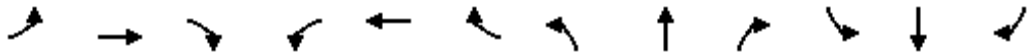
Intersection	
Int Delay, s/veh	5.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	198	1	21	233	2	44
Future Vol, veh/h	198	1	21	233	2	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	305	2	32	358	3	68

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	285	211	0	0	390	0
Stage 1	211	-	-	-	-	-
Stage 2	74	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	705	829	-	-	1169	-
Stage 1	824	-	-	-	-	-
Stage 2	949	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	703	829	-	-	1169	-
Mov Cap-2 Maneuver	703	-	-	-	-	-
Stage 1	824	-	-	-	-	-
Stage 2	946	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14	0	0.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	704	1169	-
HCM Lane V/C Ratio	-	-	0.435	0.003	-
HCM Control Delay (s)	-	-	14	8.1	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	2.2	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	8	54	10	227	2	3	24	15	230	2	7
Future Volume (vph)	5	8	54	10	227	2	3	24	15	230	2	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

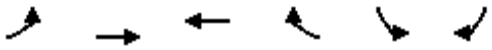
Intersection	
Int Delay, s/veh	14.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	8	54	10	227	2	3	24	15	230	2	7
Future Vol, veh/h	5	8	54	10	227	2	3	24	15	230	2	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	12	81	15	339	3	4	36	22	343	3	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	342	0	0	93	0	0	444	439	53	467	478	341
Stage 1	-	-	-	-	-	-	67	67	-	371	371	-
Stage 2	-	-	-	-	-	-	377	372	-	96	107	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1217	-	-	1501	-	-	524	512	1014	506	486	701
Stage 1	-	-	-	-	-	-	943	839	-	649	620	-
Stage 2	-	-	-	-	-	-	644	619	-	911	807	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1217	-	-	1501	-	-	507	503	1014	461	477	701
Mov Cap-2 Maneuver	-	-	-	-	-	-	507	503	-	461	477	-
Stage 1	-	-	-	-	-	-	937	834	-	645	613	-
Stage 2	-	-	-	-	-	-	624	612	-	848	802	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.3	11.5	33.8
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	614	1217	-	-	1501	-	-	466
HCM Lane V/C Ratio	0.102	0.006	-	-	0.01	-	-	0.765
HCM Control Delay (s)	11.5	8	0	-	7.4	0	-	33.8
HCM Lane LOS	B	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	6.6



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	15	26	211	52	4
Future Volume (vph)	5	15	26	211	52	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			0	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	15	26	211	52	4
Future Vol, veh/h	5	15	26	211	52	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	23	40	325	80	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	40	0	-	0	242	203
Stage 1	-	-	-	-	203	-
Stage 2	-	-	-	-	39	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1570	-	-	-	746	838
Stage 1	-	-	-	-	831	-
Stage 2	-	-	-	-	983	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1570	-	-	-	742	838
Mov Cap-2 Maneuver	-	-	-	-	742	-
Stage 1	-	-	-	-	827	-
Stage 2	-	-	-	-	983	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1570	-	-	-	748
HCM Lane V/C Ratio	0.005	-	-	-	0.115
HCM Control Delay (s)	7.3	0	-	-	10.4
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.4

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	56	2	1	215	2	0
Future Volume (vph)	56	2	1	215	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	56	2	1	215	2	0
Future Vol, veh/h	56	2	1	215	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	3	2	331	3	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	174	168	0	0	333	0
Stage 1	168	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	816	876	-	-	1226	-
Stage 1	862	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	814	876	-	-	1226	-
Mov Cap-2 Maneuver	814	-	-	-	-	-
Stage 1	862	-	-	-	-	-
Stage 2	1015	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	7.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	816	1226	-
HCM Lane V/C Ratio	-	-	0.109	0.003	-
HCM Control Delay (s)	-	-	10	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	9	30	144	8	25	237
Future Volume (vph)	9	30	144	8	25	237
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		400	415	
Storage Lanes	1	0		1	1	
Taper Length (ft)	90				90	
Link Speed (mph)	45		55			55
Link Distance (ft)	304		1385			2620
Travel Time (s)	4.6		17.2			32.5
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

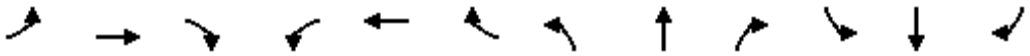
Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	30	144	8	25	237
Future Vol, veh/h	9	30	144	8	25	237
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	-	-	400	415	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	39	189	11	33	312

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	567	189	0	0	200	0
Stage 1	189	-	-	-	-	-
Stage 2	378	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	485	853	-	-	1372	-
Stage 1	843	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	473	853	-	-	1372	-
Mov Cap-2 Maneuver	473	-	-	-	-	-
Stage 1	843	-	-	-	-	-
Stage 2	676	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	720	1372	-
HCM Lane V/C Ratio	-	-	0.071	0.024	-
HCM Control Delay (s)	-	-	10.4	7.7	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	8	2	23	13	2	3	124	11	1	204	41
Future Volume (vph)	26	8	2	23	13	2	3	124	11	1	204	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

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	26	8	2	23	13	2	3	124	11	1	204	41
Future Vol, veh/h	26	8	2	23	13	2	3	124	11	1	204	41
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	35	11	3	31	17	3	4	165	15	1	272	55
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.7	8.7	8.9	10.1
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	72%	61%	0%
Vol Thru, %	90%	22%	34%	83%
Vol Right, %	8%	6%	5%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	138	36	38	246
LT Vol	3	26	23	1
Through Vol	124	8	13	204
RT Vol	11	2	2	41
Lane Flow Rate	184	48	51	328
Geometry Grp	1	1	1	1
Degree of Util (X)	0.23	0.07	0.073	0.391
Departure Headway (Hd)	4.491	5.244	5.219	4.294
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	799	682	685	840
Service Time	2.519	3.289	3.263	2.318
HCM Lane V/C Ratio	0.23	0.07	0.074	0.39
HCM Control Delay	8.9	8.7	8.7	10.1
HCM Lane LOS	A	A	A	B
HCM 95th-tile Q	0.9	0.2	0.2	1.9

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

This Page Intentionally Left Blank

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

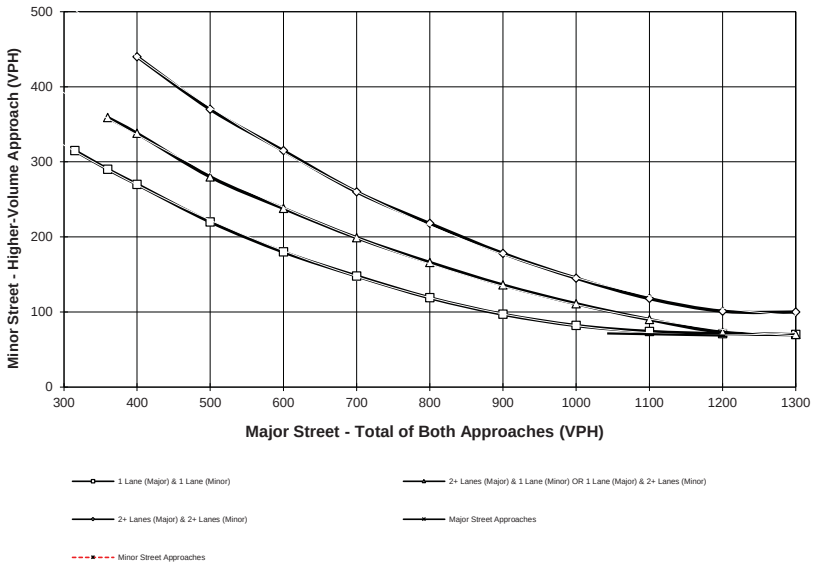
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) AM Peak Hour Warrants**

Major Street Name = **Johnson Rd.** Total of Both Approaches (VPH) = **263**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dachshund Av.** High Volume Approach (VPH) = **13**
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

Intersection ID: #1

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

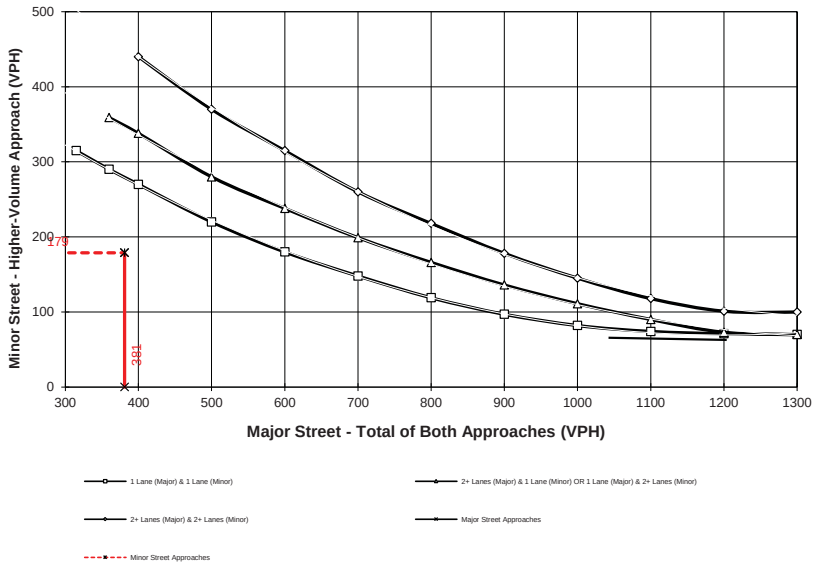
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) PM Peak Hour Warrants**

Major Street Name = **Johnson Rd.** Total of Both Approaches (VPH) = **381**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dachshund Av.** High Volume Approach (VPH) = **179**
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

Intersection ID: #1

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

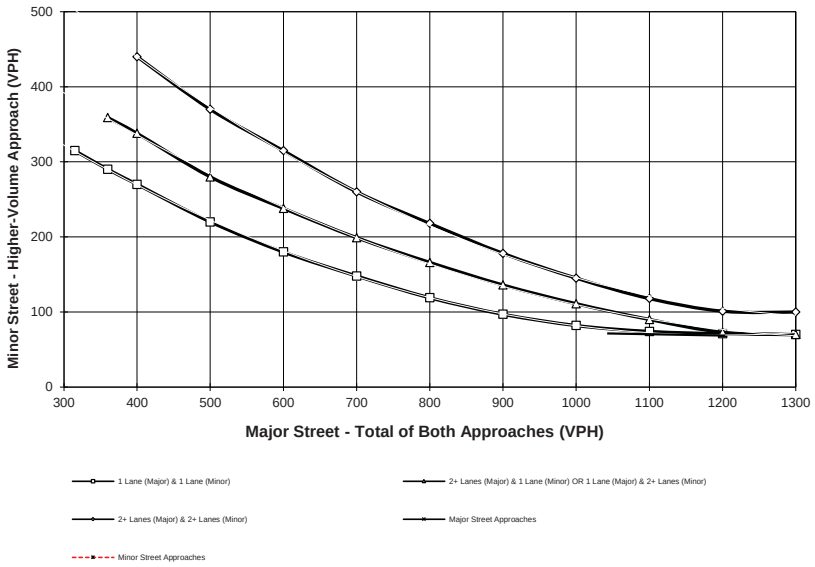
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) AM Peak Hour Warrants**

Major Street Name = **Johnson Rd.** Total of Both Approaches (VPH) = **233**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dale Evans Pkwy.** High Volume Approach (VPH) = **125**
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

Intersection ID: #2

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\01 - Existing\002R_AM.xls\Fig 4C-4 (Rural Peak)

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

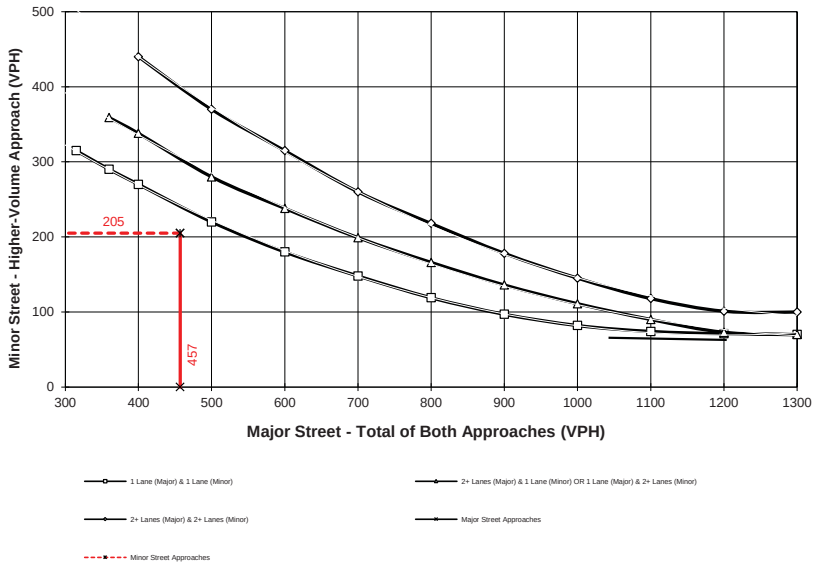
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) PM Peak Hour Warrants**

Major Street Name = **Johnson Rd.** Total of Both Approaches (VPH) = **457**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dale Evans Pkwy.** High Volume Approach (VPH) = **205**
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

Intersection ID: #2

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\01 - Existing\002R_PM.xls\Fig 4C-4 (Rural Peak)

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

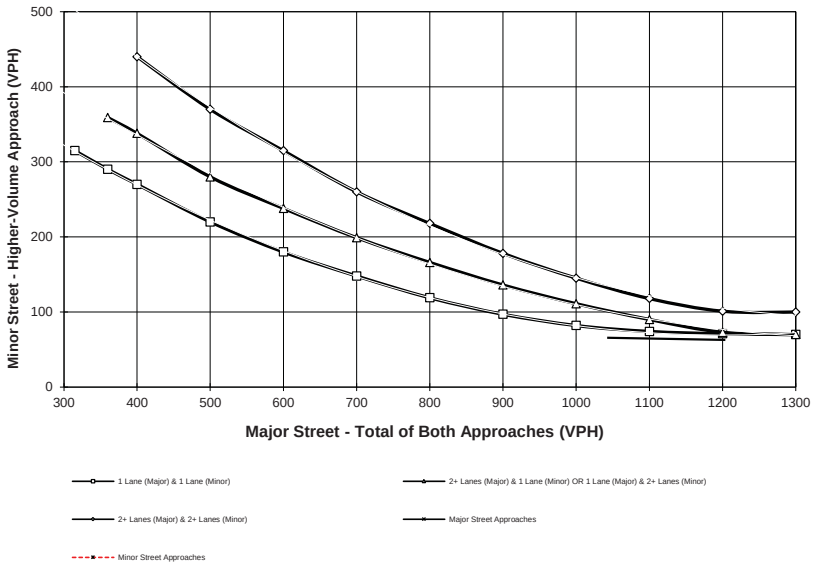
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) AM Peak Hour Warrants**

Major Street Name = **Stoddard Wells Rd.** Total of Both Approaches (VPH) = **250**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Johnson Rd.** High Volume Approach (VPH) = **83**
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

Intersection ID: #3

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

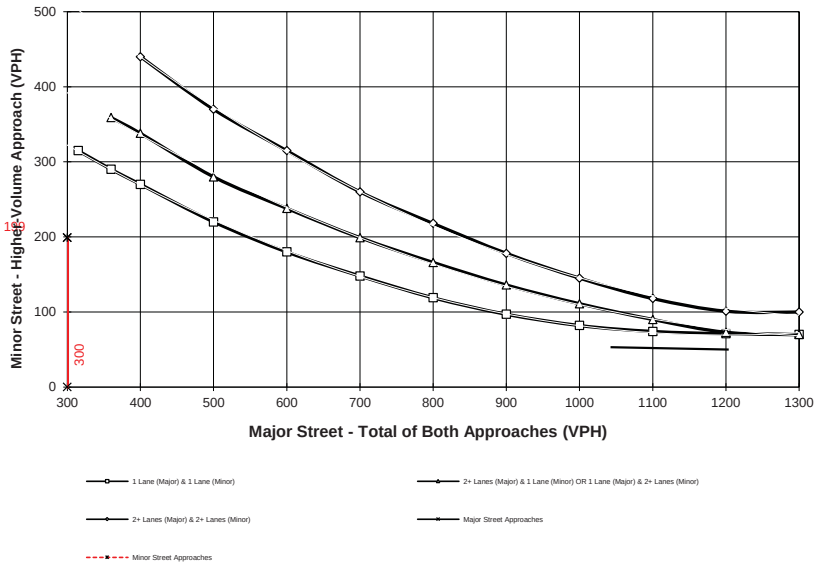
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) PM Peak Hour Warrants**

Major Street Name = **Stoddard Wells Rd.** Total of Both Approaches (VPH) = **300**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Johnson Rd.** High Volume Approach (VPH) = **199**
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

Intersection ID: #3

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

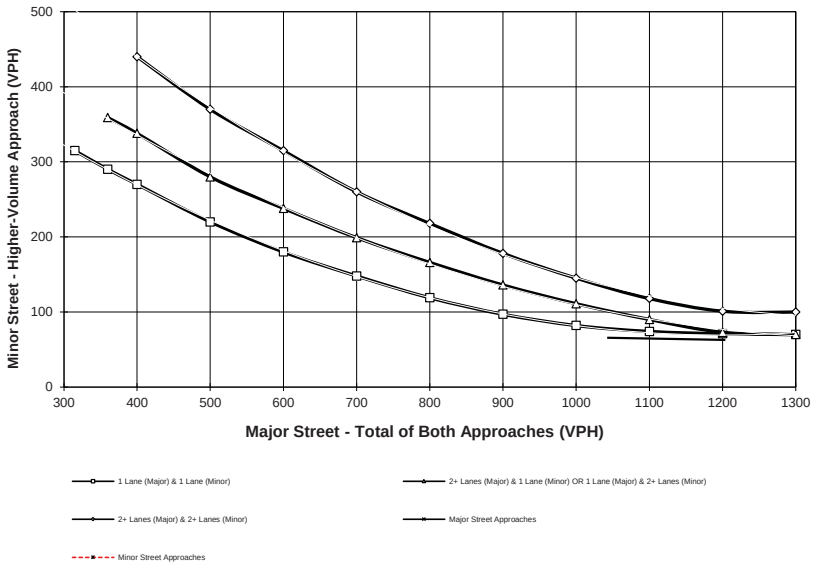
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) AM Peak Hour Warrants**

Major Street Name = **I-15 NB Ramps - Outer Hwy. 15** Total of Both Approaches (VPH) = **226**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Stoddard Wells Rd.** High Volume Approach (VPH) = **135**
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

Intersection ID: #4

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

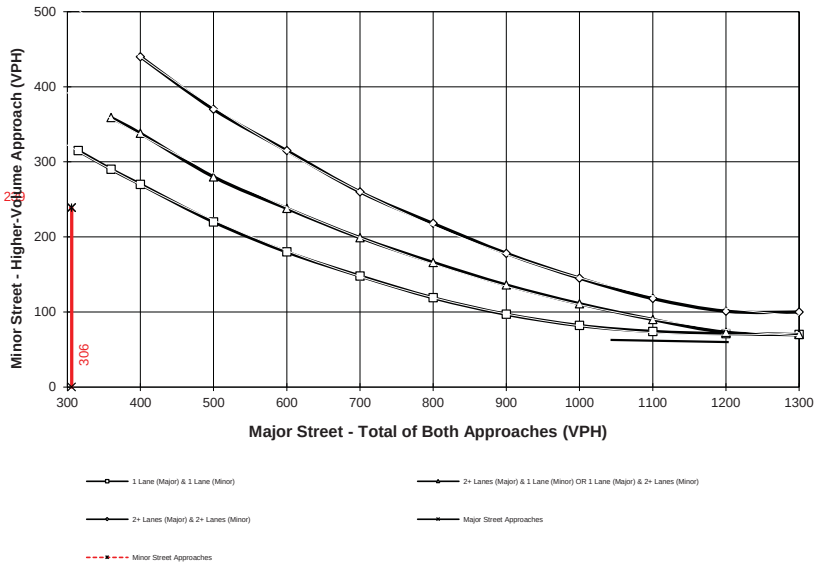
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) PM Peak Hour Warrants**

Major Street Name = **Stoddard Wells Rd.** Total of Both Approaches (VPH) = **306**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **I-15 NB Ramps - Outer Hwy. 15** High Volume Approach (VPH) = **239**
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

Intersection ID: #4

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

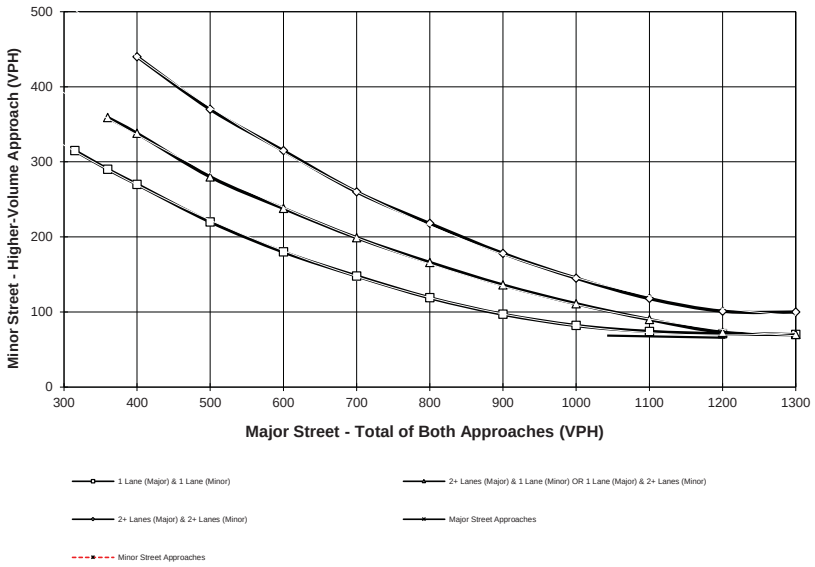
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) AM Peak Hour Warrants**

Major Street Name = **Stoddard Wells Rd.** Total of Both Approaches (VPH) = **165**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Quarry Rd.** High Volume Approach (VPH) = **34**
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

Intersection ID: #5

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

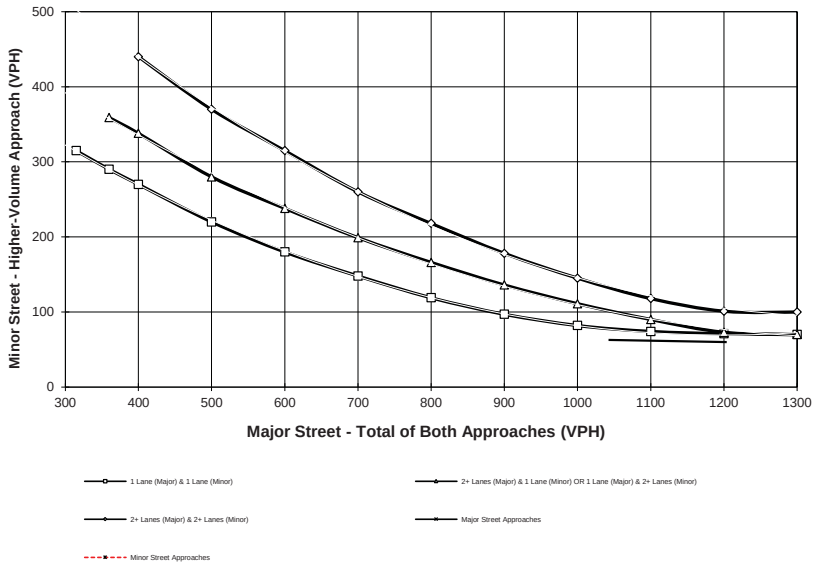
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) PM Peak Hour Warrants**

Major Street Name = **Stoddard Wells Rd.** Total of Both Approaches (VPH) = **257**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Quarry Rd.** High Volume Approach (VPH) = **56**
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

Intersection ID: #5

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

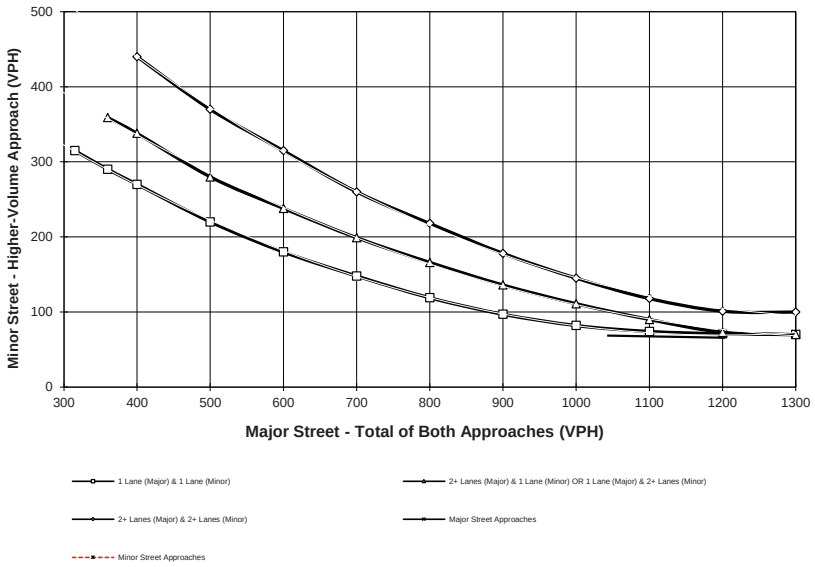
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) AM Peak Hour Warrants**

Major Street Name = **Quarry Rd.** Total of Both Approaches (VPH) = **139**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **I-15 SB Ramps** High Volume Approach (VPH) = **35**
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

Intersection ID: #6

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

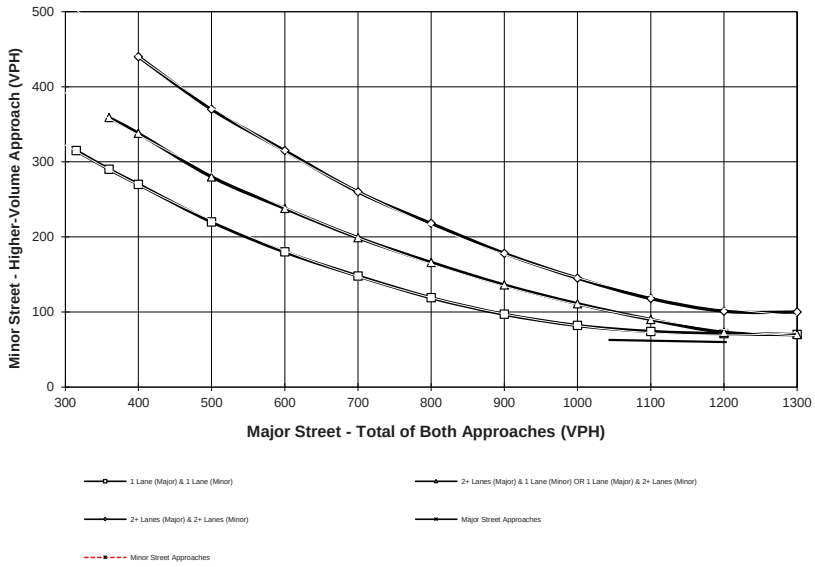
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) PM Peak Hour Warrants**

Major Street Name = **Quarry Rd.** Total of Both Approaches (VPH) = **218**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **I-15 SB Ramps** High Volume Approach (VPH) = **58**
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

Intersection ID: #6

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

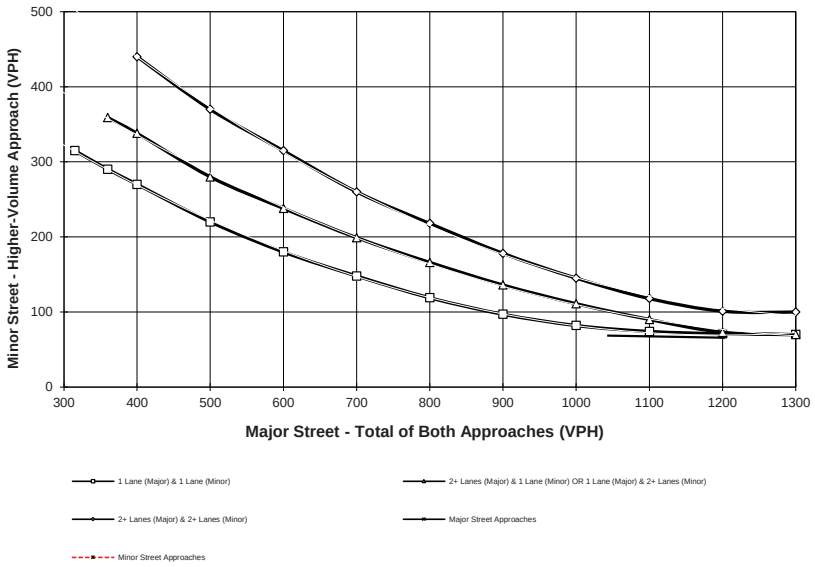
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) AM Peak Hour Warrants**

Major Street Name = **Dale Evans Pkwy.** Total of Both Approaches (VPH) = **213**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Lafayette St.** High Volume Approach (VPH) = **6**
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

Intersection ID: #7

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

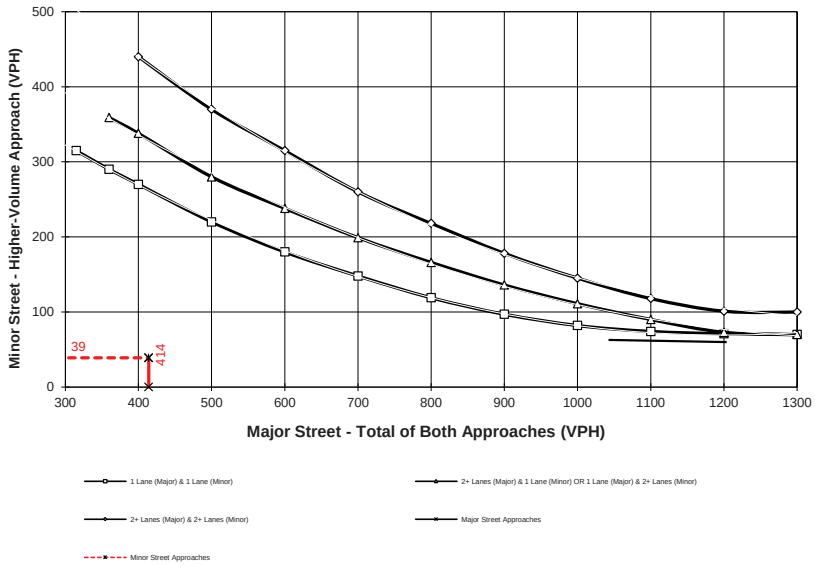
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) PM Peak Hour Warrants**

Major Street Name = **Dale Evans Pkwy.** Total of Both Approaches (VPH) = **414**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Lafayette St.** High Volume Approach (VPH) = **39**
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

Intersection ID: #7

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

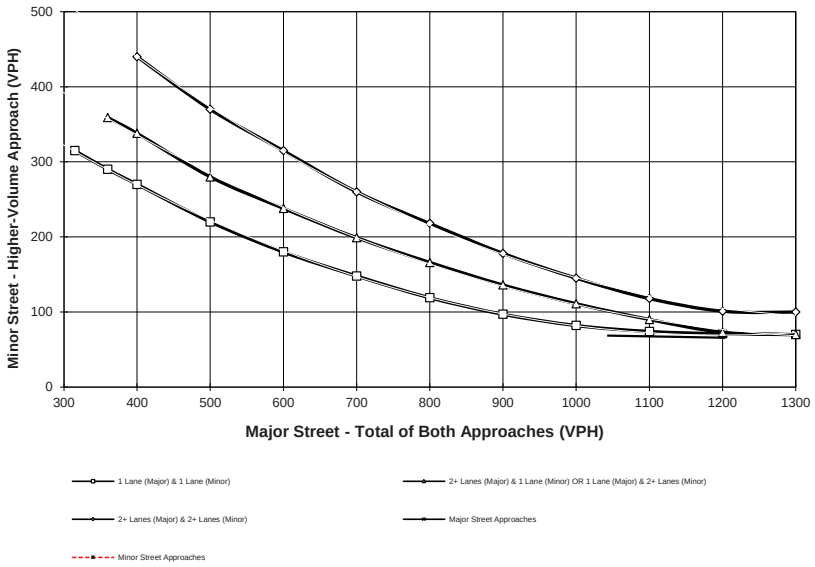
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) AM Peak Hour Warrants**

Major Street Name = **Dale Evans Pkwy.** Total of Both Approaches (VPH) = **205**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Corwin Rd.** High Volume Approach (VPH) = **34**
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

Intersection ID: #8

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\01 - Existing\008R_AM.xls\Fig 4C-4 (Rural Peak)

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

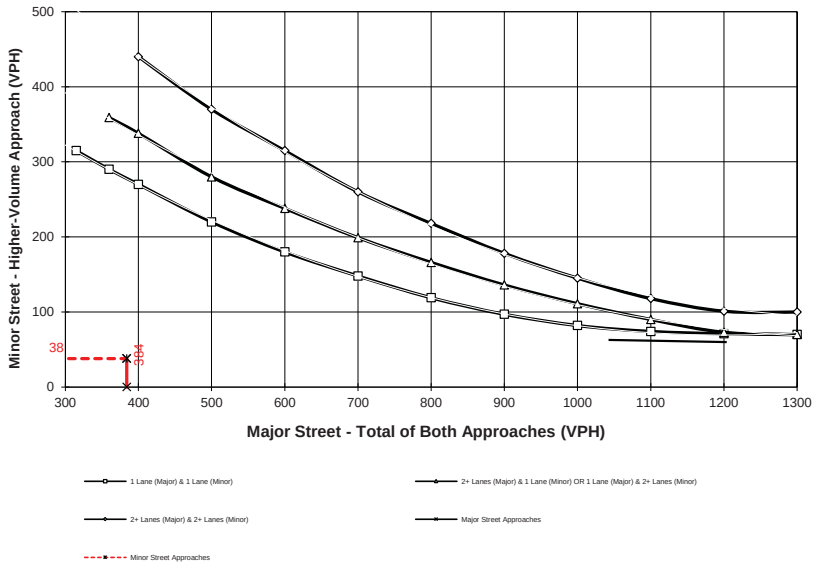
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EXISTING (2023) PM Peak Hour Warrants**

Major Street Name = **Dale Evans Pkwy.** Total of Both Approaches (VPH) = **384**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Corwin Rd.** High Volume Approach (VPH) = **38**
Number of Approach Lanes Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



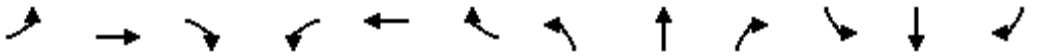
*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Intersection ID: #8

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\01 - Existing\008R_PM.xls\Fig 4C-4 (Rural Peak)

APPENDIX 5.1: OPENING YEAR CUMULATIVE (2025) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

This Page Intentionally Left Blank



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	973	23	4	465	1	6	1	7	1	1	24
Future Volume (vph)	86	973	23	4	465	1	6	1	7	1	1	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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	86	973	23	4	465	1	6	1	7	1	1	24
Future Vol, veh/h	86	973	23	4	465	1	6	1	7	1	1	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	108	1216	29	5	581	1	8	1	9	1	1	30

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	582	0	0	1245	0	0	2054	2039	1231	2044	2053	582
Stage 1	-	-	-	-	-	-	1447	1447	-	592	592	-
Stage 2	-	-	-	-	-	-	607	592	-	1452	1461	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	992	-	-	559	-	-	41	57	216	42	55	513
Stage 1	-	-	-	-	-	-	163	196	-	493	494	-
Stage 2	-	-	-	-	-	-	483	494	-	162	193	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	992	-	-	559	-	-	34	50	216	36	49	513
Mov Cap-2 Maneuver	-	-	-	-	-	-	34	50	-	36	49	-
Stage 1	-	-	-	-	-	-	145	175	-	439	490	-
Stage 2	-	-	-	-	-	-	450	490	-	138	172	-

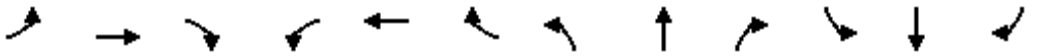
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.1	76.7	19.2
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	34	153	992	-	-	559	-	-	36	372
HCM Lane V/C Ratio	0.221	0.065	0.108	-	-	0.009	-	-	0.035	0.084
HCM Control Delay (s)	138.7	30.2	9.1	-	-	11.5	-	-	108.6	15.6
HCM Lane LOS	F	D	A	-	-	B	-	-	F	C
HCM 95th %tile Q(veh)	0.7	0.2	0.4	-	-	0	-	-	0.1	0.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	973	23	4	465	1	6	1	7	1	1	24
Future Volume (vph)	86	973	23	4	465	1	6	1	7	1	1	24
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	22.5		10.0	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	18.0	87.4		10.0	79.4		22.6	22.6		22.6	22.6	
Total Split (%)	15.0%	72.8%		8.3%	66.2%		18.8%	18.8%		18.8%	18.8%	
Maximum Green (s)	13.5	82.9		5.5	74.9		18.1	18.1		18.1	18.1	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 74.9 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

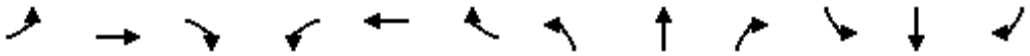
Splits and Phases: 1: Dachshund Rd. & Johnson Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	973	23	4	465	1	6	1	7	1	1	24
Future Volume (veh/h)	86	973	23	4	465	1	6	1	7	1	1	24
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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	91	1024	24	4	489	1	6	1	7	1	1	25
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	1261	30	8	1180	2	228	29	202	244	9	219
Arrive On Green	0.14	1.00	1.00	0.01	0.67	0.67	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1594	1724	40	1594	1768	4	1239	191	1339	1259	58	1452
Grp Volume(v), veh/h	91	0	1048	4	0	490	6	0	8	1	0	26
Grp Sat Flow(s),veh/h/ln	1594	0	1765	1594	0	1771	1239	0	1531	1259	0	1510
Q Serve(g_s), s	6.7	0.0	0.0	0.3	0.0	15.3	0.5	0.0	0.5	0.1	0.0	1.8
Cycle Q Clear(g_c), s	6.7	0.0	0.0	0.3	0.0	15.3	2.3	0.0	0.5	0.6	0.0	1.8
Prop In Lane	1.00		0.02	1.00		0.00	1.00		0.88	1.00		0.96
Lane Grp Cap(c), veh/h	110	0	1291	8	0	1182	228	0	231	244	0	228
V/C Ratio(X)	0.82	0.00	0.81	0.48	0.00	0.41	0.03	0.00	0.03	0.00	0.00	0.11
Avail Cap(c_a), veh/h	179	0	1291	73	0	1182	228	0	231	244	0	228
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.48	0.00	0.48	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.0	0.0	0.0	59.5	0.0	9.2	45.0	0.0	43.5	43.8	0.0	44.0
Incr Delay (d2), s/veh	7.6	0.0	2.8	37.7	0.0	1.1	0.2	0.0	0.3	0.0	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	1.0	0.2	0.0	5.5	0.2	0.0	0.2	0.0	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.6	0.0	2.8	97.2	0.0	10.2	45.2	0.0	43.8	43.8	0.0	45.0
LnGrp LOS	E	A	A	F	A	B	D	A	D	D	A	D
Approach Vol, veh/h		1139			494			14			27	
Approach Delay, s/veh		7.3			11.0			44.4			45.0	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	92.3		22.6	12.8	84.6		22.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	82.9		18.1	13.5	74.9		18.1				
Max Q Clear Time (g_c+I1), s	2.3	2.0		3.8	8.7	17.3		4.3				
Green Ext Time (p_c), s	0.0	11.1		0.1	0.1	3.1		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		9.3	
HCM 6th LOS		A	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	714	110	46	362	87	38	131	141	228	93	8
Future Volume (vph)	20	714	110	46	362	87	38	131	141	228	93	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		165	100		0	325		0
Storage Lanes	0		0	0		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		7616			2660			2620			1074	
Travel Time (s)		115.4			40.3			32.5			13.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	312.9
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	714	110	46	362	87	38	131	141	228	93	8
Future Vol, veh/h	20	714	110	46	362	87	38	131	141	228	93	8
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	768	118	49	389	94	41	141	152	245	100	9
Number of Lanes	0	1	0	0	1	1	1	1	1	1	1	0

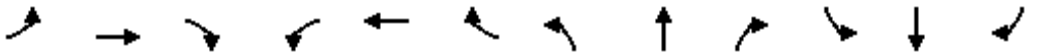
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	644.6	112.8	23	35.9
HCM LOS	F	F	C	E

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	2%	11%	0%	100%	0%
Vol Thru, %	0%	100%	0%	85%	89%	0%	0%	92%
Vol Right, %	0%	0%	100%	13%	0%	100%	0%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	131	141	844	408	87	228	101
LT Vol	38	0	0	20	46	0	228	0
Through Vol	0	131	0	714	362	0	0	93
RT Vol	0	0	141	110	0	87	0	8
Lane Flow Rate	41	141	152	908	439	94	245	109
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.118	0.388	0.388	2.368	1.144	0.224	0.695	0.291
Departure Headway (Hd)	13.893	13.351	12.593	9.808	12.248	11.435	13.674	13.062
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	260	272	288	381	298	316	267	277
Service Time	11.593	11.051	10.293	7.508	9.948	9.135	11.374	10.762
HCM Lane V/C Ratio	0.158	0.518	0.528	2.383	1.473	0.297	0.918	0.394
HCM Control Delay	18.4	24.3	23.1	644.6	133.1	17.4	42.5	21
HCM Lane LOS	C	C	C	F	F	C	E	C
HCM 95th-tile Q	0.4	1.8	1.8	67.6	14.2	0.8	4.7	1.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	714	110	46	362	87	38	131	141	228	93	8
Future Volume (vph)	20	714	110	46	362	87	38	131	141	228	93	8
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Storage Length (ft)	150		0	150		165	100		0	325		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		6652			2660			2620			1074	
Travel Time (s)		100.8			40.3			32.5			13.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Free	Prot	NA	Perm	Prot	NA	
Protected Phases		2			6		3	8		7	4	
Permitted Phases	2			6		Free			8			
Detector Phase	2	2		6	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0	10.0	5.0	10.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		10.0	22.5	22.5	10.0	22.5	
Total Split (s)	73.4	73.4		73.4	73.4		12.0	22.6	22.6	24.0	34.6	
Total Split (%)	61.2%	61.2%		61.2%	61.2%		10.0%	18.8%	18.8%	20.0%	28.8%	
Maximum Green (s)	68.9	68.9		68.9	68.9		7.5	18.1	18.1	19.5	30.1	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	5	5		5	5			5	5		5	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Dale Evans Pkwy. & Johnson Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	714	110	46	362	87	38	131	141	228	93	8
Future Volume (veh/h)	20	714	110	46	362	87	38	131	141	228	93	8
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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	22	768	118	49	389	0	41	141	152	245	100	9
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	908	140	168	1073		50	212	179	259	401	36
Arrive On Green	0.61	0.61	0.61	0.20	0.20	0.00	0.03	0.12	0.12	0.16	0.25	0.25
Sat Flow, veh/h	890	1500	230	561	1772	1502	1594	1772	1502	1594	1602	144
Grp Volume(v), veh/h	22	0	886	49	389	0	41	141	152	245	0	109
Grp Sat Flow(s),veh/h/ln	890	0	1730	561	1772	1502	1594	1772	1502	1594	0	1746
Q Serve(g_s), s	1.8	0.0	49.7	10.1	22.7	0.0	3.1	9.1	11.9	18.3	0.0	6.0
Cycle Q Clear(g_c), s	24.5	0.0	49.7	59.8	22.7	0.0	3.1	9.1	11.9	18.3	0.0	6.0
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	430	0	1048	168	1073		50	212	179	259	0	437
V/C Ratio(X)	0.05	0.00	0.85	0.29	0.36		0.82	0.67	0.85	0.95	0.00	0.25
Avail Cap(c_a), veh/h	430	0	1048	168	1073		100	267	226	259	0	438
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.91	0.91	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	19.1	66.8	28.0	0.0	57.8	50.6	51.8	49.7	0.0	36.0
Incr Delay (d2), s/veh	0.2	0.0	8.4	4.0	0.9	0.0	26.1	4.3	20.8	41.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	19.9	1.7	11.0	0.0	1.6	4.1	5.3	9.9	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	0.0	27.5	70.8	28.9	0.0	83.9	54.8	72.6	91.0	0.0	36.3
LnGrp LOS	C	A	C	E	C		F	D	E	F	A	D
Approach Vol, veh/h		908			438			334			354	
Approach Delay, s/veh		27.4			33.6			66.5			74.2	
Approach LOS		C			C			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		77.2	8.3	34.5		77.2	24.0	18.8				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		68.9	7.5	30.1		68.9	19.5	18.1				
Max Q Clear Time (g_c+I1), s		51.7	5.1	8.0		61.8	20.3	13.9				
Green Ext Time (p_c), s		6.0	0.0	0.4		1.5	0.0	0.4				

Intersection Summary		
HCM 6th Ctrl Delay		43.3
HCM 6th LOS		D

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	407	1	70	842	2	59
Future Volume (vph)	407	1	70	842	2	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	7616		549			661
Travel Time (s)	115.4		8.3			10.0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	40.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	407	1	70	842	2	59
Future Vol, veh/h	407	1	70	842	2	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	496	1	85	1027	2	72

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	675	599	0	0	1112	0
Stage 1	599	-	-	-	-	-
Stage 2	76	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 419	502	-	-	628	-
Stage 1	549	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 418	502	-	-	628	-
Mov Cap-2 Maneuver	~ 418	-	-	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	944	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	136.7	0	0.4
HCM LOS	F		

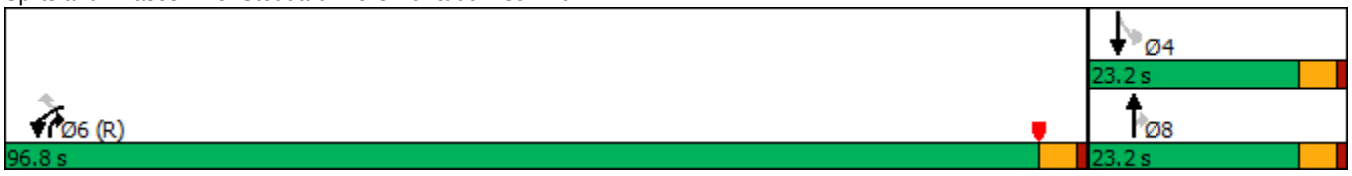
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	418	628	-
HCM Lane V/C Ratio	-	-	1.19	0.004	-
HCM Control Delay (s)	-	-	136.7	10.8	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	19.5	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	407	1	70	842	2	59
Future Volume (vph)	407	1	70	842	2	59
Ideal Flow (vphpl)	1700	1800	1800	1800	1700	1800
Storage Length (ft)	150	0		150	150	
Storage Lanes	1	1		1	1	
Taper Length (ft)	90				90	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	964		549			661
Travel Time (s)	14.6		8.3			10.0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA	pm+ov	Perm	NA
Protected Phases	6		8	6		4
Permitted Phases		6		8	4	
Detector Phase	6	6	8	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	96.8	96.8	23.2	96.8	23.2	23.2
Total Split (%)	80.7%	80.7%	19.3%	80.7%	19.3%	19.3%
Maximum Green (s)	92.3	92.3	18.7	92.3	18.7	18.7
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	Max	C-Max	Max	Max
Walk Time (s)			7.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			5			

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2: and 6:WBL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

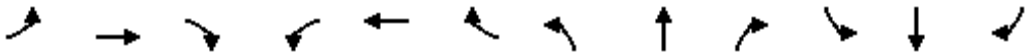
Splits and Phases: 3: Stoddard Wells Rd. & Johnson Rd.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	407	1	70	842	2	59
Future Volume (veh/h)	407	1	70	842	2	59
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1673	1772	1772	1772	1673	1772
Adj Flow Rate, veh/h	496	1	85	1027	2	72
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1226	1155	276	1389	111	276
Arrive On Green	0.77	0.77	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1594	1502	1772	1502	453	1772
Grp Volume(v), veh/h	496	1	85	1027	2	72
Grp Sat Flow(s),veh/h/ln	1594	1502	1772	1502	453	1772
Q Serve(g_s), s	12.5	0.0	5.1	18.7	0.5	4.3
Cycle Q Clear(g_c), s	12.5	0.0	5.1	18.7	5.6	4.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1226	1155	276	1389	111	276
V/C Ratio(X)	0.40	0.00	0.31	0.74	0.02	0.26
Avail Cap(c_a), veh/h	1226	1155	276	1389	111	276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	4.6	3.2	44.9	1.0	47.4	44.6
Incr Delay (d2), s/veh	1.0	0.0	2.9	3.6	0.3	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	2.4	31.9	0.1	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.6	3.2	47.8	4.6	47.7	46.9
LnGrp LOS	A	A	D	A	D	D
Approach Vol, veh/h	497		1112			74
Approach Delay, s/veh	5.6		7.9			46.9
Approach LOS	A		A			D

Timer - Assigned Phs				4		6	8
Phs Duration (G+Y+Rc), s				23.2		96.8	23.2
Change Period (Y+Rc), s				4.5		4.5	4.5
Max Green Setting (Gmax), s				18.7		92.3	18.7
Max Q Clear Time (g_c+I1), s				7.6		14.5	20.7
Green Ext Time (p_c), s				0.2		1.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	131	91	18	632	81	3	49	32	1206	1	16
Future Volume (vph)	4	131	91	18	632	81	3	49	32	1206	1	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3262.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	131	91	18	632	81	3	49	32	1206	1	16
Future Vol, veh/h	4	131	91	18	632	81	3	49	32	1206	1	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	168	117	23	810	104	4	63	41	1546	1	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	914	0	0	285	0	0	1156	1197	227	1197	1203	862
Stage 1	-	-	-	-	-	-	237	237	-	908	908	-
Stage 2	-	-	-	-	-	-	919	960	-	289	295	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	746	-	-	1277	-	-	174	186	812	~ 163	184	355
Stage 1	-	-	-	-	-	-	766	709	-	~ 330	354	-
Stage 2	-	-	-	-	-	-	325	335	-	~ 719	669	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	746	-	-	1277	-	-	157	178	812	~ 109	176	355
Mov Cap-2 Maneuver	-	-	-	-	-	-	157	178	-	~ 109	176	-
Stage 1	-	-	-	-	-	-	760	703	-	~ 327	341	-
Stage 2	-	-	-	-	-	-	294	323	-	~ 617	664	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	29.5	$ 6037.1
HCM LOS			D	F

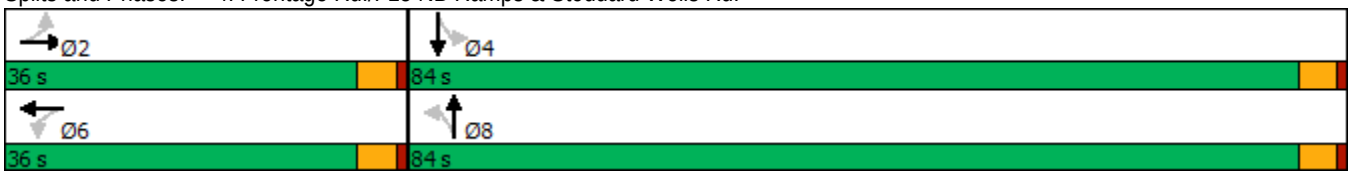
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	252	746	-	-	1277	-	-	110
HCM Lane V/C Ratio	0.427	0.007	-	-	0.018	-	-	14.254
HCM Control Delay (s)	29.5	9.9	0	-	7.9	0	-	$ 6037.1
HCM Lane LOS	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	2	0	-	-	0.1	-	-	185.4

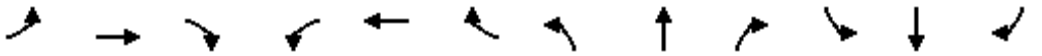
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	131	91	18	632	81	3	49	32	1206	1	16
Future Volume (vph)	4	131	91	18	632	81	3	49	32	1206	1	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	150		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)										49%		
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	14.5	14.5		14.5	14.5		9.5	9.5		9.5	9.5	
Total Split (s)	36.0	36.0		36.0	36.0		84.0	84.0		84.0	84.0	
Total Split (%)	30.0%	30.0%		30.0%	30.0%		70.0%	70.0%		70.0%	70.0%	
Maximum Green (s)	31.5	31.5		31.5	31.5		79.5	79.5		79.5	79.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 140	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 4: Frontage Rd./I-15 NB Ramps & Stoddard Wells Rd.





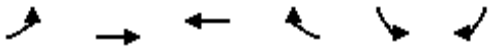
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	131	91	18	632	81	3	49	32	1206	1	16
Future Volume (veh/h)	4	131	91	18	632	81	3	49	32	1206	1	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	168	117	23	810	104	4	63	41	1566	0	0
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	269	188	189	831	107	52	695	438	1851	1239	0
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.66	0.66	0.66	0.66	0.00	0.00
Sat Flow, veh/h	611	1027	715	1094	3167	407	32	1049	661	2580	1870	0
Grp Volume(v), veh/h	5	0	285	23	454	460	108	0	0	1566	0	0
Grp Sat Flow(s),veh/h/ln	611	0	1742	1094	1777	1797	1741	0	0	1290	1870	0
Q Serve(g_s), s	1.0	0.0	17.3	2.3	30.4	30.4	0.0	0.0	0.0	57.3	0.0	0.0
Cycle Q Clear(g_c), s	31.4	0.0	17.3	19.6	30.4	30.4	2.7	0.0	0.0	59.9	0.0	0.0
Prop In Lane	1.00		0.41	1.00		0.23	0.04		0.38	1.00		0.00
Lane Grp Cap(c), veh/h	66	0	457	189	466	472	1185	0	0	1851	1239	0
V/C Ratio(X)	0.08	0.00	0.62	0.12	0.97	0.97	0.09	0.00	0.00	0.85	0.00	0.00
Avail Cap(c_a), veh/h	66	0	457	189	466	472	1185	0	0	1851	1239	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	59.4	0.0	39.0	47.7	43.8	43.8	7.3	0.0	0.0	16.6	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	2.6	0.3	34.9	34.7	0.2	0.0	0.0	5.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	7.5	0.6	17.3	17.5	1.0	0.0	0.0	17.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.9	0.0	41.6	47.9	78.7	78.5	7.4	0.0	0.0	21.5	0.0	0.0
LnGrp LOS	E	A	D	D	E	E	A	A	A	C	A	A
Approach Vol, veh/h		290			937			108			1566	
Approach Delay, s/veh		42.0			77.9			7.4			21.5	
Approach LOS		D			E			A			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		36.0		84.0		36.0		84.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		31.5		79.5		31.5		79.5				
Max Q Clear Time (g_c+I1), s		33.4		61.9		32.4		4.7				
Green Ext Time (p_c), s		0.0		7.6		0.0		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			41.3									
HCM 6th LOS			D									

Notes

User approved volume balancing among the lanes for turning movement.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	6	40	85	566	202	2
Future Volume (vph)	6	40	85	566	202	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			0	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

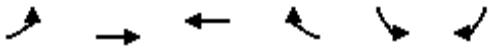
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	40	85	566	202	2
Future Vol, veh/h	6	40	85	566	202	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	51	109	726	259	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	109	0	-	0	539	472
Stage 1	-	-	-	-	472	-
Stage 2	-	-	-	-	67	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1481	-	-	-	503	592
Stage 1	-	-	-	-	628	-
Stage 2	-	-	-	-	956	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1481	-	-	-	500	592
Mov Cap-2 Maneuver	-	-	-	-	500	-
Stage 1	-	-	-	-	624	-
Stage 2	-	-	-	-	956	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	19.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1481	-	-	-	501
HCM Lane V/C Ratio	0.005	-	-	-	0.522
HCM Control Delay (s)	7.4	0	-	-	19.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	3



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	6	40	85	566	202	2
Future Volume (vph)	6	40	85	566	202	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			1	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

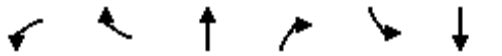
Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	40	85	566	202	2
Future Vol, veh/h	6	40	85	566	202	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	51	109	726	259	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	835	0	-	0	176	109
Stage 1	-	-	-	-	109	-
Stage 2	-	-	-	-	67	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	798	-	-	-	814	945
Stage 1	-	-	-	-	916	-
Stage 2	-	-	-	-	956	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	798	-	-	-	806	945
Mov Cap-2 Maneuver	-	-	-	-	806	-
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	956	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	798	-	-	-	807
HCM Lane V/C Ratio	0.01	-	-	-	0.324
HCM Control Delay (s)	9.6	0	-	-	11.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	1.4



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	203	2	2	570	4	1
Future Volume (vph)	203	2	2	570	4	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	203	2	2	570	4	1
Future Vol, veh/h	203	2	2	570	4	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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	248	2	2	695	5	1

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	361	350	0	0	697	0
Stage 1	350	-	-	-	-	-
Stage 2	11	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	638	693	-	-	899	-
Stage 1	713	-	-	-	-	-
Stage 2	1012	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	634	693	-	-	899	-
Mov Cap-2 Maneuver	634	-	-	-	-	-
Stage 1	713	-	-	-	-	-
Stage 2	1006	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.3	0	7.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	635	899	-
HCM Lane V/C Ratio	-	-	0.394	0.005	-
HCM Control Delay (s)	-	-	14.3	9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.9	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	203	2	2	570	4	1
Future Volume (vph)	203	2	2	570	4	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		150	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	90				90	
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	203	2	2	570	4	1
Future Vol, veh/h	203	2	2	570	4	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	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	248	2	2	695	5	1

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	13	2	0	0	697	0
Stage 1	2	-	-	-	-	-
Stage 2	11	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1006	1082	-	-	899	-
Stage 1	1021	-	-	-	-	-
Stage 2	1012	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1000	1082	-	-	899	-
Mov Cap-2 Maneuver	1000	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1006	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	7.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1001	899	-
HCM Lane V/C Ratio	-	-	0.25	0.005	-
HCM Control Delay (s)	-	-	9.8	9	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	34	276	22	121	128
Future Volume (vph)	10	34	276	22	121	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		400	415	
Storage Lanes	1	0		1	1	
Taper Length (ft)	90				90	
Link Speed (mph)	45		55			55
Link Distance (ft)	304		1385			2620
Travel Time (s)	4.6		17.2			32.5
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

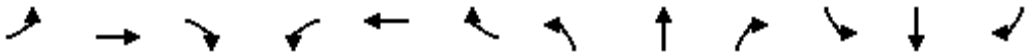
Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	34	276	22	121	128
Future Vol, veh/h	10	34	276	22	121	128
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	-	-	400	415	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	39	317	25	139	147

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	742	317	0	0	342	0
Stage 1	317	-	-	-	-	-
Stage 2	425	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	383	724	-	-	1217	-
Stage 1	738	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	339	724	-	-	1217	-
Mov Cap-2 Maneuver	339	-	-	-	-	-
Stage 1	738	-	-	-	-	-
Stage 2	584	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	4.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	575	1217	-
HCM Lane V/C Ratio	-	-	0.088	0.114	-
HCM Control Delay (s)	-	-	11.9	8.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.4	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	13	1	18	6	2	5	210	19	1	95	58
Future Volume (vph)	136	13	1	18	6	2	5	210	19	1	95	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

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	136	13	1	18	6	2	5	210	19	1	95	58
Future Vol, veh/h	136	13	1	18	6	2	5	210	19	1	95	58
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	149	14	1	20	7	2	5	231	21	1	104	64
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.7	8.5	9.9	8.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	91%	69%	1%
Vol Thru, %	90%	9%	23%	62%
Vol Right, %	8%	1%	8%	38%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	234	150	26	154
LT Vol	5	136	18	1
Through Vol	210	13	6	95
RT Vol	19	1	2	58
Lane Flow Rate	257	165	29	169
Geometry Grp	1	1	1	1
Degree of Util (X)	0.328	0.234	0.042	0.212
Departure Headway (Hd)	4.586	5.117	5.236	4.511
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	782	699	679	792
Service Time	2.628	3.171	3.304	2.558
HCM Lane V/C Ratio	0.329	0.236	0.043	0.213
HCM Control Delay	9.9	9.7	8.5	8.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.4	0.9	0.1	0.8

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	118	6	2	39	3	5
Future Volume (vph)	118	6	2	39	3	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	45	
Link Distance (ft)	787			1189	2650	
Travel Time (s)	11.9			18.0	40.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

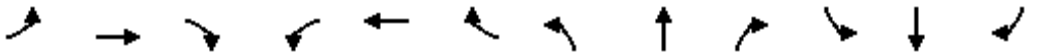
Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	118	6	2	39	3	5
Future Vol, veh/h	118	6	2	39	3	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	128	7	2	42	3	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	135	0	178	132
Stage 1	-	-	-	-	132	-
Stage 2	-	-	-	-	46	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1449	-	812	917
Stage 1	-	-	-	-	894	-
Stage 2	-	-	-	-	976	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1449	-	811	917
Mov Cap-2 Maneuver	-	-	-	-	811	-
Stage 1	-	-	-	-	894	-
Stage 2	-	-	-	-	975	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	874	-	-	1449	-
HCM Lane V/C Ratio	0.01	-	-	0.002	-
HCM Control Delay (s)	9.2	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	612	165	30	907	1	158	1	28	1	1	75
Future Volume (vph)	38	612	165	30	907	1	158	1	28	1	1	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2218.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	612	165	30	907	1	158	1	28	1	1	75
Future Vol, veh/h	38	612	165	30	907	1	158	1	28	1	1	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	58	927	250	45	1374	2	239	2	42	2	2	114

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1376	0	0	1177	0	0	2691	2634	1052	2655	2758	1375
Stage 1	-	-	-	-	-	-	1168	1168	-	1465	1465	-
Stage 2	-	-	-	-	-	-	1523	1466	-	1190	1293	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	498	-	-	593	-	-	~ 14	24	275	15	20	178
Stage 1	-	-	-	-	-	-	~ 236	267	-	160	193	-
Stage 2	-	-	-	-	-	-	~ 148	192	-	229	233	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	498	-	-	593	-	-	~ 4	20	275	10	16	178
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 4	20	-	10	16	-
Stage 1	-	-	-	-	-	-	~ 209	236	-	141	178	-
Stage 2	-	-	-	-	-	-	~ 49	177	-	170	206	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.4	$ 23892.6	78.1
HCM LOS			F	F

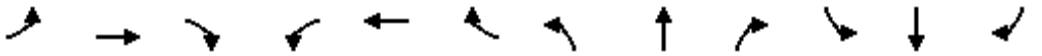
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	4	191	498	-	-	593	-	-	10	157
HCM Lane V/C Ratio	59.848	0.23	0.116	-	-	0.077	-	-	0.152	0.733
HCM Control Delay (s)	$ 28272.5	29.4	13.2	-	-	11.6	-	-	$ 421.1	73.6
HCM Lane LOS	F	D	B	-	-	B	-	-	F	F
HCM 95th %tile Q(veh)	32.2	0.9	0.4	-	-	0.2	-	-	0.4	4.5

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	612	165	30	907	1	158	1	28	1	1	75
Future Volume (vph)	38	612	165	30	907	1	158	1	28	1	1	75
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	22.5		10.0	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	10.0	83.0		10.0	83.0		27.0	27.0		27.0	27.0	
Total Split (%)	8.3%	69.2%		8.3%	69.2%		22.5%	22.5%		22.5%	22.5%	
Maximum Green (s)	5.5	78.5		5.5	78.5		22.5	22.5		22.5	22.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 78.5 (65%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

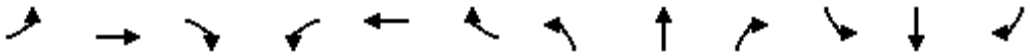
Splits and Phases: 1: Dachshund Rd. & Johnson Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	612	165	30	907	1	158	1	28	1	1	75
Future Volume (veh/h)	38	612	165	30	907	1	158	1	28	1	1	75
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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	40	644	174	32	955	1	166	1	29	1	1	79
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	904	244	44	1184	1	227	9	274	271	4	279
Arrive On Green	0.02	0.45	0.45	0.03	0.67	0.67	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1594	1344	363	1594	1770	2	1180	50	1459	1234	19	1486
Grp Volume(v), veh/h	40	0	818	32	0	956	166	0	30	1	0	80
Grp Sat Flow(s),veh/h/ln	1594	0	1707	1594	0	1772	1180	0	1509	1234	0	1504
Q Serve(g_s), s	3.0	0.0	46.5	2.4	0.0	46.5	16.9	0.0	2.0	0.1	0.0	5.5
Cycle Q Clear(g_c), s	3.0	0.0	46.5	2.4	0.0	46.5	22.3	0.0	2.0	2.1	0.0	5.5
Prop In Lane	1.00		0.21	1.00		0.00	1.00		0.97	1.00		0.99
Lane Grp Cap(c), veh/h	49	0	1148	44	0	1186	227	0	283	271	0	282
V/C Ratio(X)	0.82	0.00	0.71	0.73	0.00	0.81	0.73	0.00	0.11	0.00	0.00	0.28
Avail Cap(c_a), veh/h	73	0	1148	73	0	1186	227	0	283	271	0	282
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.48	0.00	0.48	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.4	0.0	23.6	57.9	0.0	14.3	51.4	0.0	40.4	41.3	0.0	41.8
Incr Delay (d2), s/veh	18.7	0.0	1.8	21.0	0.0	5.9	18.6	0.0	0.8	0.0	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	19.8	1.2	0.0	17.5	6.1	0.0	0.8	0.0	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.2	0.0	25.4	79.0	0.0	20.2	70.0	0.0	41.2	41.3	0.0	44.3
LnGrp LOS	E	A	C	E	A	C	E	A	D	D	A	D
Approach Vol, veh/h		858			988			196			81	
Approach Delay, s/veh		27.8			22.1			65.6			44.3	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	85.2		27.0	8.2	84.8		27.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	78.5		22.5	5.5	78.5		22.5				
Max Q Clear Time (g_c+I1), s	4.4	48.5		7.5	5.0	48.5		24.3				
Green Ext Time (p_c), s	0.0	6.3		0.3	0.0	8.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		29.3	
HCM 6th LOS		C	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	575	96	175	757	208	160	114	109	131	193	18
Future Volume (vph)	12	575	96	175	757	208	160	114	109	131	193	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		165	100		0	325		0
Storage Lanes	0		0	0		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		7616			2660			2620			1074	
Travel Time (s)		115.4			40.3			32.5			13.3	
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	751.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	575	96	175	757	208	160	114	109	131	193	18
Future Vol, veh/h	12	575	96	175	757	208	160	114	109	131	193	18
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	788	132	240	1037	285	219	156	149	179	264	25
Number of Lanes	0	1	0	0	1	1	1	1	1	1	1	0

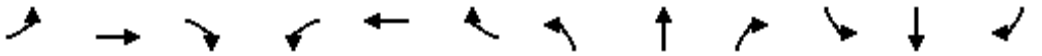
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	919.8	1092.4	43.6	68.6
HCM LOS	F	F	E	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	2%	19%	0%	100%	0%
Vol Thru, %	0%	100%	0%	84%	81%	0%	0%	91%
Vol Right, %	0%	0%	100%	14%	0%	100%	0%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	160	114	109	683	932	208	131	211
LT Vol	160	0	0	12	175	0	131	0
Through Vol	0	114	0	575	757	0	0	193
RT Vol	0	0	109	96	0	208	0	18
Lane Flow Rate	219	156	149	936	1277	285	179	289
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.702	0.478	0.428	2.956	3.856	0.798	0.579	0.888
Departure Headway (Hd)	18.692	18.141	17.369	14.927	15.287	14.411	18.57	17.934
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	195	201	209	253	255	254	197	205
Service Time	16.392	15.841	15.069	12.627	12.987	12.111	16.27	15.634
HCM Lane V/C Ratio	1.123	0.776	0.713	3.7	5.008	1.122	0.909	1.41
HCM Control Delay	56.3	36.4	32.5	919.8	1323.5	56.8	44.1	83.8
HCM Lane LOS	F	E	D	F	F	F	E	F
HCM 95th-tile Q	4.4	2.3	2	63.2	87.9	6	3.2	6.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	575	96	175	757	208	160	114	109	131	193	18
Future Volume (vph)	12	575	96	175	757	208	160	114	109	131	193	18
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Storage Length (ft)	150		0	150		165	100		0	325		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		6652			2660			2620			1074	
Travel Time (s)		100.8			40.3			32.5			13.3	
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Free	Prot	NA	Perm	Prot	NA	
Protected Phases		2			6		3	8		7	4	
Permitted Phases	2			6		Free			8			
Detector Phase	2	2		6	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		5.0	5.0		5.0	10.0	10.0	5.0	10.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		20.0	22.5	22.5	20.0	22.5	
Total Split (s)	77.5	77.5		77.5	77.5		20.0	22.5	22.5	20.0	22.5	
Total Split (%)	64.6%	64.6%		64.6%	64.6%		16.7%	18.8%	18.8%	16.7%	18.8%	
Maximum Green (s)	73.0	73.0		73.0	73.0		15.5	18.0	18.0	15.5	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	5	5		5	5			5	5		5	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Dale Evans Pkwy. & Johnson Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	575	96	175	757	208	160	114	109	131	193	18
Future Volume (veh/h)	12	575	96	175	757	208	160	114	109	131	193	18
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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	16	788	132	240	1037	0	219	156	149	179	264	25
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	356	900	151	391	1078		206	270	229	202	239	23
Arrive On Green	1.00	1.00	1.00	1.00	1.00	0.00	0.13	0.15	0.15	0.13	0.15	0.15
Sat Flow, veh/h	487	1479	248	543	1772	1502	1594	1772	1502	1594	1594	151
Grp Volume(v), veh/h	16	0	920	240	1037	0	219	156	149	179	0	289
Grp Sat Flow(s),veh/h/ln	487	0	1727	543	1772	1502	1594	1772	1502	1594	0	1745
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	15.5	9.8	11.2	13.3	0.0	18.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	15.5	9.8	11.2	13.3	0.0	18.0
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	356	0	1051	391	1078		206	270	229	202	0	262
V/C Ratio(X)	0.04	0.00	0.88	0.61	0.96		1.06	0.58	0.65	0.89	0.00	1.10
Avail Cap(c_a), veh/h	356	0	1051	391	1078		206	270	229	206	0	262
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.50	0.50	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	52.3	47.3	47.9	51.5	0.0	51.0
Incr Delay (d2), s/veh	0.2	0.0	10.2	3.6	12.3	0.0	80.6	3.0	6.4	33.2	0.0	86.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.0	0.4	3.7	0.0	10.5	4.4	4.4	6.9	0.0	13.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.2	0.0	10.2	3.6	12.3	0.0	132.9	50.3	54.3	84.7	0.0	137.5
LnGrp LOS	A	A	B	A	B		F	D	D	F	A	F
Approach Vol, veh/h		936			1277			524			468	
Approach Delay, s/veh		10.0			10.7			86.0			117.3	
Approach LOS		B			B			F			F	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		77.5	20.0	22.5		77.5	19.7	22.8				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		73.0	15.5	18.0		73.0	15.5	18.0				
Max Q Clear Time (g_c+I1), s		2.0	17.5	20.0		2.0	15.3	13.2				
Green Ext Time (p_c), s		8.8	0.0	0.0		16.8	0.0	0.5				

Intersection Summary												
HCM 6th Ctrl Delay			38.4									
HCM 6th LOS			D									

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	934	1	22	681	2	46
Future Volume (vph)	934	1	22	681	2	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	7616		549			661
Travel Time (s)	115.4		8.3			10.0
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	393.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	934	1	22	681	2	46
Future Vol, veh/h	934	1	22	681	2	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1245	1	29	908	3	61

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	550	483	0	0	937	0
Stage 1	483	-	-	-	-	-
Stage 2	67	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 496	584	-	-	731	-
Stage 1	~ 620	-	-	-	-	-
Stage 2	~ 956	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 494	584	-	-	731	-
Mov Cap-2 Maneuver	~ 494	-	-	-	-	-
Stage 1	~ 620	-	-	-	-	-
Stage 2	~ 952	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 709.8	0	0.4
HCM LOS	F		

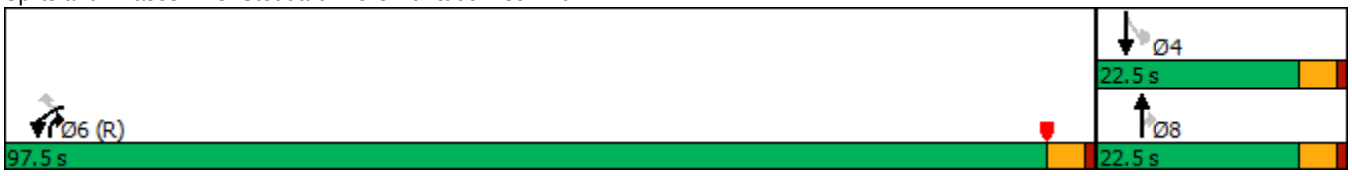
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	494	731	-
HCM Lane V/C Ratio	-	-	2.524	0.004	-
HCM Control Delay (s)	-	-	$ 709.8	9.9	0
HCM Lane LOS	-	-	F	A	A
HCM 95th %tile Q(veh)	-	-	98.8	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	934	1	22	681	2	46
Future Volume (vph)	934	1	22	681	2	46
Ideal Flow (vphpl)	1700	1800	1800	1800	1700	1800
Storage Length (ft)	150	0		150	150	
Storage Lanes	1	1		1	1	
Taper Length (ft)	90				90	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	964		549			661
Travel Time (s)	14.6		8.3			10.0
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA	pm+ov	Perm	NA
Protected Phases	6		8	6		4
Permitted Phases		6		8	4	
Detector Phase	6	6	8	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	97.5	97.5	22.5	97.5	22.5	22.5
Total Split (%)	81.3%	81.3%	18.8%	81.3%	18.8%	18.8%
Maximum Green (s)	93.0	93.0	18.0	93.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	Max	C-Max	Max	Max
Walk Time (s)			7.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			5			

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2: and 6:WBL, Start of Yellow	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	

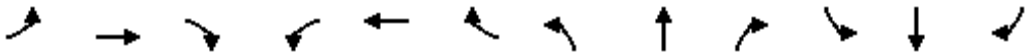
Splits and Phases: 3: Stoddard Wells Rd. & Johnson Rd.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	934	1	22	681	2	46
Future Volume (veh/h)	934	1	22	681	2	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1673	1772	1772	1772	1673	1772
Adj Flow Rate, veh/h	1245	1	29	908	3	61
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1235	1164	266	1389	133	266
Arrive On Green	0.77	0.77	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1594	1502	1772	1502	535	1772
Grp Volume(v), veh/h	1245	1	29	908	3	61
Grp Sat Flow(s),veh/h/ln	1594	1502	1772	1502	535	1772
Q Serve(g_s), s	93.0	0.0	1.7	13.8	0.6	3.6
Cycle Q Clear(g_c), s	93.0	0.0	1.7	13.8	2.3	3.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1235	1164	266	1389	133	266
V/C Ratio(X)	1.01	0.00	0.11	0.65	0.02	0.23
Avail Cap(c_a), veh/h	1235	1164	266	1389	133	266
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.5	3.0	44.1	0.9	45.1	44.9
Incr Delay (d2), s/veh	27.6	0.0	0.8	2.4	0.3	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	31.1	0.0	0.8	27.9	0.1	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.1	3.0	44.9	3.3	45.4	46.9
LnGrp LOS	F	A	D	A	D	D
Approach Vol, veh/h	1246		937			64
Approach Delay, s/veh	41.0		4.6			46.8
Approach LOS	D		A			D

Timer - Assigned Phs				4		6	8
Phs Duration (G+Y+Rc), s				22.5		97.5	22.5
Change Period (Y+Rc), s				4.5		4.5	4.5
Max Green Setting (Gmax), s				18.0		93.0	18.0
Max Q Clear Time (g_c+I1), s				5.6		95.0	15.8
Green Ext Time (p_c), s				0.2		0.0	1.0

Intersection Summary			
HCM 6th Ctrl Delay		26.0	
HCM 6th LOS		C	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	118	77	34	1270	115	3	77	33	923	2	7
Future Volume (vph)	5	118	77	34	1270	115	3	77	33	923	2	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	66

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	118	77	34	1270	115	3	77	33	923	2	7
Future Vol, veh/h	5	118	77	34	1270	115	3	77	33	923	2	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	176	115	51	1896	172	4	115	49	1378	3	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2068	0	0	291	0	0	2339	2418	234	2414	2389	1982
Stage 1	-	-	-	-	-	-	248	248	-	2084	2084	-
Stage 2	-	-	-	-	-	-	2091	2170	-	330	305	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	269	-	-	1271	-	-	26	~ 32	805	~ 23	34	77
Stage 1	-	-	-	-	-	-	756	701	-	~ 69	95	-
Stage 2	-	-	-	-	-	-	69	~ 85	-	~ 683	662	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	269	-	-	1271	-	-	20	~ 31	805	-	33	77
Mov Cap-2 Maneuver	-	-	-	-	-	-	20	~ 31	-	-	33	-
Stage 1	-	-	-	-	-	-	732	679	-	~ 67	95	-
Stage 2	-	-	-	-	-	-	58	~ 85	-	~ 516	641	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	$ 1553.6	
HCM LOS			F	-

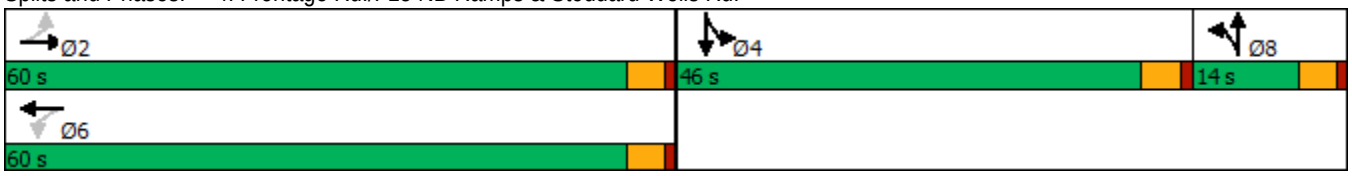
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	42	269	-	-	1271	-	-	-
HCM Lane V/C Ratio	4.016	0.028	-	-	0.04	-	-	-
HCM Control Delay (s)	$ 1553.6	18.8	0	-	8	0	-	-
HCM Lane LOS	F	C	A	-	A	A	-	-
HCM 95th %tile Q(veh)	19.1	0.1	-	-	0.1	-	-	-

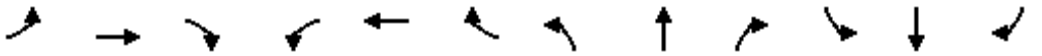
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	118	77	34	1270	115	3	77	33	923	2	7
Future Volume (vph)	5	118	77	34	1270	115	3	77	33	923	2	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	150		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)										49%		
Turn Type	Perm	NA		Perm	NA		Split	NA		Split	NA	
Protected Phases		2			6		8	8		4	4	
Permitted Phases	2			6								
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	14.5	14.5		14.5	14.5		9.5	9.5		9.5	9.5	
Total Split (s)	60.0	60.0		60.0	60.0		14.0	14.0		46.0	46.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		11.7%	11.7%		38.3%	38.3%	
Maximum Green (s)	55.5	55.5		55.5	55.5		9.5	9.5		41.5	41.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 118.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 4: Frontage Rd./I-15 NB Ramps & Stoddard Wells Rd.





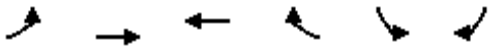
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	118	77	34	1270	115	3	77	33	923	2	7
Future Volume (veh/h)	5	118	77	34	1270	115	3	77	33	923	2	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	128	84	37	1380	125	3	84	36	1012	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	471	309	495	1473	133	4	99	42	1268	666	0
Arrive On Green	0.45	0.45	0.45	0.67	0.67	0.67	0.08	0.08	0.08	0.46	0.00	0.00
Sat Flow, veh/h	348	1054	692	1170	3296	297	43	1212	519	3563	1870	0
Grp Volume(v), veh/h	5	0	212	37	741	764	123	0	0	1012	0	0
Grp Sat Flow(s),veh/h/ln	348	0	1746	1170	1777	1817	1775	0	0	1781	1870	0
Q Serve(g_s), s	1.6	0.0	8.9	1.7	42.8	43.8	8.0	0.0	0.0	28.2	0.0	0.0
Cycle Q Clear(g_c), s	45.4	0.0	8.9	10.6	42.8	43.8	8.0	0.0	0.0	28.2	0.0	0.0
Prop In Lane	1.00		0.40	1.00		0.16	0.02		0.29	1.00		0.00
Lane Grp Cap(c), veh/h	86	0	780	495	794	812	145	0	0	1268	666	0
V/C Ratio(X)	0.06	0.00	0.27	0.07	0.93	0.94	0.85	0.00	0.00	0.80	0.00	0.00
Avail Cap(c_a), veh/h	97	0	831	529	846	865	145	0	0	1268	666	0
HCM Platoon Ratio	1.00	1.00	1.00	1.50	1.50	1.50	1.00	1.00	1.00	1.30	1.30	1.30
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	51.0	0.0	20.3	14.5	17.7	17.9	52.8	0.0	0.0	27.7	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.1	16.5	17.5	43.2	0.0	0.0	5.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	3.5	0.4	14.2	15.0	5.3	0.0	0.0	11.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	0.0	20.5	14.5	34.2	35.4	96.0	0.0	0.0	33.0	0.0	0.0
LnGrp LOS	D	A	C	B	C	D	F	A	A	C	A	A
Approach Vol, veh/h		217			1542			123			1012	
Approach Delay, s/veh		21.2			34.3			96.0			33.0	
Approach LOS		C			C			F			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		56.6		46.0		56.6		14.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		55.5		41.5		55.5		9.5				
Max Q Clear Time (g_c+I1), s		47.4		30.2		45.8		10.0				
Green Ext Time (p_c), s		0.7		3.3		6.3		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			35.5									
HCM 6th LOS			D									

Notes

User approved volume balancing among the lanes for turning movement.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	24	68	1212	177	4
Future Volume (vph)	5	24	68	1212	177	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			0	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	18.9

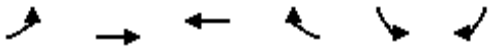
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	24	68	1212	177	4
Future Vol, veh/h	5	24	68	1212	177	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	37	105	1865	272	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	105	0	-	0	1091	1038
Stage 1	-	-	-	-	1038	-
Stage 2	-	-	-	-	53	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1486	-	-	-	~ 238	280
Stage 1	-	-	-	-	341	-
Stage 2	-	-	-	-	970	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1486	-	-	-	~ 237	280
Mov Cap-2 Maneuver	-	-	-	-	~ 237	-
Stage 1	-	-	-	-	339	-
Stage 2	-	-	-	-	970	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	155.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1486	-	-	-	238
HCM Lane V/C Ratio	0.005	-	-	-	1.17
HCM Control Delay (s)	7.4	0	-	-	155.5
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	13.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	24	68	1212	177	4
Future Volume (vph)	5	24	68	1212	177	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			1	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	24	68	1212	177	4
Future Vol, veh/h	5	24	68	1212	177	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	37	105	1865	272	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1970	0	-	0	158	105
Stage 1	-	-	-	-	105	-
Stage 2	-	-	-	-	53	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	294	-	-	-	833	949
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	970	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	294	-	-	-	810	949
Mov Cap-2 Maneuver	-	-	-	-	810	-
Stage 1	-	-	-	-	893	-
Stage 2	-	-	-	-	970	-

Approach	EB	WB	SB
HCM Control Delay, s	3	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	294	-	-	-	813
HCM Lane V/C Ratio	0.026	-	-	-	0.343
HCM Control Delay (s)	17.6	0	-	-	11.7
HCM Lane LOS	C	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.5

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	181	2	1	1216	2	0
Future Volume (vph)	181	2	1	1216	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	11.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	181	2	1	1216	2	0
Future Vol, veh/h	181	2	1	1216	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	278	3	2	1871	3	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	944	938	0	0	1873	0
Stage 1	938	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	291	321	-	-	321	-
Stage 1	381	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	288	321	-	-	321	-
Mov Cap-2 Maneuver	288	-	-	-	-	-
Stage 1	381	-	-	-	-	-
Stage 2	1008	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	86.8	0	16.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	288	321	-
HCM Lane V/C Ratio	-	-	0.978	0.01	-
HCM Control Delay (s)	-	-	86.8	16.3	0
HCM Lane LOS	-	-	F	C	A
HCM 95th %tile Q(veh)	-	-	9.9	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	181	2	1	1216	2	0
Future Volume (vph)	181	2	1	1216	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		150	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	90				90	
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	181	2	1	1216	2	0
Future Vol, veh/h	181	2	1	1216	2	0
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	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	278	3	2	1871	3	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	8	2	0	0	1873	0
Stage 1	2	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1013	1082	-	-	321	-
Stage 1	1021	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1004	1082	-	-	321	-
Mov Cap-2 Maneuver	1004	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1008	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	16.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1005	321	-
HCM Lane V/C Ratio	-	-	0.28	0.01	-
HCM Control Delay (s)	-	-	10	16.3	0
HCM Lane LOS	-	-	B	C	A
HCM 95th %tile Q(veh)	-	-	1.2	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	22	167	216	16	79	386
Future Volume (vph)	22	167	216	16	79	386
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		400	415	
Storage Lanes	1	0		1	1	
Taper Length (ft)	90				90	
Link Speed (mph)	45		55			55
Link Distance (ft)	304		1385			2620
Travel Time (s)	4.6		17.2			32.5
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

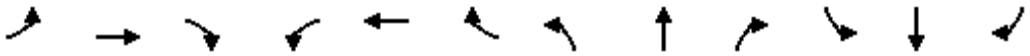
Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	167	216	16	79	386
Future Vol, veh/h	22	167	216	16	79	386
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	-	-	400	415	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	220	284	21	104	508

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1000	284	0	0	305	0
Stage 1	284	-	-	-	-	-
Stage 2	716	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	270	755	-	-	1256	-
Stage 1	764	-	-	-	-	-
Stage 2	484	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	248	755	-	-	1256	-
Mov Cap-2 Maneuver	248	-	-	-	-	-
Stage 1	764	-	-	-	-	-
Stage 2	444	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.9	0	1.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	610	1256	-
HCM Lane V/C Ratio	-	-	0.408	0.083	-
HCM Control Delay (s)	-	-	14.9	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	2	0.3	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	11	2	24	19	2	3	177	11	1	320	151
Future Volume (vph)	79	11	2	24	19	2	3	177	11	1	320	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	20.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	79	11	2	24	19	2	3	177	11	1	320	151
Future Vol, veh/h	79	11	2	24	19	2	3	177	11	1	320	151
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	105	15	3	32	25	3	4	236	15	1	427	201
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.2	10.3	11.5	26.2
HCM LOS	B	B	B	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	86%	53%	0%
Vol Thru, %	93%	12%	42%	68%
Vol Right, %	6%	2%	4%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	191	92	45	472
LT Vol	3	79	24	1
Through Vol	177	11	19	320
RT Vol	11	2	2	151
Lane Flow Rate	255	123	60	629
Geometry Grp	1	1	1	1
Degree of Util (X)	0.375	0.217	0.108	0.828
Departure Headway (Hd)	5.304	6.359	6.453	4.736
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	677	563	553	768
Service Time	3.349	4.419	4.519	2.736
HCM Lane V/C Ratio	0.377	0.218	0.108	0.819
HCM Control Delay	11.5	11.2	10.3	26.2
HCM Lane LOS	B	B	B	D
HCM 95th-tile Q	1.7	0.8	0.4	9.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	52	3	3	114	4	2
Future Volume (vph)	52	3	3	114	4	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45			45	45	
Link Distance (ft)	787			1189	2650	
Travel Time (s)	11.9			18.0	40.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Free			Free	Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	52	3	3	114	4	2
Future Vol, veh/h	52	3	3	114	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	3	3	124	4	2

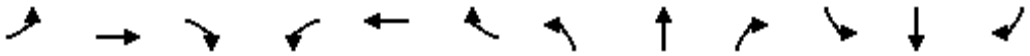
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	60	0	189	59
Stage 1	-	-	-	-	59	-
Stage 2	-	-	-	-	130	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1544	-	800	1007
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	896	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1544	-	798	1007
Mov Cap-2 Maneuver	-	-	-	-	798	-
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	894	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	857	-	-	1544	-
HCM Lane V/C Ratio	0.008	-	-	0.002	-
HCM Control Delay (s)	9.2	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

APPENDIX 5.2: OPENING YEAR CUMULATIVE (2025) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

This Page Intentionally Left Blank



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	973	23	4	465	15	6	1	7	5	1	70
Future Volume (vph)	241	973	23	4	465	15	6	1	7	5	1	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	241	973	23	4	465	15	6	1	7	5	1	70
Future Vol, veh/h	241	973	23	4	465	15	6	1	7	5	1	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	301	1216	29	5	581	19	8	1	9	6	1	88

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	600	0	0	1245	0	0	2478	2443	1231	2439	2448	591
Stage 1	-	-	-	-	-	-	1833	1833	-	601	601	-
Stage 2	-	-	-	-	-	-	645	610	-	1838	1847	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	977	-	-	559	-	-	20	31	216	22	31	507
Stage 1	-	-	-	-	-	-	98	127	-	487	489	-
Stage 2	-	-	-	-	-	-	461	485	-	97	125	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	977	-	-	559	-	-	12	21	216	15	21	507
Mov Cap-2 Maneuver	-	-	-	-	-	-	12	21	-	15	21	-
Stage 1	-	-	-	-	-	-	68	88	-	337	485	-
Stage 2	-	-	-	-	-	-	377	481	-	63	87	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	0.1	249.9	40.1
HCM LOS			F	E

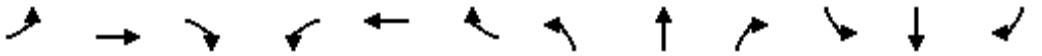
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	12	100	977	-	-	559	-	-	15	382
HCM Lane V/C Ratio	0.625	0.1	0.308	-	-	0.009	-	-	0.417	0.232
HCM Control Delay (s)	$ 523.1	45	10.3	-	-	11.5	-	-	$ 363.2	17.3
HCM Lane LOS	F	E	B	-	-	B	-	-	F	C
HCM 95th %tile Q(veh)	1.4	0.3	1.3	-	-	0	-	-	1.1	0.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	973	23	4	465	15	6	1	7	5	1	70
Future Volume (vph)	241	973	23	4	465	15	6	1	7	5	1	70
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	22.5		10.0	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	35.0	87.2		10.0	62.2		22.8	22.8		22.8	22.8	
Total Split (%)	29.2%	72.7%		8.3%	51.8%		19.0%	19.0%		19.0%	19.0%	
Maximum Green (s)	30.5	82.7		5.5	57.7		18.3	18.3		18.3	18.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

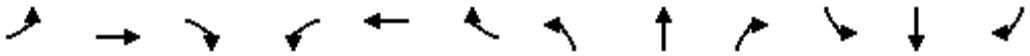
Splits and Phases: 1: Dachshund Rd. & Johnson Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	973	23	4	465	15	6	1	7	5	1	70
Future Volume (veh/h)	241	973	23	4	465	15	6	1	7	5	1	70
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	0.99		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	254	1024	24	4	489	16	6	1	7	5	1	74
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	1258	29	8	958	31	186	29	201	243	3	223
Arrive On Green	0.35	1.00	1.00	0.01	0.56	0.56	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1594	1724	40	1594	1706	56	1170	189	1320	1239	20	1461
Grp Volume(v), veh/h	254	0	1048	4	0	505	6	0	8	5	0	75
Grp Sat Flow(s),veh/h/ln	1594	0	1764	1594	0	1762	1170	0	1508	1239	0	1480
Q Serve(g_s), s	18.3	0.0	0.0	0.3	0.0	21.1	0.6	0.0	0.5	0.4	0.0	5.4
Cycle Q Clear(g_c), s	18.3	0.0	0.0	0.3	0.0	21.1	6.0	0.0	0.5	1.0	0.0	5.4
Prop In Lane	1.00		0.02	1.00		0.03	1.00		0.88	1.00		0.99
Lane Grp Cap(c), veh/h	277	0	1288	8	0	989	186	0	230	243	0	226
V/C Ratio(X)	0.92	0.00	0.81	0.48	0.00	0.51	0.03	0.00	0.03	0.02	0.00	0.33
Avail Cap(c_a), veh/h	405	0	1288	73	0	989	186	0	230	243	0	226
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.32	0.00	0.32	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.4	0.0	0.0	59.5	0.0	16.2	48.1	0.0	43.3	43.7	0.0	45.4
Incr Delay (d2), s/veh	8.0	0.0	1.9	37.7	0.0	1.9	0.3	0.0	0.3	0.2	0.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	0.7	0.2	0.0	8.3	0.2	0.0	0.2	0.1	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.4	0.0	1.9	97.2	0.0	18.1	48.4	0.0	43.6	43.9	0.0	49.3
LnGrp LOS	D	A	A	F	A	B	D	A	D	D	A	D
Approach Vol, veh/h		1302			509			14			80	
Approach Delay, s/veh		10.6			18.7			45.7			49.0	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	92.1		22.8	25.3	71.9		22.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	82.7		18.3	30.5	57.7		18.3				
Max Q Clear Time (g_c+I1), s	2.3	2.0		7.4	20.3	23.1		8.0				
Green Ext Time (p_c), s	0.0	11.1		0.2	0.5	3.1		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		14.6	
HCM 6th LOS		B	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	812	110	63	391	87	38	131	198	228	93	8
Future Volume (vph)	20	812	110	63	391	87	38	131	198	228	93	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		165	100		0	325		0
Storage Lanes	0		0	0		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		7616			2660			2620			1074	
Travel Time (s)		115.4			40.3			32.5			13.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	401
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	812	110	63	391	87	38	131	198	228	93	8
Future Vol, veh/h	20	812	110	63	391	87	38	131	198	228	93	8
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	873	118	68	420	94	41	141	213	245	100	9
Number of Lanes	0	1	0	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	806.8	166.2	28.5	40.5
HCM LOS	F	F	D	E

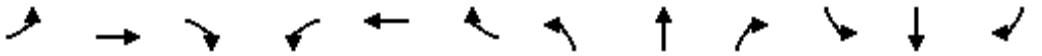
Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	2%	14%	0%	100%	0%
Vol Thru, %	0%	100%	0%	86%	86%	0%	0%	92%
Vol Right, %	0%	0%	100%	12%	0%	100%	0%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	131	198	942	454	87	228	101
LT Vol	38	0	0	20	63	0	228	0
Through Vol	0	131	0	812	391	0	0	93
RT Vol	0	0	198	110	0	87	0	8
Lane Flow Rate	41	141	213	1013	488	94	245	109
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.119	0.391	0.55	2.728	1.299	0.229	0.713	0.299
Departure Headway (Hd)	14.962	14.416	13.651	10.389	13.361	12.523	15.072	14.451
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	241	252	266	365	278	289	243	251
Service Time	12.662	12.116	11.351	8.089	11.061	10.223	12.772	12.151
HCM Lane V/C Ratio	0.17	0.56	0.801	2.775	1.755	0.325	1.008	0.434
HCM Control Delay	19.7	26.1	31.8	806.8	194.4	18.9	48.1	23.2
HCM Lane LOS	C	D	D	F	F	C	E	C
HCM 95th-tile Q	0.4	1.8	3	79.3	17.5	0.9	4.8	1.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	812	110	63	391	87	38	131	198	228	93	8
Future Volume (vph)	20	812	110	63	391	87	38	131	198	228	93	8
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Storage Length (ft)	150		0	150		165	100		0	325		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		6652			2660			2620			1074	
Travel Time (s)		100.8			40.3			32.5			13.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Free	Prot	NA	Perm	Prot	NA	
Protected Phases		2			6		3	8		7	4	
Permitted Phases	2			6		Free			8			
Detector Phase	2	2		6	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0	10.0	5.0	10.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		10.0	22.5	22.5	10.0	22.5	
Total Split (s)	75.5	75.5		75.5	75.5		11.0	22.5	22.5	22.0	33.5	
Total Split (%)	62.9%	62.9%		62.9%	62.9%		9.2%	18.8%	18.8%	18.3%	27.9%	
Maximum Green (s)	71.0	71.0		71.0	71.0		6.5	18.0	18.0	17.5	29.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	5	5		5	5			5	5		5	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 2: Dale Evans Pkwy. & Johnson Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	812	110	63	391	87	38	131	198	228	93	8
Future Volume (veh/h)	20	812	110	63	391	87	38	131	198	228	93	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	22	873	118	68	420	0	41	141	213	245	100	9
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	571	904	122	84	1048		50	266	221	232	423	38
Arrive On Green	0.59	0.59	0.59	1.00	1.00	0.00	0.03	0.15	0.15	0.15	0.26	0.26
Sat Flow, veh/h	864	1527	206	508	1772	1502	1594	1772	1477	1594	1600	144
Grp Volume(v), veh/h	22	0	991	68	420	0	41	141	213	245	0	109
Grp Sat Flow(s),veh/h/ln	864	0	1734	508	1772	1502	1594	1772	1477	1594	0	1744
Q Serve(g_s), s	1.3	0.0	65.4	5.6	0.0	0.0	3.1	8.8	17.2	17.5	0.0	5.9
Cycle Q Clear(g_c), s	1.3	0.0	65.4	71.0	0.0	0.0	3.1	8.8	17.2	17.5	0.0	5.9
Prop In Lane	1.00		0.12	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	571	0	1026	84	1048		50	266	221	232	0	461
V/C Ratio(X)	0.04	0.00	0.97	0.81	0.40		0.82	0.53	0.96	1.05	0.00	0.24
Avail Cap(c_a), veh/h	571	0	1026	84	1048		86	266	221	232	0	461
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.83	0.83	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.3	0.0	23.4	34.5	0.0	0.0	57.8	47.1	50.7	51.3	0.0	34.6
Incr Delay (d2), s/veh	0.1	0.0	21.0	48.7	0.9	0.0	26.2	2.0	49.5	74.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	29.2	3.0	0.3	0.0	1.6	3.9	9.1	11.4	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.4	0.0	44.4	83.2	0.9	0.0	83.9	49.1	100.2	125.2	0.0	34.9
LnGrp LOS	B	A	D	F	A		F	D	F	F	A	C
Approach Vol, veh/h		1013			488			395			354	
Approach Delay, s/veh		43.6			12.4			80.3			97.4	
Approach LOS		D			B			F			F	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		75.5	8.3	36.2		75.5	22.0	22.5				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		71.0	6.5	29.0		71.0	17.5	18.0				
Max Q Clear Time (g_c+I1), s		67.4	5.1	7.9		73.0	19.5	19.2				
Green Ext Time (p_c), s		2.2	0.0	0.4		0.0	0.0	0.0				

Intersection Summary												
HCM 6th Ctrl Delay			51.8									
HCM 6th LOS			D									

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	436	1	70	940	2	59
Future Volume (vph)	436	1	70	940	2	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	7616		549			661
Travel Time (s)	115.4		8.3			10.0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	62.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	436	1	70	940	2	59
Future Vol, veh/h	436	1	70	940	2	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	532	1	85	1146	2	72

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	734	658	0	0	1231	0
Stage 1	658	-	-	-	-	-
Stage 2	76	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 387	464	-	-	566	-
Stage 1	~ 515	-	-	-	-	-
Stage 2	947	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 385	464	-	-	566	-
Mov Cap-2 Maneuver	~ 385	-	-	-	-	-
Stage 1	~ 515	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	216.1	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	385	566	-
HCM Lane V/C Ratio	-	-	1.384	0.004	-
HCM Control Delay (s)	-	-	216.1	11.4	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	26.1	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	436	1	70	940	2	59
Future Volume (vph)	436	1	70	940	2	59
Ideal Flow (vphpl)	1700	1800	1800	1800	1700	1800
Storage Length (ft)	150	0		150	150	
Storage Lanes	1	1		1	1	
Taper Length (ft)	90				90	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	964		549			661
Travel Time (s)	14.6		8.3			10.0
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA	pm+ov	Perm	NA
Protected Phases	6		8	6		4
Permitted Phases		6		8	4	
Detector Phase	6	6	8	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	97.2	97.2	22.8	97.2	22.8	22.8
Total Split (%)	81.0%	81.0%	19.0%	81.0%	19.0%	19.0%
Maximum Green (s)	92.7	92.7	18.3	92.7	18.3	18.3
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	Max	C-Max	Max	Max
Walk Time (s)			7.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			5			

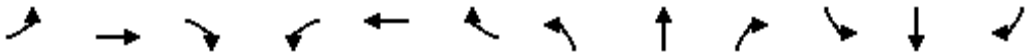
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2: and 6:WBL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Stoddard Wells Rd. & Johnson Rd.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	436	1	70	940	2	59
Future Volume (veh/h)	436	1	70	940	2	59
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1673	1772	1772	1772	1673	1772
Adj Flow Rate, veh/h	532	1	85	1146	2	72
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1231	1160	270	1385	104	270
Arrive On Green	0.77	0.77	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1594	1502	1772	1477	404	1772
Grp Volume(v), veh/h	532	1	85	1146	2	72
Grp Sat Flow(s),veh/h/ln	1594	1502	1772	1477	404	1772
Q Serve(g_s), s	13.7	0.0	5.1	18.3	0.5	4.3
Cycle Q Clear(g_c), s	13.7	0.0	5.1	18.3	5.7	4.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1231	1160	270	1385	104	270
V/C Ratio(X)	0.43	0.00	0.31	0.83	0.02	0.27
Avail Cap(c_a), veh/h	1231	1160	270	1385	104	270
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	4.7	3.1	45.3	1.0	47.8	44.9
Incr Delay (d2), s/veh	1.1	0.0	3.0	5.8	0.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	2.4	36.3	0.1	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.8	3.1	48.3	6.8	48.1	47.3
LnGrp LOS	A	A	D	A	D	D
Approach Vol, veh/h	533		1231			74
Approach Delay, s/veh	5.8		9.7			47.3
Approach LOS	A		A			D

Timer - Assigned Phs				4		6	8
Phs Duration (G+Y+Rc), s				22.8		97.2	22.8
Change Period (Y+Rc), s				4.5		4.5	4.5
Max Green Setting (Gmax), s				18.3		92.7	18.3
Max Q Clear Time (g_c+I1), s				7.7		15.7	20.3
Green Ext Time (p_c), s				0.2		1.7	0.0

Intersection Summary			
HCM 6th Ctrl Delay		10.1	
HCM 6th LOS		B	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	131	91	18	661	81	3	49	32	1304	1	16
Future Volume (vph)	4	131	91	18	661	81	3	49	32	1304	1	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3964.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	131	91	18	661	81	3	49	32	1304	1	16
Future Vol, veh/h	4	131	91	18	661	81	3	49	32	1304	1	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	168	117	23	847	104	4	63	41	1672	1	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	951	0	0	285	0	0	1193	1234	227	1234	1240	899
Stage 1	-	-	-	-	-	-	237	237	-	945	945	-
Stage 2	-	-	-	-	-	-	956	997	-	289	295	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	722	-	-	1277	-	-	164	177	812	~ 153	175	338
Stage 1	-	-	-	-	-	-	766	709	-	~ 314	340	-
Stage 2	-	-	-	-	-	-	310	322	-	~ 719	669	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	722	-	-	1277	-	-	148	169	812	~ 100	167	338
Mov Cap-2 Maneuver	-	-	-	-	-	-	148	169	-	~ 100	167	-
Stage 1	-	-	-	-	-	-	760	703	-	~ 311	327	-
Stage 2	-	-	-	-	-	-	279	309	-	~ 617	664	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	31.7	$ 7174
HCM LOS			D	F

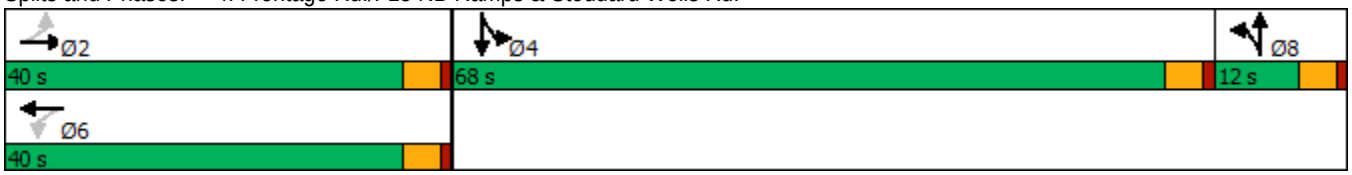
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	240	722	-	-	1277	-	-	101
HCM Lane V/C Ratio	0.449	0.007	-	-	0.018	-	-	16.768
HCM Control Delay (s)	31.7	10	0	-	7.9	0	-	$ 7174
HCM Lane LOS	D	B	A	-	A	A	-	F
HCM 95th %tile Q(veh)	2.2	0	-	-	0.1	-	-	202.2

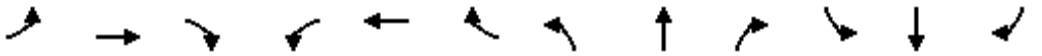
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	131	91	18	661	81	3	49	32	1304	1	16
Future Volume (vph)	4	131	91	18	661	81	3	49	32	1304	1	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	150		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)										49%		
Turn Type	Perm	NA		Perm	NA		Split	NA		Split	NA	
Protected Phases		2			6		8	8		4	4	
Permitted Phases	2			6								
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	14.5	14.5		14.5	14.5		9.5	9.5		9.5	9.5	
Total Split (s)	40.0	40.0		40.0	40.0		12.0	12.0		68.0	68.0	
Total Split (%)	33.3%	33.3%		33.3%	33.3%		10.0%	10.0%		56.7%	56.7%	
Maximum Green (s)	35.5	35.5		35.5	35.5		7.5	7.5		63.5	63.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 119.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 4: Frontage Rd./I-15 NB Ramps & Stoddard Wells Rd.





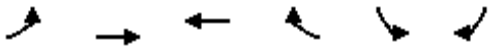
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	131	91	18	661	81	3	49	32	1304	1	16
Future Volume (veh/h)	4	131	91	18	661	81	3	49	32	1304	1	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	168	117	23	847	104	4	63	41	1692	0	0
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	294	205	222	916	113	4	64	42	1906	1001	0
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.06	0.06	0.06	0.54	0.00	0.00
Sat Flow, veh/h	589	1023	712	1089	3182	391	64	1009	657	3563	1870	0
Grp Volume(v), veh/h	5	0	285	23	473	478	108	0	0	1692	0	0
Grp Sat Flow(s),veh/h/ln	589	0	1735	1089	1777	1796	1730	0	0	1781	1870	0
Q Serve(g_s), s	1.0	0.0	16.6	2.2	30.6	30.7	7.4	0.0	0.0	49.9	0.0	0.0
Cycle Q Clear(g_c), s	31.6	0.0	16.6	18.8	30.6	30.7	7.4	0.0	0.0	49.9	0.0	0.0
Prop In Lane	1.00		0.41	1.00		0.22	0.04		0.38	1.00		0.00
Lane Grp Cap(c), veh/h	78	0	500	222	512	517	109	0	0	1906	1001	0
V/C Ratio(X)	0.06	0.00	0.57	0.10	0.92	0.92	0.99	0.00	0.00	0.89	0.00	0.00
Avail Cap(c_a), veh/h	85	0	519	234	532	537	109	0	0	1906	1001	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	56.3	0.0	36.0	44.0	41.0	41.0	55.5	0.0	0.0	24.4	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	1.4	0.2	21.7	21.5	82.8	0.0	0.0	6.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	7.0	0.6	15.9	16.1	5.7	0.0	0.0	21.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.7	0.0	37.4	44.2	62.7	62.5	138.4	0.0	0.0	31.0	0.0	0.0
LnGrp LOS	E	A	D	D	E	E	F	A	A	C	A	A
Approach Vol, veh/h		290			974			108			1692	
Approach Delay, s/veh		37.7			62.2			138.4			31.0	
Approach LOS		D			E			F			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		38.7		68.0		38.7		12.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		35.5		63.5		35.5		7.5				
Max Q Clear Time (g_c+I1), s		33.6		51.9		32.7		9.4				
Green Ext Time (p_c), s		0.3		6.1		1.5		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			45.3									
HCM 6th LOS			D									

Notes

User approved volume balancing among the lanes for turning movement.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	6	40	85	595	202	2
Future Volume (vph)	6	40	85	595	202	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			0	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

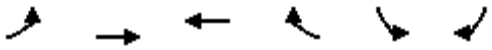
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	40	85	595	202	2
Future Vol, veh/h	6	40	85	595	202	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	51	109	763	259	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	109	0	-	0	558	491
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	67	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1481	-	-	-	491	578
Stage 1	-	-	-	-	615	-
Stage 2	-	-	-	-	956	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1481	-	-	-	488	578
Mov Cap-2 Maneuver	-	-	-	-	488	-
Stage 1	-	-	-	-	611	-
Stage 2	-	-	-	-	956	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	20.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1481	-	-	-	489
HCM Lane V/C Ratio	0.005	-	-	-	0.535
HCM Control Delay (s)	7.4	0	-	-	20.5
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	3.1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	6	40	85	595	202	2
Future Volume (vph)	6	40	85	595	202	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			1	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	40	85	595	202	2
Future Vol, veh/h	6	40	85	595	202	2
Conflicting Peds, #/hr	5	0	0	5	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	51	109	763	259	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	877	0	-	0	186	119
Stage 1	-	-	-	-	114	-
Stage 2	-	-	-	-	72	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	770	-	-	-	803	933
Stage 1	-	-	-	-	911	-
Stage 2	-	-	-	-	951	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	766	-	-	-	786	924
Mov Cap-2 Maneuver	-	-	-	-	786	-
Stage 1	-	-	-	-	896	-
Stage 2	-	-	-	-	946	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	766	-	-	-	787
HCM Lane V/C Ratio	0.01	-	-	-	0.332
HCM Control Delay (s)	9.7	0	-	-	11.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	1.5

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	203	2	2	599	4	1
Future Volume (vph)	203	2	2	599	4	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	203	2	2	599	4	1
Future Vol, veh/h	203	2	2	599	4	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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	248	2	2	730	5	1

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	378	367	0	0	732	0
Stage 1	367	-	-	-	-	-
Stage 2	11	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	624	678	-	-	873	-
Stage 1	701	-	-	-	-	-
Stage 2	1012	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	620	678	-	-	873	-
Mov Cap-2 Maneuver	620	-	-	-	-	-
Stage 1	701	-	-	-	-	-
Stage 2	1006	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.6	0	7.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	621	873	-
HCM Lane V/C Ratio	-	-	0.403	0.006	-
HCM Control Delay (s)	-	-	14.6	9.1	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.9	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	203	2	2	599	4	1
Future Volume (vph)	203	2	2	599	4	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		150	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	90				90	
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	203	2	2	599	4	1
Future Vol, veh/h	203	2	2	599	4	1
Conflicting Peds, #/hr	5	5	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	248	2	2	730	5	1

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	23	12	0	0	737	0
Stage 1	7	-	-	-	-	-
Stage 2	16	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	993	1069	-	-	869	-
Stage 1	1016	-	-	-	-	-
Stage 2	1007	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	977	1059	-	-	865	-
Mov Cap-2 Maneuver	977	-	-	-	-	-
Stage 1	1011	-	-	-	-	-
Stage 2	996	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	7.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	978	865	-
HCM Lane V/C Ratio	-	-	0.256	0.006	-
HCM Control Delay (s)	-	-	9.9	9.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	1	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	34	333	22	121	145
Future Volume (vph)	10	34	333	22	121	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		400	415	
Storage Lanes	1	0		1	1	
Taper Length (ft)	90				90	
Link Speed (mph)	45		55			55
Link Distance (ft)	304		1385			2620
Travel Time (s)	4.6		17.2			32.5
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

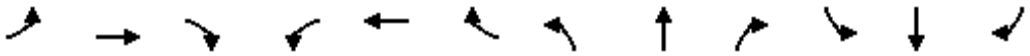
Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	34	333	22	121	145
Future Vol, veh/h	10	34	333	22	121	145
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	-	-	400	415	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	39	383	25	139	167

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	828	383	0	0	408	0
Stage 1	383	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	341	664	-	-	1151	-
Stage 1	689	-	-	-	-	-
Stage 2	646	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	300	664	-	-	1151	-
Mov Cap-2 Maneuver	300	-	-	-	-	-
Stage 1	689	-	-	-	-	-
Stage 2	568	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.7	0	3.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	520	1151	-
HCM Lane V/C Ratio	-	-	0.097	0.121	-
HCM Control Delay (s)	-	-	12.7	8.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.4	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	166	13	1	18	6	2	5	237	19	1	103	67
Future Volume (vph)	166	13	1	18	6	2	5	237	19	1	103	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

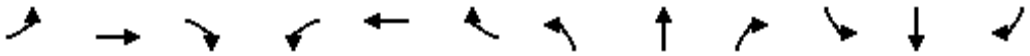
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	166	13	1	18	6	2	5	237	19	1	103	67
Future Vol, veh/h	166	13	1	18	6	2	5	237	19	1	103	67
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	182	14	1	20	7	2	5	260	21	1	113	74
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.5	8.8	10.6	9.2
HCM LOS	B	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	92%	69%	1%
Vol Thru, %	91%	7%	23%	60%
Vol Right, %	7%	1%	8%	39%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	261	180	26	171
LT Vol	5	166	18	1
Through Vol	237	13	6	103
RT Vol	19	1	2	67
Lane Flow Rate	287	198	29	188
Geometry Grp	1	1	1	1
Degree of Util (X)	0.376	0.288	0.043	0.243
Departure Headway (Hd)	4.717	5.245	5.425	4.647
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	757	680	653	767
Service Time	2.775	3.319	3.521	2.71
HCM Lane V/C Ratio	0.379	0.291	0.044	0.245
HCM Control Delay	10.6	10.5	8.8	9.2
HCM Lane LOS	B	B	A	A
HCM 95th-tile Q	1.8	1.2	0.1	1



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	133	6	21	44	1	3	107	68	1	32	3
Future Volume (vph)	10	133	6	21	44	1	3	107	68	1	32	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		787			1189			2650			316	
Travel Time (s)		11.9			18.0			40.2			4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	133	6	21	44	1	3	107	68	1	32	3
Future Vol, veh/h	10	133	6	21	44	1	3	107	68	1	32	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	145	7	23	48	1	3	116	74	1	35	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	49	0	0	152	0	0	285	266	149	361	269	49
Stage 1	-	-	-	-	-	-	171	171	-	95	95	-
Stage 2	-	-	-	-	-	-	114	95	-	266	174	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1558	-	-	1429	-	-	667	640	898	595	637	1020
Stage 1	-	-	-	-	-	-	831	757	-	912	816	-
Stage 2	-	-	-	-	-	-	891	816	-	739	755	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1558	-	-	1429	-	-	624	624	898	459	621	1020
Mov Cap-2 Maneuver	-	-	-	-	-	-	624	624	-	459	621	-
Stage 1	-	-	-	-	-	-	824	751	-	905	802	-
Stage 2	-	-	-	-	-	-	835	802	-	569	749	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	2.4	12	11
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	706	1558	-	-	1429	-	-	635
HCM Lane V/C Ratio	0.274	0.007	-	-	0.016	-	-	0.062
HCM Control Delay (s)	12	7.3	0	-	7.6	0	-	11
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.1	0	-	-	0	-	-	0.2

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	0	0	26	0	0
Future Volume (vph)	8	0	0	26	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	335		269			195
Travel Time (s)	7.6		4.1			3.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

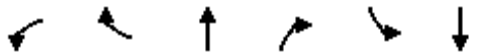
Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	0	0	26	0	0
Future Vol, veh/h	8	0	0	26	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	0	0	28	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	15	14	0	0	28	0
Stage 1	14	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1004	1066	-	-	1585	-
Stage 1	1009	-	-	-	-	-
Stage 2	1022	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1004	1066	-	-	1585	-
Mov Cap-2 Maneuver	1004	-	-	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	1022	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1004	1585	-
HCM Lane V/C Ratio	-	-	0.009	-	-
HCM Control Delay (s)	-	-	8.6	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	0	26	27	0	8
Future Volume (vph)	8	0	26	27	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	313		1795			269
Travel Time (s)	7.1		27.2			4.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	0	26	27	0	8
Future Vol, veh/h	8	0	26	27	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	0	28	29	0	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	52	43	0	0	57	0
Stage 1	43	-	-	-	-	-
Stage 2	9	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	957	1027	-	-	1547	-
Stage 1	979	-	-	-	-	-
Stage 2	1014	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	957	1027	-	-	1547	-
Mov Cap-2 Maneuver	957	-	-	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	1014	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	957	1547	-
HCM Lane V/C Ratio	-	-	0.009	-	-
HCM Control Delay (s)	-	-	8.8	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	11	1	53	38	1	16
Future Volume (vph)	11	1	53	38	1	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	333		257			1795
Travel Time (s)	7.6		3.9			27.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	1	53	38	1	16
Future Vol, veh/h	11	1	53	38	1	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	1	58	41	1	17

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	98	79	0	0	99	0
Stage 1	79	-	-	-	-	-
Stage 2	19	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	901	981	-	-	1494	-
Stage 1	944	-	-	-	-	-
Stage 2	1004	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	900	981	-	-	1494	-
Mov Cap-2 Maneuver	900	-	-	-	-	-
Stage 1	944	-	-	-	-	-
Stage 2	1003	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	906	1494	-
HCM Lane V/C Ratio	-	-	0.014	0.001	-
HCM Control Delay (s)	-	-	9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	1	91	26	1	27
Future Volume (vph)	8	1	91	26	1	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	340		316			257
Travel Time (s)	7.7		4.8			3.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

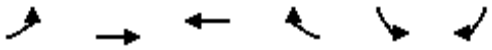
Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	1	91	26	1	27
Future Vol, veh/h	8	1	91	26	1	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	1	99	28	1	29

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	144	113	0	0	127	0
Stage 1	113	-	-	-	-	-
Stage 2	31	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	849	940	-	-	1459	-
Stage 1	912	-	-	-	-	-
Stage 2	992	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	848	940	-	-	1459	-
Mov Cap-2 Maneuver	848	-	-	-	-	-
Stage 1	912	-	-	-	-	-
Stage 2	991	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	857	1459	-
HCM Lane V/C Ratio	-	-	0.011	0.001	-
HCM Control Delay (s)	-	-	9.2	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	43	143	46	1	1	13
Future Volume (vph)	43	143	46	1	1	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45	45		30	
Link Distance (ft)		1189	461		387	
Travel Time (s)		18.0	7.0		8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

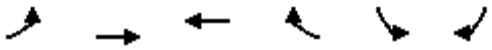
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	43	143	46	1	1	13
Future Vol, veh/h	43	143	46	1	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	155	50	1	1	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	51	0	-	0	300	51
Stage 1	-	-	-	-	51	-
Stage 2	-	-	-	-	249	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1555	-	-	-	691	1017
Stage 1	-	-	-	-	971	-
Stage 2	-	-	-	-	792	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1555	-	-	-	668	1017
Mov Cap-2 Maneuver	-	-	-	-	668	-
Stage 1	-	-	-	-	939	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1555	-	-	-	980
HCM Lane V/C Ratio	0.03	-	-	-	0.016
HCM Control Delay (s)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	108	36	1	1	10
Future Volume (vph)	35	108	36	1	1	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45	45		30	
Link Distance (ft)		461	686		374	
Travel Time (s)		7.0	10.4		8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

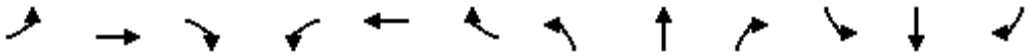
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	35	108	36	1	1	10
Future Vol, veh/h	35	108	36	1	1	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	117	39	1	1	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	40	0	-	0	233	40
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	193	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1570	-	-	-	755	1031
Stage 1	-	-	-	-	982	-
Stage 2	-	-	-	-	840	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1570	-	-	-	735	1031
Mov Cap-2 Maneuver	-	-	-	-	735	-
Stage 1	-	-	-	-	956	-
Stage 2	-	-	-	-	840	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1570	-	-	-	995
HCM Lane V/C Ratio	0.024	-	-	-	0.012
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	612	165	30	907	7	158	1	28	19	1	267
Future Volume (vph)	112	612	165	30	907	7	158	1	28	19	1	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	114.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	112	612	165	30	907	7	158	1	28	19	1	267
Future Vol, veh/h	112	612	165	30	907	7	158	1	28	19	1	267
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	66	66	66	66	66	66	66	66	66	66	66	66
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	170	927	250	45	1374	11	239	2	42	29	2	405

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1385	0	0	1177	0	0	3065	2867	1052	2884	2987	1380
Stage 1	-	-	-	-	-	-	1392	1392	-	1470	1470	-
Stage 2	-	-	-	-	-	-	1673	1475	-	1414	1517	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	494	-	-	593	-	-	~ 8	17	275	~ 10	14	~ 177
Stage 1	-	-	-	-	-	-	~ 176	209	-	158	191	-
Stage 2	-	-	-	-	-	-	~ 121	190	-	171	182	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	494	-	-	593	-	-	-	10	275	~ 5	8	~ 177
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	10	-	~ 5	8	-
Stage 1	-	-	-	-	-	-	~ 115	137	-	104	176	-
Stage 2	-	-	-	-	-	-	-	176	-	94	119	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2	0.4		$ 911.8
HCM LOS			-	F

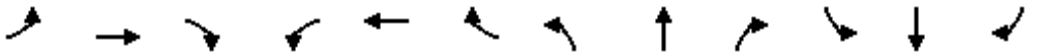
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	144	494	-	-	593	-	-	5	164
HCM Lane V/C Ratio	-	0.305	0.344	-	-	0.077	-	-	5.758	2.476
HCM Control Delay (s)	-	40.6	16.1	-	-	11.6	-	-	$ 3530.8	$ 726.1
HCM Lane LOS	-	E	C	-	-	B	-	-	F	F
HCM 95th %tile Q(veh)	-	1.2	1.5	-	-	0.2	-	-	5.1	34.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	612	165	30	907	7	158	1	28	19	1	267
Future Volume (vph)	112	612	165	30	907	7	158	1	28	19	1	267
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	22.5		10.0	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	14.0	73.6		10.0	69.6		36.4	36.4		36.4	36.4	
Total Split (%)	11.7%	61.3%		8.3%	58.0%		30.3%	30.3%		30.3%	30.3%	
Maximum Green (s)	9.5	69.1		5.5	65.1		31.9	31.9		31.9	31.9	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 65.1 (54%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	

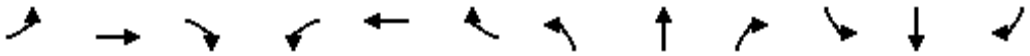
Splits and Phases: 1: Dachshund Rd. & Johnson Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	612	165	30	907	7	158	1	28	19	1	267
Future Volume (veh/h)	112	612	165	30	907	7	158	1	28	19	1	267
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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	118	644	174	32	955	7	166	1	29	20	1	281
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	126	799	216	44	953	7	154	13	388	370	1	398
Arrive On Green	0.08	0.59	0.59	0.03	0.54	0.54	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1594	1344	363	1594	1757	13	982	50	1459	1234	5	1497
Grp Volume(v), veh/h	118	0	818	32	0	962	166	0	30	20	0	282
Grp Sat Flow(s),veh/h/ln	1594	0	1707	1594	0	1770	982	0	1509	1234	0	1502
Q Serve(g_s), s	8.8	0.0	44.8	2.4	0.0	65.1	11.5	0.0	1.8	1.5	0.0	20.4
Cycle Q Clear(g_c), s	8.8	0.0	44.8	2.4	0.0	65.1	31.9	0.0	1.8	3.3	0.0	20.4
Prop In Lane	1.00		0.21	1.00		0.01	1.00		0.97	1.00		1.00
Lane Grp Cap(c), veh/h	126	0	1014	44	0	960	154	0	401	370	0	399
V/C Ratio(X)	0.94	0.00	0.81	0.73	0.00	1.00	1.07	0.00	0.07	0.05	0.00	0.71
Avail Cap(c_a), veh/h	126	0	1014	73	0	960	154	0	401	370	0	399
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.43	0.00	0.43	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.9	0.0	19.0	57.9	0.0	27.5	56.5	0.0	33.0	34.2	0.0	39.8
Incr Delay (d2), s/veh	35.7	0.0	3.1	21.0	0.0	29.5	93.8	0.0	0.4	0.3	0.0	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	16.5	1.2	0.0	32.4	8.7	0.0	0.7	0.5	0.0	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.7	0.0	22.0	79.0	0.0	57.0	150.3	0.0	33.4	34.5	0.0	49.9
LnGrp LOS	F	A	C	E	A	F	F	A	C	C	A	D
Approach Vol, veh/h		936			994			196			302	
Approach Delay, s/veh		30.7			57.7			132.4			48.9	
Approach LOS		C			E			F			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	75.8		36.4	14.0	69.6		36.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	69.1		31.9	9.5	65.1		31.9				
Max Q Clear Time (g_c+I1), s	4.4	46.8		22.4	10.8	67.1		33.9				
Green Ext Time (p_c), s	0.0	5.8		1.3	0.0	0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		52.2	
HCM 6th LOS		D	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	622	96	246	878	208	160	114	136	131	193	18
Future Volume (vph)	12	622	96	246	878	208	160	114	136	131	193	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		165	100		0	325		0
Storage Lanes	0		0	0		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		7616			2660			2620			1074	
Travel Time (s)		115.4			40.3			32.5			13.3	
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	971.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	622	96	246	878	208	160	114	136	131	193	18
Future Vol, veh/h	12	622	96	246	878	208	160	114	136	131	193	18
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	852	132	337	1203	285	219	156	186	179	264	25
Number of Lanes	0	1	0	0	1	1	1	1	1	1	1	0

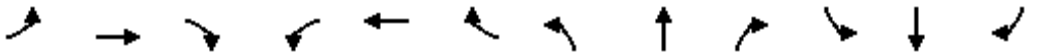
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	1034.3	1453.1	47.3	72.3
HCM LOS	F	F	E	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	2%	22%	0%	100%	0%
Vol Thru, %	0%	100%	0%	85%	78%	0%	0%	91%
Vol Right, %	0%	0%	100%	13%	0%	100%	0%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	160	114	136	730	1124	208	131	211
LT Vol	160	0	0	12	246	0	131	0
Through Vol	0	114	0	622	878	0	0	193
RT Vol	0	0	136	96	0	208	0	18
Lane Flow Rate	219	156	186	1000	1540	285	179	289
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.703	0.479	0.536	3.206	4.716	0.809	0.586	0.898
Departure Headway (Hd)	19.831	19.277	18.502	16.081	15.932	15.032	19.37	18.729
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	184	189	197	240	246	245	188	197
Service Time	17.531	16.977	16.202	13.781	13.632	12.732	17.07	16.429
HCM Lane V/C Ratio	1.19	0.825	0.944	4.167	6.26	1.163	0.952	1.467
HCM Control Delay	59.3	38.5	40.7	1034.3	1710.8	60.3	46.3	88.5
HCM Lane LOS	F	E	E	F	F	F	E	F
HCM 95th-tile Q	4.3	2.3	2.8	65.8	108.6	6.1	3.2	6.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	622	96	246	878	208	160	114	136	131	193	18
Future Volume (vph)	12	622	96	246	878	208	160	114	136	131	193	18
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Storage Length (ft)	150		0	150		165	100		0	325		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		6652			2660			2620			1074	
Travel Time (s)		100.8			40.3			32.5			13.3	
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA	Free	Prot	NA	Perm	Prot	NA	
Protected Phases		2			6		3	8		7	4	
Permitted Phases	2			6		Free			8			
Detector Phase	2	2		6	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	10.0	10.0	5.0	10.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		20.0	22.5	22.5	20.0	22.5	
Total Split (s)	77.5	77.5		77.5	77.5		20.0	22.5	22.5	20.0	22.5	
Total Split (%)	64.6%	64.6%		64.6%	64.6%		16.7%	18.8%	18.8%	16.7%	18.8%	
Maximum Green (s)	73.0	73.0		73.0	73.0		15.5	18.0	18.0	15.5	18.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag							Lag	Lead	Lead	Lag	Lead	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None	None	None	None	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	5	5		5	5			5	5		5	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Dale Evans Pkwy. & Johnson Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	622	96	246	878	208	160	114	136	131	193	18
Future Volume (veh/h)	12	622	96	246	878	208	160	114	136	131	193	18
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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	16	852	132	337	1203	0	219	156	186	179	264	25
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	911	141	371	1078		206	248	210	222	239	23
Arrive On Green	1.00	1.00	1.00	1.00	1.00	0.00	0.13	0.14	0.14	0.14	0.15	0.15
Sat Flow, veh/h	416	1498	232	512	1772	1502	1594	1772	1502	1594	1594	151
Grp Volume(v), veh/h	16	0	984	337	1203	0	219	156	186	179	0	289
Grp Sat Flow(s),veh/h/ln	416	0	1730	512	1772	1502	1594	1772	1502	1594	0	1745
Q Serve(g_s), s	0.0	0.0	0.0	73.0	73.0	0.0	15.5	10.0	14.6	13.1	0.0	18.0
Cycle Q Clear(g_c), s	73.0	0.0	0.0	73.0	73.0	0.0	15.5	10.0	14.6	13.1	0.0	18.0
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	60	0	1053	371	1078		206	248	210	222	0	262
V/C Ratio(X)	0.27	0.00	0.93	0.91	1.12		1.06	0.63	0.89	0.81	0.00	1.10
Avail Cap(c_a), veh/h	60	0	1053	371	1078		206	266	225	222	0	262
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.09	0.09	0.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.5	0.0	0.0	2.8	0.0	0.0	52.3	48.7	50.7	50.1	0.0	51.0
Incr Delay (d2), s/veh	10.6	0.0	15.9	3.9	53.6	0.0	80.6	4.2	30.3	19.3	0.0	86.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	4.7	0.4	16.1	0.0	10.5	4.5	7.0	6.2	0.0	13.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.1	0.0	15.9	6.7	53.6	0.0	132.9	52.9	80.9	69.4	0.0	137.5
LnGrp LOS	D	A	B	A	F		F	D	F	E	A	F
Approach Vol, veh/h		1000			1540			561			468	
Approach Delay, s/veh		16.4			43.4			93.4			111.4	
Approach LOS		B			D			F			F	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		77.5	20.0	22.5		77.5	21.2	21.3				
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5				
Max Green Setting (Gmax), s		73.0	15.5	18.0		73.0	15.5	18.0				
Max Q Clear Time (g_c+I1), s		75.0	17.5	20.0		75.0	15.1	16.6				
Green Ext Time (p_c), s		0.0	0.0	0.0		0.0	0.0	0.2				

Intersection Summary		
HCM 6th Ctrl Delay		52.6
HCM 6th LOS		D

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	1055	1	22	728	2	46
Future Volume (vph)	1055	1	22	728	2	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	7616		549			661
Travel Time (s)	115.4		8.3			10.0
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	520.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1055	1	22	728	2	46
Future Vol, veh/h	1055	1	22	728	2	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1407	1	29	971	3	61

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	582	515	0	0	1000	0
Stage 1	515	-	-	-	-	-
Stage 2	67	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 475	560	-	-	692	-
Stage 1	~ 600	-	-	-	-	-
Stage 2	~ 956	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 473	560	-	-	692	-
Mov Cap-2 Maneuver	~ 473	-	-	-	-	-
Stage 1	~ 600	-	-	-	-	-
Stage 2	~ 952	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 913.5	0	0.4
HCM LOS	F		

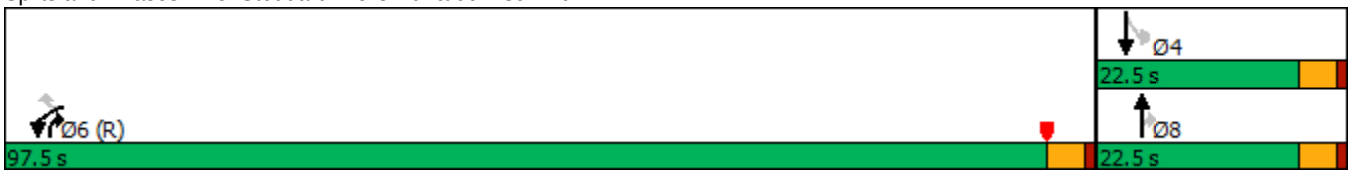
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	473	692	-
HCM Lane V/C Ratio	-	-	2.977	0.004	-
HCM Control Delay (s)	-	-	$ 913.5	10.2	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	121.2	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	1055	1	22	728	2	46
Future Volume (vph)	1055	1	22	728	2	46
Ideal Flow (vphpl)	1700	1800	1800	1800	1700	1800
Storage Length (ft)	150	0		150	150	
Storage Lanes	1	1		1	1	
Taper Length (ft)	90				90	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	964		549			661
Travel Time (s)	14.6		8.3			10.0
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA	pm+ov	Perm	NA
Protected Phases	6		8	6		4
Permitted Phases		6		8	4	
Detector Phase	6	6	8	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.5	9.5	22.5	9.5	14.5	14.5
Total Split (s)	97.5	97.5	22.5	97.5	22.5	22.5
Total Split (%)	81.3%	81.3%	18.8%	81.3%	18.8%	18.8%
Maximum Green (s)	93.0	93.0	18.0	93.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	Max	C-Max	None	None
Walk Time (s)			7.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			5			

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2: and 6:WBL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Stoddard Wells Rd. & Johnson Rd.



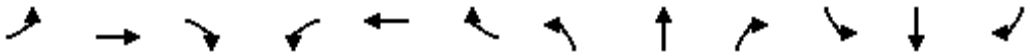
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1055	1	22	728	2	46
Future Volume (veh/h)	1055	1	22	728	2	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1673	1772	1772	1772	1673	1772
Adj Flow Rate, veh/h	1407	1	29	971	3	61
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1235	1164	266	1389	128	266
Arrive On Green	0.77	0.77	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1594	1502	1772	1502	504	1772
Grp Volume(v), veh/h	1407	1	29	971	3	61
Grp Sat Flow(s),veh/h/ln	1594	1502	1772	1502	504	1772
Q Serve(g_s), s	93.0	0.0	1.7	16.5	0.6	3.6
Cycle Q Clear(g_c), s	93.0	0.0	1.7	16.5	2.3	3.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1235	1164	266	1389	128	266
V/C Ratio(X)	1.14	0.00	0.11	0.70	0.02	0.23
Avail Cap(c_a), veh/h	1235	1164	266	1389	128	266
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.5	3.0	44.1	1.0	45.1	44.9
Incr Delay (d2), s/veh	72.8	0.0	0.8	2.9	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	46.6	0.0	0.8	30.0	0.1	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	86.3	3.0	44.9	3.9	45.1	45.3
LnGrp LOS	F	A	D	A	D	D
Approach Vol, veh/h	1408		1000			64
Approach Delay, s/veh	86.3		5.1			45.3
Approach LOS	F		A			D

Timer - Assigned Phs				4		6	8
Phs Duration (G+Y+Rc), s				22.5		97.5	22.5
Change Period (Y+Rc), s				4.5		4.5	4.5
Max Green Setting (Gmax), s				18.0		93.0	18.0
Max Q Clear Time (g_c+I1), s				5.6		95.0	18.5
Green Ext Time (p_c), s				0.2		0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.4
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	118	77	34	1391	115	3	77	33	970	2	7
Future Volume (vph)	5	118	77	34	1391	115	3	77	33	970	2	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	83.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	118	77	34	1391	115	3	77	33	970	2	7
Future Vol, veh/h	5	118	77	34	1391	115	3	77	33	970	2	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	176	115	51	2076	172	4	115	49	1448	3	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2248	0	0	291	0	0	2519	2598	234	2594	2569	2162
Stage 1	-	-	-	-	-	-	248	248	-	2264	2264	-
Stage 2	-	-	-	-	-	-	2271	2350	-	330	305	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	229	-	-	1271	-	-	19	~ 25	805	~ 17	26	60
Stage 1	-	-	-	-	-	-	756	701	-	~ 54	76	-
Stage 2	-	-	-	-	-	-	54	~ 69	-	~ 683	662	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	229	-	-	1271	-	-	14	~ 24	805	-	25	60
Mov Cap-2 Maneuver	-	-	-	-	-	-	14	~ 24	-	-	25	-
Stage 1	-	-	-	-	-	-	728	675	-	~ 52	76	-
Stage 2	-	-	-	-	-	-	43	~ 69	-	~ 512	638	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.2	$ 2090.9	
HCM LOS			F	-

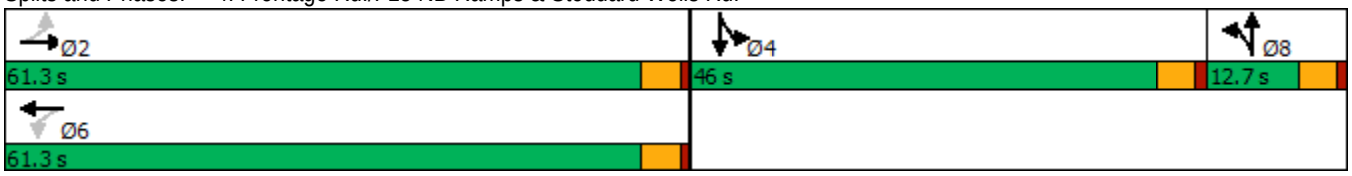
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	33	229	-	-	1271	-	-	-
HCM Lane V/C Ratio	5.111	0.033	-	-	0.04	-	-	-
HCM Control Delay (s)	$ 2090.9	21.2	0	-	8	0	-	-
HCM Lane LOS	F	C	A	-	A	A	-	-
HCM 95th %tile Q(veh)	20.1	0.1	-	-	0.1	-	-	-

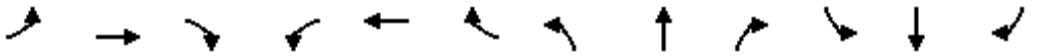
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	118	77	34	1391	115	3	77	33	970	2	7
Future Volume (vph)	5	118	77	34	1391	115	3	77	33	970	2	7
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1800	1800	1800	1700	1800	1800
Storage Length (ft)	150		0	150		0	0		0	150		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)										49%		
Turn Type	Perm	NA		Perm	NA		Split	NA		Split	NA	
Protected Phases		2			6		8	8		4	4	
Permitted Phases	2			6								
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	14.5	14.5		14.5	14.5		9.5	9.5		9.5	9.5	
Total Split (s)	61.3	61.3		61.3	61.3		12.7	12.7		46.0	46.0	
Total Split (%)	51.1%	51.1%		51.1%	51.1%		10.6%	10.6%		38.3%	38.3%	
Maximum Green (s)	56.8	56.8		56.8	56.8		8.2	8.2		41.5	41.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5			4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 4: Frontage Rd./I-15 NB Ramps & Stoddard Wells Rd.





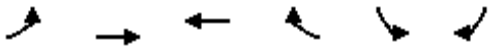
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	118	77	34	1391	115	3	77	33	970	2	7
Future Volume (veh/h)	5	118	77	34	1391	115	3	77	33	970	2	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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	1673	1772	1772	1673	1772	1772	1772	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	5	128	84	37	1512	125	3	84	36	1063	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	60	474	311	476	1494	123	3	79	34	1098	610	0
Arrive On Green	0.47	0.47	0.47	0.71	0.71	0.71	0.07	0.07	0.07	0.45	0.00	0.00
Sat Flow, veh/h	274	999	655	1046	3150	259	41	1148	492	3188	1772	0
Grp Volume(v), veh/h	5	0	212	37	803	834	123	0	0	1063	0	0
Grp Sat Flow(s),veh/h/ln	274	0	1654	1046	1683	1725	1681	0	0	1594	1772	0
Q Serve(g_s), s	0.0	0.0	9.3	1.8	56.8	56.8	8.2	0.0	0.0	38.9	0.0	0.0
Cycle Q Clear(g_c), s	56.8	0.0	9.3	11.1	56.8	56.8	8.2	0.0	0.0	38.9	0.0	0.0
Prop In Lane	1.00		0.40	1.00		0.15	0.02		0.29	1.00		0.00
Lane Grp Cap(c), veh/h	60	0	785	476	799	818	115	0	0	1098	610	0
V/C Ratio(X)	0.08	0.00	0.27	0.08	1.01	1.02	1.07	0.00	0.00	0.97	0.00	0.00
Avail Cap(c_a), veh/h	60	0	785	476	799	818	115	0	0	1105	614	0
HCM Platoon Ratio	1.00	1.00	1.00	1.50	1.50	1.50	1.00	1.00	1.00	1.30	1.30	1.30
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	59.9	0.0	19.0	12.6	17.3	17.3	55.8	0.0	0.0	32.4	0.0	0.0
Incr Delay (d2), s/veh	2.7	0.0	0.8	0.3	33.3	36.2	103.4	0.0	0.0	19.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.6	0.4	19.2	20.3	6.8	0.0	0.0	16.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.6	0.0	19.8	13.0	50.6	53.5	159.2	0.0	0.0	52.2	0.0	0.0
LnGrp LOS	E	A	B	B	F	F	F	A	A	D	A	A
Approach Vol, veh/h		217			1674			123			1063	
Approach Delay, s/veh		20.8			51.2			159.2			52.2	
Approach LOS		C			D			F			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		61.3		45.7		61.3		12.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		56.8		41.5		56.8		8.2				
Max Q Clear Time (g_c+I1), s		58.8		40.9		58.8		10.2				
Green Ext Time (p_c), s		0.0		0.3		0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			53.7									
HCM 6th LOS			D									

Notes

User approved volume balancing among the lanes for turning movement.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	24	68	1333	177	4
Future Volume (vph)	5	24	68	1333	177	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			0	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	25.1

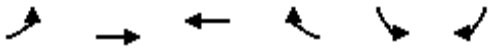
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	24	68	1333	177	4
Future Vol, veh/h	5	24	68	1333	177	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	37	105	2051	272	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	105	0	-	0	1184	1131
Stage 1	-	-	-	-	1131	-
Stage 2	-	-	-	-	53	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1486	-	-	-	~ 209	248
Stage 1	-	-	-	-	308	-
Stage 2	-	-	-	-	970	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1486	-	-	-	~ 208	248
Mov Cap-2 Maneuver	-	-	-	-	~ 208	-
Stage 1	-	-	-	-	306	-
Stage 2	-	-	-	-	970	-

Approach	EB	WB	SB
HCM Control Delay, s	1.3	0	223.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1486	-	-	-	209
HCM Lane V/C Ratio	0.005	-	-	-	1.332
HCM Control Delay (s)	7.4	0	-	-	223.2
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0	-	-	-	15.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	5	24	68	1333	177	4
Future Volume (vph)	5	24	68	1333	177	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			1	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	24	68	1333	177	4
Future Vol, veh/h	5	24	68	1333	177	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	37	105	2051	272	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2156	0	-	0	158	105
Stage 1	-	-	-	-	105	-
Stage 2	-	-	-	-	53	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	249	-	-	-	833	949
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	970	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	249	-	-	-	806	949
Mov Cap-2 Maneuver	-	-	-	-	806	-
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	970	-

Approach	EB	WB	SB
HCM Control Delay, s	3.4	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	249	-	-	-	809
HCM Lane V/C Ratio	0.031	-	-	-	0.344
HCM Control Delay (s)	19.9	0	-	-	11.8
HCM Lane LOS	C	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.5

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	181	2	1	1337	2	0
Future Volume (vph)	181	2	1	1337	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	16

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	181	2	1	1337	2	0
Future Vol, veh/h	181	2	1	1337	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	278	3	2	2057	3	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1037	1031	0	0	2059	0
Stage 1	1031	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 256	283	-	-	271	-
Stage 1	344	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 253	283	-	-	271	-
Mov Cap-2 Maneuver	~ 253	-	-	-	-	-
Stage 1	344	-	-	-	-	-
Stage 2	1006	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	132.8	0	18.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	253	271	-
HCM Lane V/C Ratio	-	-	1.113	0.011	-
HCM Control Delay (s)	-	-	132.8	18.4	0
HCM Lane LOS	-	-	F	C	A
HCM 95th %tile Q(veh)	-	-	12.2	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	181	2	1	1337	2	0
Future Volume (vph)	181	2	1	1337	2	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		150	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	90				90	
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	181	2	1	1337	2	0
Future Vol, veh/h	181	2	1	1337	2	0
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	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	278	3	2	2057	3	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	8	2	0	0	2059	0
Stage 1	2	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1013	1082	-	-	271	-
Stage 1	1021	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1002	1082	-	-	271	-
Mov Cap-2 Maneuver	1002	-	-	-	-	-
Stage 1	1021	-	-	-	-	-
Stage 2	1006	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	18.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1003	271	-
HCM Lane V/C Ratio	-	-	0.281	0.011	-
HCM Control Delay (s)	-	-	10	18.4	0
HCM Lane LOS	-	-	B	C	A
HCM 95th %tile Q(veh)	-	-	1.2	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	22	167	243	16	79	457
Future Volume (vph)	22	167	243	16	79	457
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		400	415	
Storage Lanes	1	0		1	1	
Taper Length (ft)	90				90	
Link Speed (mph)	45		55			55
Link Distance (ft)	304		1385			2620
Travel Time (s)	4.6		17.2			32.5
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

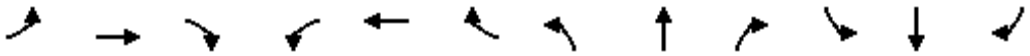
Intersection	
Int Delay, s/veh	3.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	167	243	16	79	457
Future Vol, veh/h	22	167	243	16	79	457
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	-	-	400	415	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	220	320	21	104	601

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1129	320	0	0	341	0
Stage 1	320	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	226	721	-	-	1218	-
Stage 1	736	-	-	-	-	-
Stage 2	438	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	207	721	-	-	1218	-
Mov Cap-2 Maneuver	207	-	-	-	-	-
Stage 1	736	-	-	-	-	-
Stage 2	401	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.5	0	1.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	559	1218	-
HCM Lane V/C Ratio	-	-	0.445	0.085	-
HCM Control Delay (s)	-	-	16.5	8.2	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	2.3	0.3	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	11	2	24	19	2	3	190	11	1	354	188
Future Volume (vph)	93	11	2	24	19	2	3	190	11	1	354	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

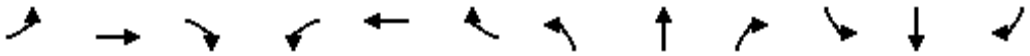
Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	34
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	93	11	2	24	19	2	3	190	11	1	354	188
Future Vol, veh/h	93	11	2	24	19	2	3	190	11	1	354	188
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	124	15	3	32	25	3	4	253	15	1	472	251
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.2	10.8	12.6	48.2
HCM LOS	B	B	B	E

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	88%	53%	0%
Vol Thru, %	93%	10%	42%	65%
Vol Right, %	5%	2%	4%	35%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	204	106	45	543
LT Vol	3	93	24	1
Through Vol	190	11	19	354
RT Vol	11	2	2	188
Lane Flow Rate	272	141	60	724
Geometry Grp	1	1	1	1
Degree of Util (X)	0.42	0.263	0.114	0.972
Departure Headway (Hd)	5.561	6.688	6.858	4.831
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	645	534	519	753
Service Time	3.62	4.758	4.945	2.874
HCM Lane V/C Ratio	0.422	0.264	0.116	0.961
HCM Control Delay	12.6	12.2	10.8	48.2
HCM Lane LOS	B	B	B	E
HCM 95th-tile Q	2.1	1	0.4	15.2



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	59	3	81	133	1	4	51	32	1	133	12
Future Volume (vph)	5	59	3	81	133	1	4	51	32	1	133	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		787			1189			2650			316	
Travel Time (s)		11.9			18.0			40.2			4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	7.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	59	3	81	133	1	4	51	32	1	133	12
Future Vol, veh/h	5	59	3	81	133	1	4	51	32	1	133	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	64	3	88	145	1	4	55	35	1	145	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	146	0	0	67	0	0	477	398	66	443	399	146
Stage 1	-	-	-	-	-	-	76	76	-	322	322	-
Stage 2	-	-	-	-	-	-	401	322	-	121	77	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1436	-	-	1535	-	-	498	540	998	525	539	901
Stage 1	-	-	-	-	-	-	933	832	-	690	651	-
Stage 2	-	-	-	-	-	-	626	651	-	883	831	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1436	-	-	1535	-	-	364	504	998	441	503	901
Mov Cap-2 Maneuver	-	-	-	-	-	-	364	504	-	441	503	-
Stage 1	-	-	-	-	-	-	929	829	-	687	611	-
Stage 2	-	-	-	-	-	-	442	611	-	792	828	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	2.8	12.1	14.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	603	1436	-	-	1535	-	-	521
HCM Lane V/C Ratio	0.157	0.004	-	-	0.057	-	-	0.305
HCM Control Delay (s)	12.1	7.5	0	-	7.5	0	-	14.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0.2	-	-	1.3

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	32	0	0	13	0	0
Future Volume (vph)	32	0	0	13	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	335		269			195
Travel Time (s)	7.6		4.1			3.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	6.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	0	0	13	0	0
Future Vol, veh/h	32	0	0	13	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	0	0	14	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	8	7	0	0	14	0
Stage 1	7	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1013	1075	-	-	1604	-
Stage 1	1016	-	-	-	-	-
Stage 2	1022	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1013	1075	-	-	1604	-
Mov Cap-2 Maneuver	1013	-	-	-	-	-
Stage 1	1016	-	-	-	-	-
Stage 2	1022	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1013	1604	-
HCM Lane V/C Ratio	-	-	0.034	-	-
HCM Control Delay (s)	-	-	8.7	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	33	0	13	13	0	32
Future Volume (vph)	33	0	13	13	0	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	313		1795			269
Travel Time (s)	7.1		27.2			4.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	0	13	13	0	32
Future Vol, veh/h	33	0	13	13	0	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	0	14	14	0	35

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	56	21	0	0	28	0
Stage 1	21	-	-	-	-	-
Stage 2	35	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	952	1056	-	-	1585	-
Stage 1	1002	-	-	-	-	-
Stage 2	987	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	952	1056	-	-	1585	-
Mov Cap-2 Maneuver	952	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	987	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	952	1585	-
HCM Lane V/C Ratio	-	-	0.038	-	-
HCM Control Delay (s)	-	-	8.9	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	46	1	25	18	1	66
Future Volume (vph)	46	1	25	18	1	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	333		257			1795
Travel Time (s)	7.6		3.9			27.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	1	25	18	1	66
Future Vol, veh/h	46	1	25	18	1	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	1	27	20	1	72

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	111	37	0	0	47	0
Stage 1	37	-	-	-	-	-
Stage 2	74	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	886	1035	-	-	1560	-
Stage 1	985	-	-	-	-	-
Stage 2	949	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	885	1035	-	-	1560	-
Mov Cap-2 Maneuver	885	-	-	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	948	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	888	1560	-
HCM Lane V/C Ratio	-	-	0.058	0.001	-
HCM Control Delay (s)	-	-	9.3	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	32	1	43	13	1	112
Future Volume (vph)	32	1	43	13	1	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	340		316			257
Travel Time (s)	7.7		4.8			3.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

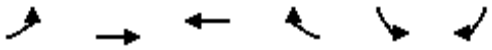
Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	1	43	13	1	112
Future Vol, veh/h	32	1	43	13	1	112
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	1	47	14	1	122

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	178	54	0	0	61	0
Stage 1	54	-	-	-	-	-
Stage 2	124	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	812	1013	-	-	1542	-
Stage 1	969	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	811	1013	-	-	1542	-
Mov Cap-2 Maneuver	811	-	-	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	901	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	816	1542	-
HCM Lane V/C Ratio	-	-	0.044	0.001	-
HCM Control Delay (s)	-	-	9.6	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	20	65	149	1	1	53
Future Volume (vph)	20	65	149	1	1	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45	45		30	
Link Distance (ft)		1189	461		387	
Travel Time (s)		18.0	7.0		8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

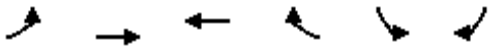
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	65	149	1	1	53
Future Vol, veh/h	20	65	149	1	1	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	71	162	1	1	58

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	163	0	-	0	278	163
Stage 1	-	-	-	-	163	-
Stage 2	-	-	-	-	115	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1416	-	-	-	712	882
Stage 1	-	-	-	-	866	-
Stage 2	-	-	-	-	910	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1416	-	-	-	701	882
Mov Cap-2 Maneuver	-	-	-	-	701	-
Stage 1	-	-	-	-	852	-
Stage 2	-	-	-	-	910	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1416	-	-	-	878
HCM Lane V/C Ratio	0.015	-	-	-	0.067
HCM Control Delay (s)	7.6	0	-	-	9.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	48	106	1	1	43
Future Volume (vph)	17	48	106	1	1	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45	45		30	
Link Distance (ft)		461	686		374	
Travel Time (s)		7.0	10.4		8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	48	106	1	1	43
Future Vol, veh/h	17	48	106	1	1	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	52	115	1	1	47

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	116	0	-	0	204	116
Stage 1	-	-	-	-	116	-
Stage 2	-	-	-	-	88	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1473	-	-	-	784	936
Stage 1	-	-	-	-	909	-
Stage 2	-	-	-	-	935	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1473	-	-	-	774	936
Mov Cap-2 Maneuver	-	-	-	-	774	-
Stage 1	-	-	-	-	897	-
Stage 2	-	-	-	-	935	-

Approach	EB	WB	SB
HCM Control Delay, s	2	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1473	-	-	-	932
HCM Lane V/C Ratio	0.013	-	-	-	0.051
HCM Control Delay (s)	7.5	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

APPENDIX 5.3: OPENING YEAR CUMULATIVE (2025) WITHOUT PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

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

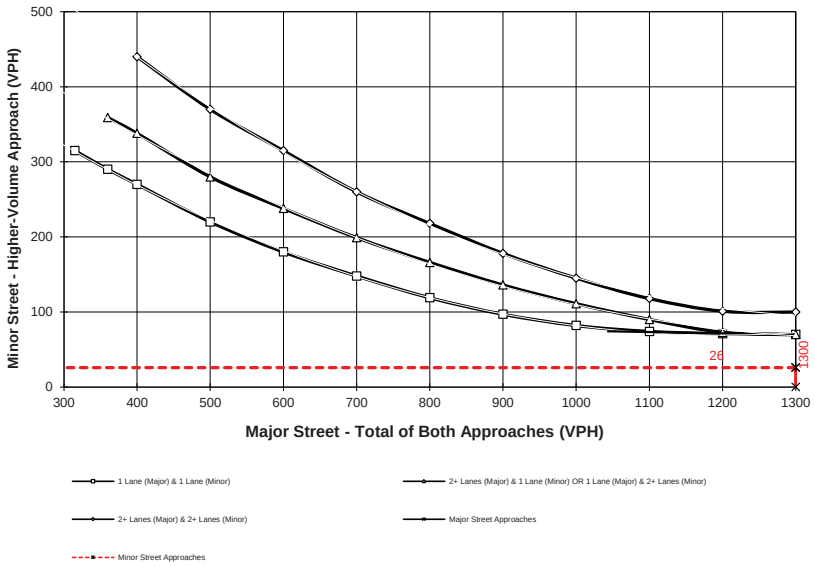
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC AM PEAK HOUR WARRANTS**

Major Street Name = **Johnson Rd.**
Total of Both Approaches (VPH) = **1,552**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dachshund Av.**
High Volume Approach (VPH) = **26**
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

Intersection ID: #1

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\02 - EAC\001R_AM.xls\Fig 4C-4 (Rural Peak)

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

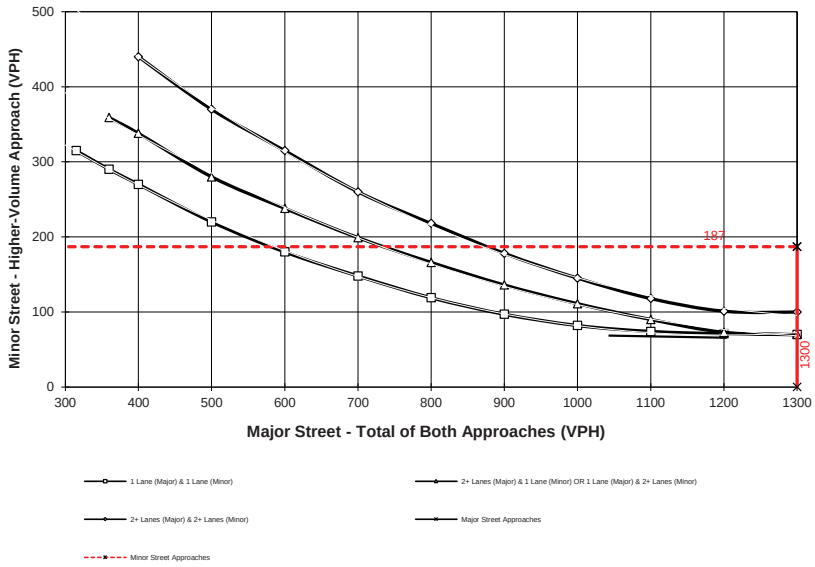
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC PM PEAK HOUR WARRANTS**

Major Street Name = **Johnson Rd.**
Total of Both Approaches (VPH) = **1,753**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dachshund Av.**
High Volume Approach (VPH) = **187**
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

Intersection ID: #1

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\02 - EAC\001R_PM.xls\Fig 4C-4 (Rural Peak)

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

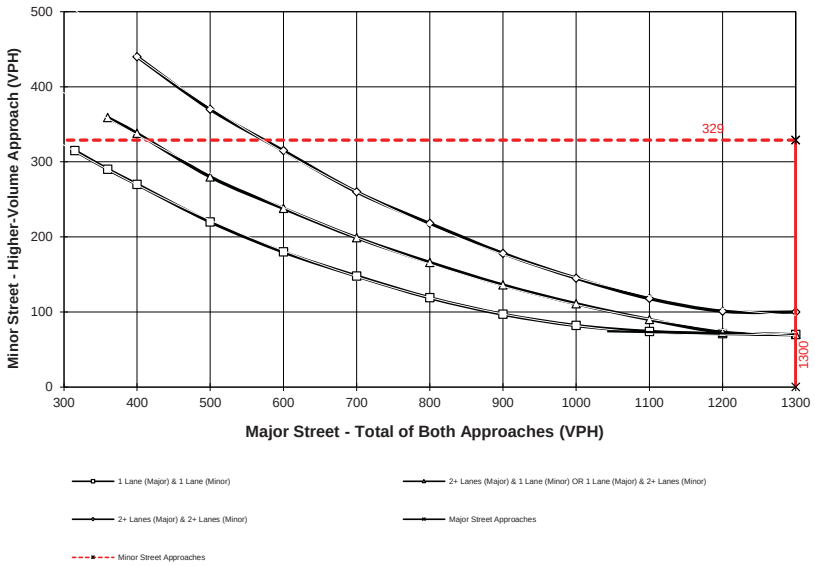
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC AM PEAK HOUR WARRANTS**

Major Street Name = **Johnson Rd.**
Total of Both Approaches (VPH) = **1,339**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dale Evans Pkwy.**
High Volume Approach (VPH) = **329**
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

Intersection ID: #2

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

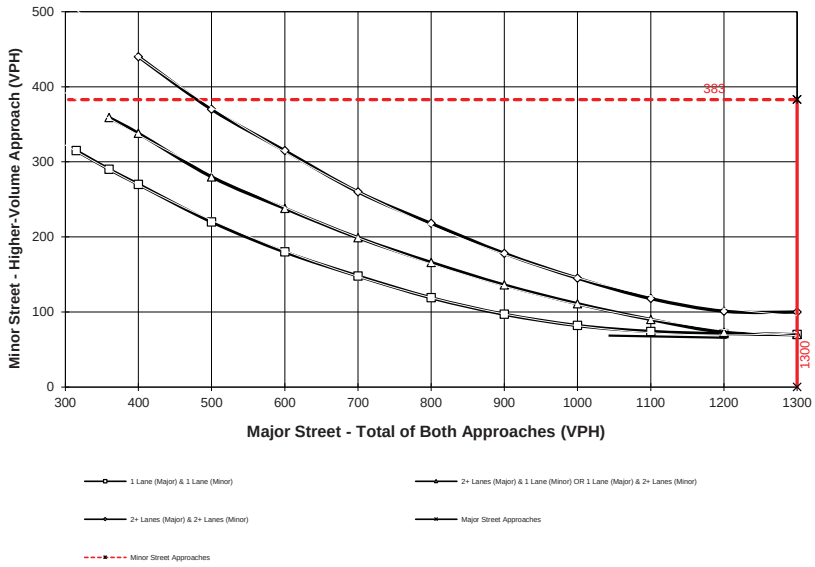
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC PM PEAK HOUR WARRANTS**

Major Street Name = **Johnson Rd.**
Total of Both Approaches (VPH) = **1,823**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dale Evans Pkwy.**
High Volume Approach (VPH) = **383**
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

Intersection ID: #2

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

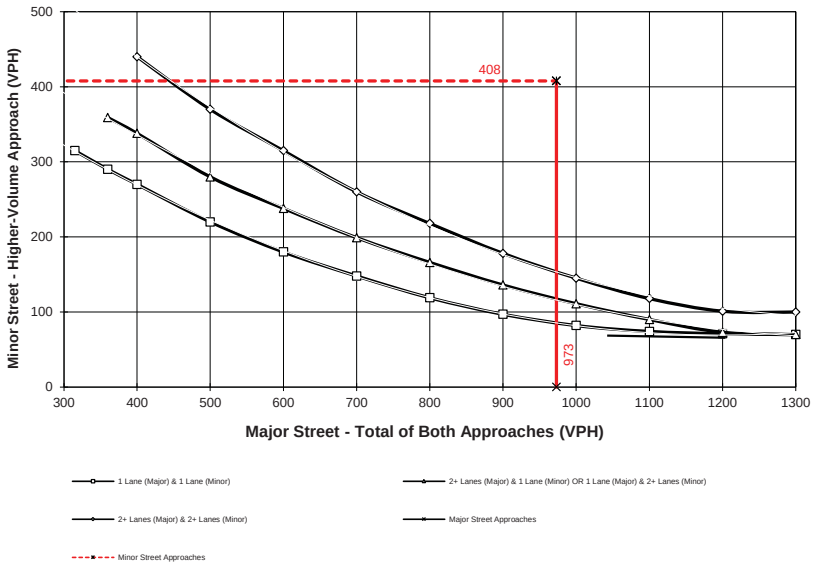
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC AM PEAK HOUR WARRANTS**

Major Street Name = **Stoddard Wells Rd.** Total of Both Approaches (VPH) = **973**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Johnson Rd.** High Volume Approach (VPH) = **408**
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

Intersection ID: #3

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\02 - EAC\003R_AM.xls\Fig 4C-4 (Rural Peak)

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

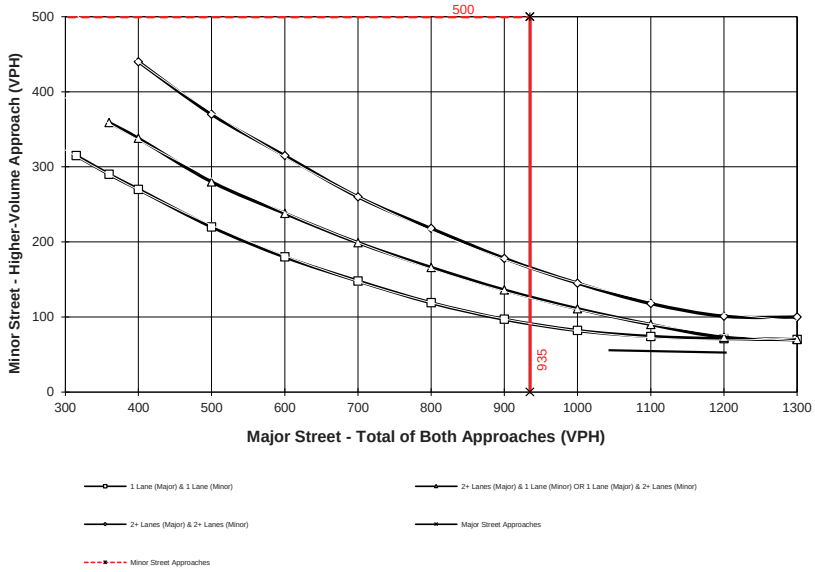
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC PM PEAK HOUR WARRANTS**

Major Street Name = **Johnson Rd.** Total of Both Approaches (VPH) = **935**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Stoddard Wells Rd.** High Volume Approach (VPH) = **703**
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

Intersection ID: #3

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\02 - EAC\003R_PM.xls\Fig 4C-4 (Rural Peak)

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

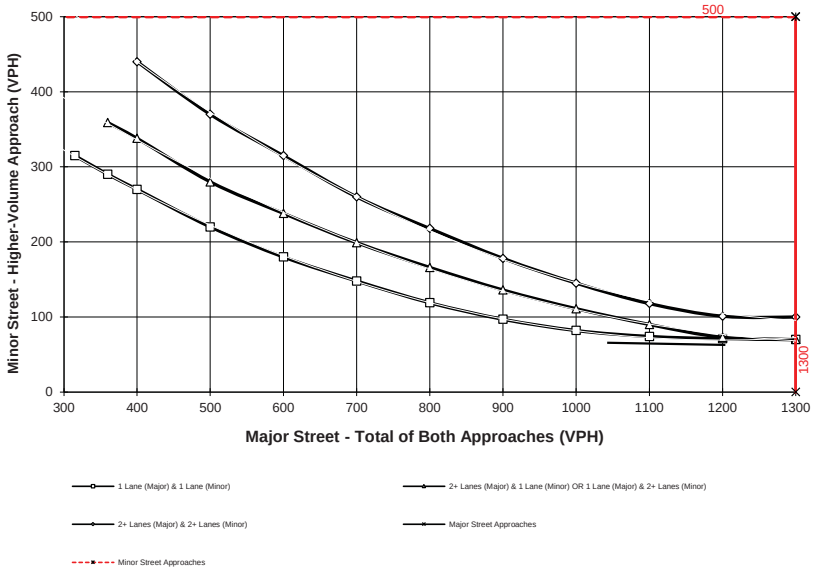
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC AM PEAK HOUR WARRANTS**

Major Street Name = **I-15 NB Ramps - Outer Hwy. 15** Total of Both Approaches (VPH) = **1,307**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Stoddard Wells Rd.** High Volume Approach (VPH) = **731**
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

Intersection ID: #4

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\02 - EAC\004R_AM.xls\Fig 4C-4 (Rural Peak)

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

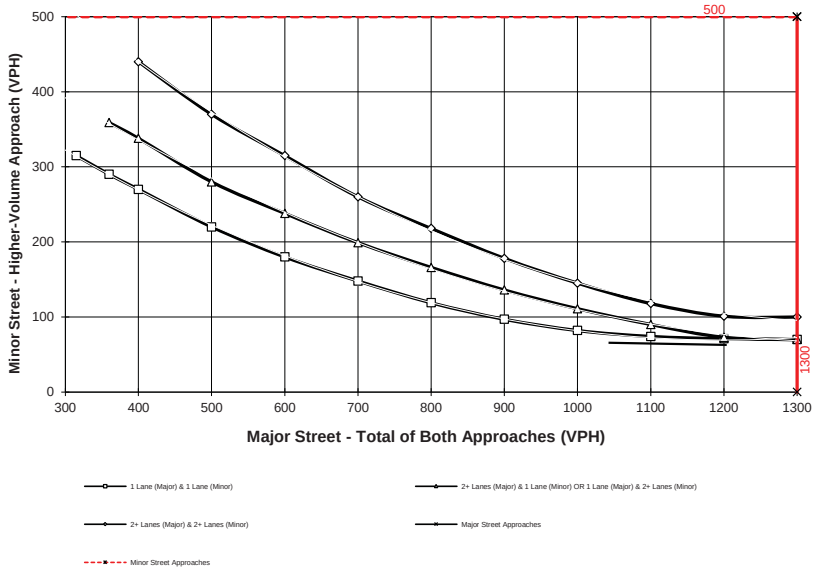
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC PM PEAK HOUR WARRANTS**

Major Street Name = **Stoddard Wells Rd.** Total of Both Approaches (VPH) = **1,619**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **I-15 NB Ramps - Outer Hwy. 15** High Volume Approach (VPH) = **932**
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

Intersection ID: #4

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\02 - EAC\004R_PM.xls\Fig 4C-4 (Rural Peak)

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

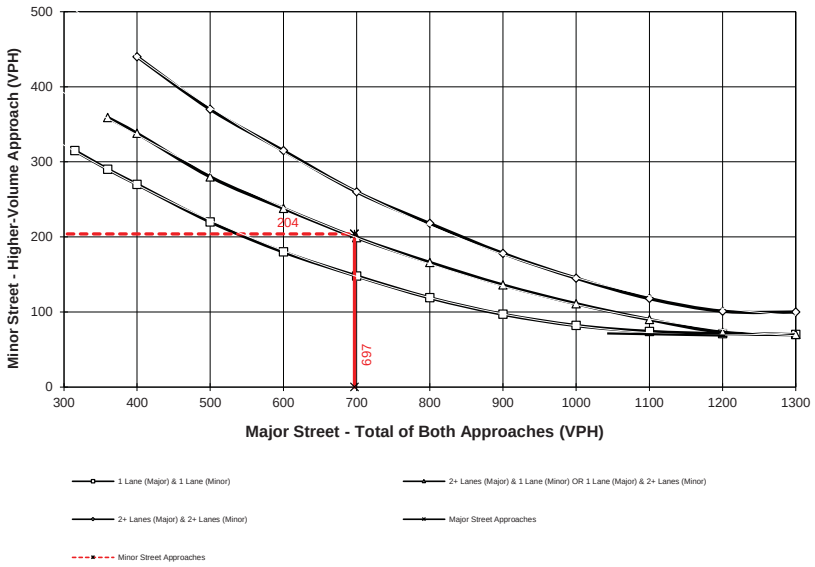
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC AM PEAK HOUR WARRANTS**

Major Street Name = **Stoddard Wells Rd.** Total of Both Approaches (VPH) = **697**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Quarry Rd.** High Volume Approach (VPH) = **204**
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

Intersection ID: #5

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\02 - EAC\005R_AM.xls\Fig 4C-4 (Rural Peak)

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

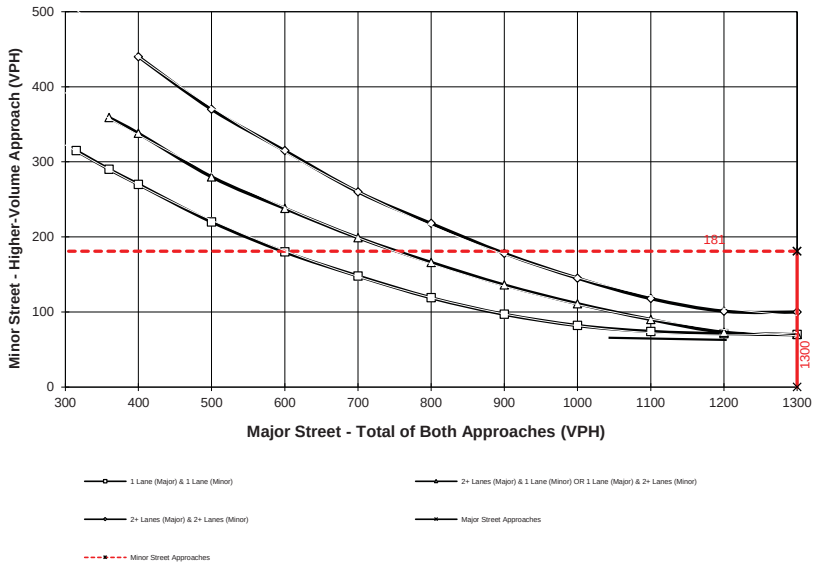
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC PM PEAK HOUR WARRANTS**

Major Street Name = **Stoddard Wells Rd.** Total of Both Approaches (VPH) = **1,309**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Quarry Rd.** High Volume Approach (VPH) = **181**
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

Intersection ID: #5

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\02 - EAC\005R_PM.xls\Fig 4C-4 (Rural Peak)

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

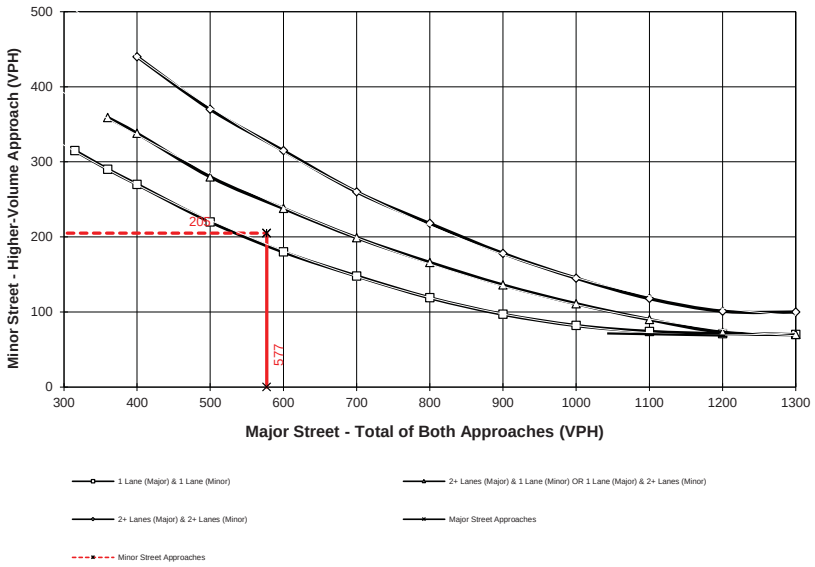
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC AM PEAK HOUR WARRANTS**

Major Street Name = **Quarry Rd.**
Total of Both Approaches (VPH) = **577**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **I-15 SB Ramps**
High Volume Approach (VPH) = **205**
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

Intersection ID: #6

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\02 - EAC\006R_AM.xls\Fig 4C-4 (Rural Peak)

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

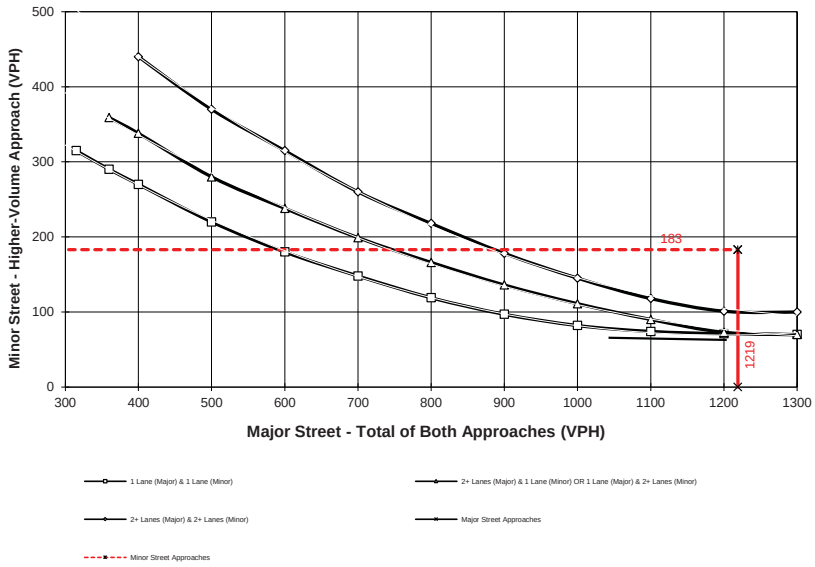
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC PM PEAK HOUR WARRANTS**

Major Street Name = **Quarry Rd.**
Total of Both Approaches (VPH) = **1,219**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **I-15 SB Ramps**
High Volume Approach (VPH) = **183**
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

Intersection ID: #6

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\02 - EAC\006R_PM.xls\Fig 4C-4 (Rural Peak)

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

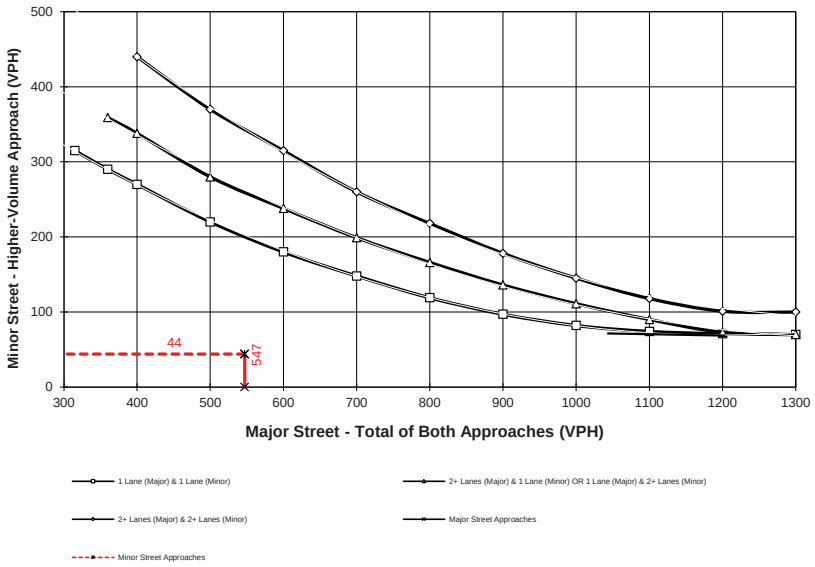
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC AM PEAK HOUR WARRANTS**

Major Street Name = **Dale Evans Pkwy.** Total of Both Approaches (VPH) = **547**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Lafayette St.** High Volume Approach (VPH) = **44**
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

Intersection ID: #7

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

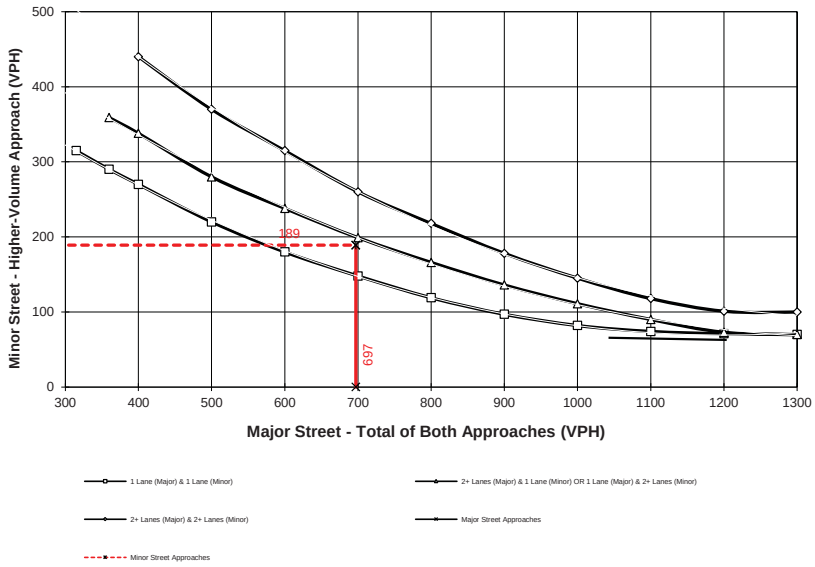
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC PM PEAK HOUR WARRANTS**

Major Street Name = **Dale Evans Pkwy.** Total of Both Approaches (VPH) = **697**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Lafayette St.** High Volume Approach (VPH) = **189**
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

Intersection ID: #7

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

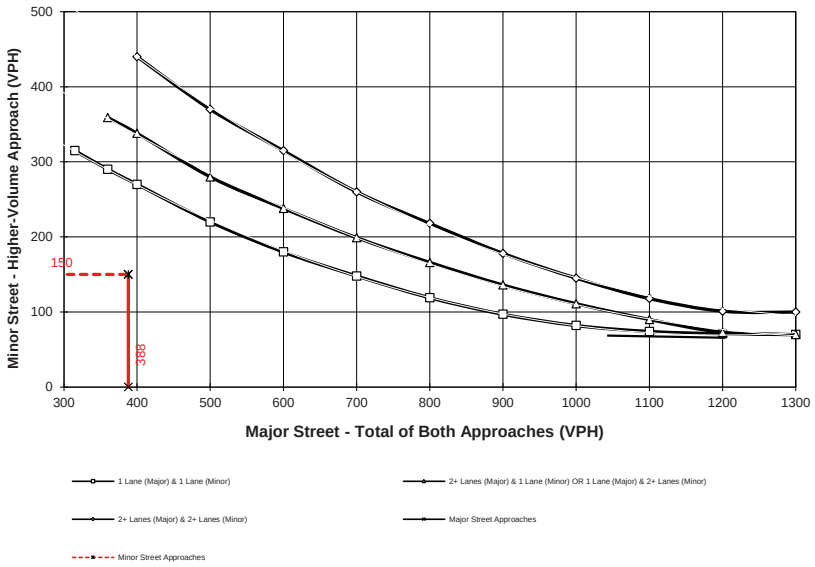
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC AM PEAK HOUR WARRANTS**

Major Street Name = **Dale Evans Pkwy.** Total of Both Approaches (VPH) = **388**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Corwin Rd.** High Volume Approach (VPH) = **150**
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

Intersection ID: #8

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\02 - EAC\008R_AM.xls\Fig 4C-4 (Rural Peak)

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

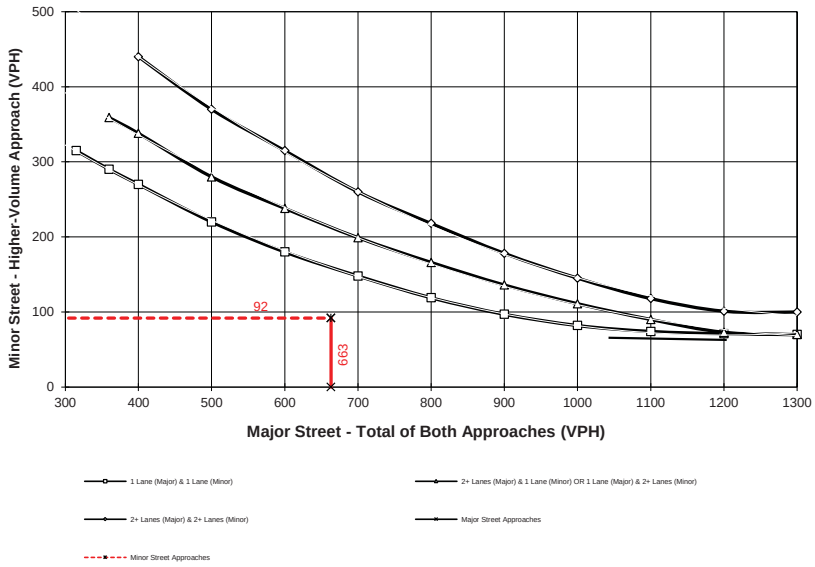
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC PM PEAK HOUR WARRANTS**

Major Street Name = **Dale Evans Pkwy.** Total of Both Approaches (VPH) = **663**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Corwin Rd.** High Volume Approach (VPH) = **92**
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

Intersection ID: #8

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\02 - EAC\008R_PM.xls\Fig 4C-4 (Rural Peak)

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

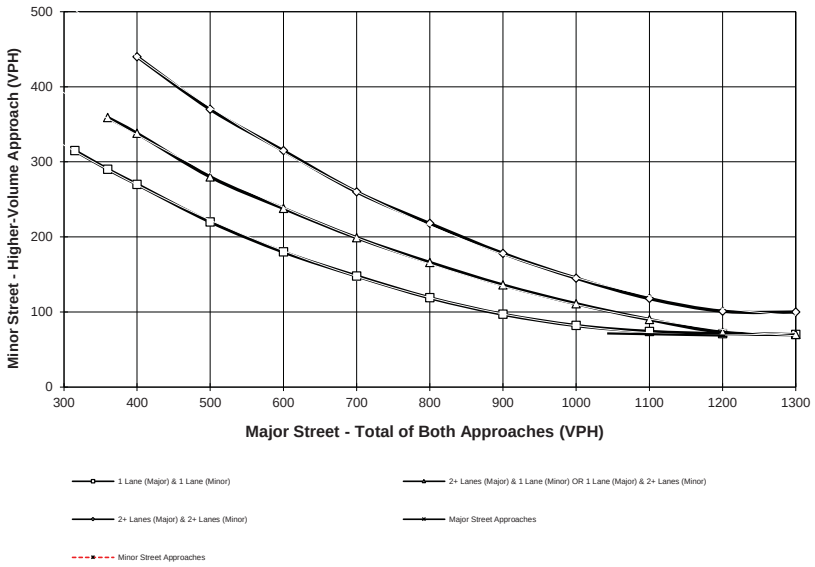
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC AM PEAK HOUR WARRANTS**

Major Street Name = **Cordova Rd.** Total of Both Approaches (VPH) = **165**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dachshund Av.** High Volume Approach (VPH) = **8**
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

Intersection ID: #9

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

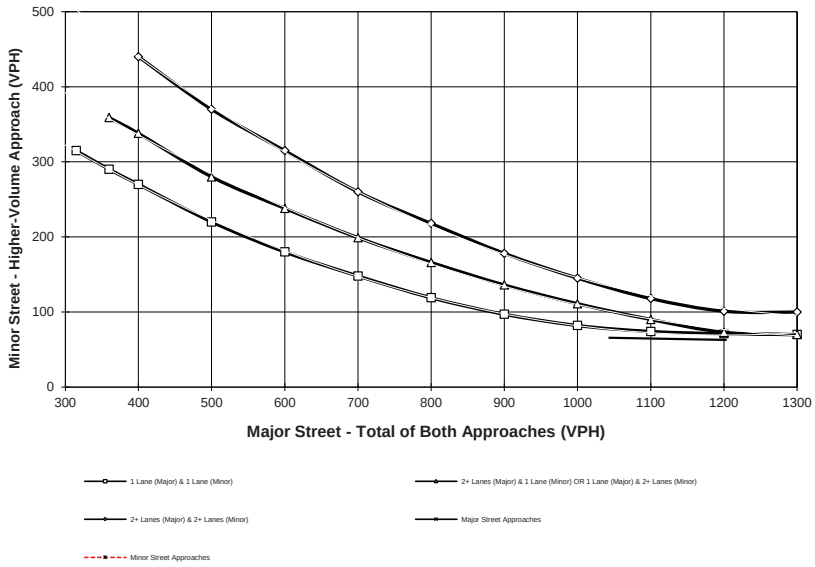
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAC PM PEAK HOUR WARRANTS**

Major Street Name = **Cordova Rd.** Total of Both Approaches (VPH) = **172**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dachshund Av.** High Volume Approach (VPH) = **6**
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

Intersection ID: #9

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

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	EAC (2025)
				CALC JC	DATE 12/04/23
Jurisdiction: **Town of Apple Valley**				CHK	DATE
Major Street: **Cordova Rd.**				Critical Approach Speed (Major)	45 mph
Minor Street: **Dachshund Av.**				Critical Approach Speed (Minor)	35 mph

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

Major Street Future ADT = **2,448** vpd Minor Street Future ADT = **126** 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 …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements ADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **2,448**	1 **126**	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

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **2,448**	1 **126**	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

No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 8% B: 15%

2 CONDITIONS 80%

2 CONDITIONS 80%

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.

APPENDIX 5.4: OPENING YEAR CUMULATIVE (2025) WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

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

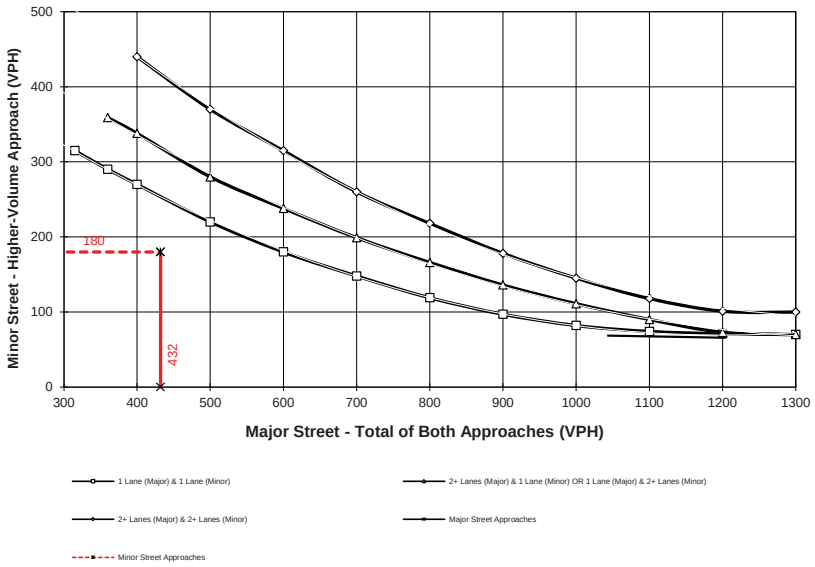
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAPC (2025) AM PEAK HOUR WARRANTS**

Major Street Name = **Dale Evans Pkwy.** Total of Both Approaches (VPH) = **432**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Corwin Rd.** High Volume Approach (VPH) = **180**
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

Intersection ID: #8

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

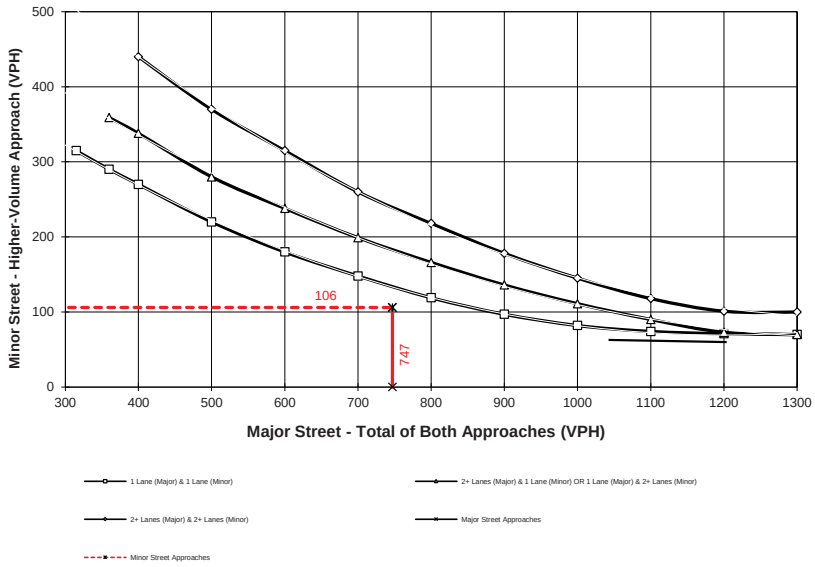
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAPC (2025) PM PEAK HOUR WARRANTS**

Major Street Name = **Dale Evans Pkwy.** Total of Both Approaches (VPH) = **747**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Corwin Rd.** High Volume Approach (VPH) = **106**
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

Intersection ID: #8

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

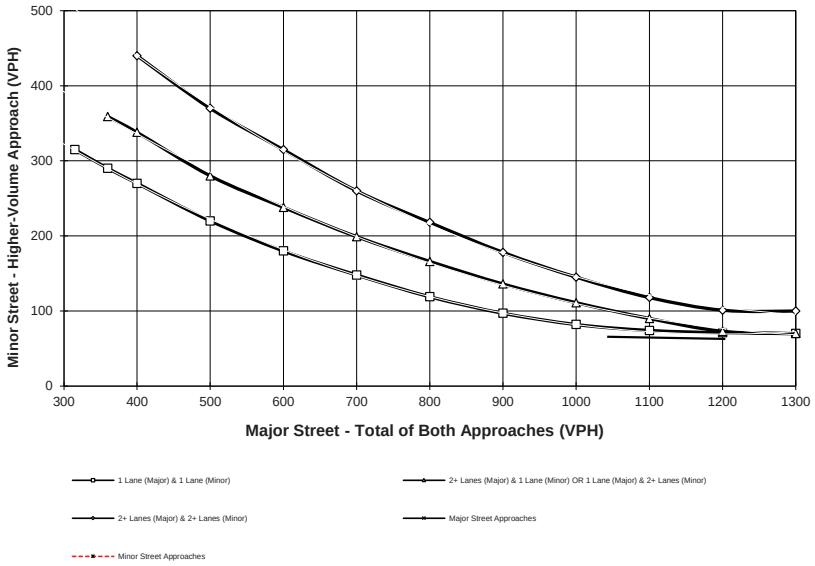
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAPC (2025) AM PEAK HOUR WARRANTS**

Major Street Name = **Cordova Rd.** Total of Both Approaches (VPH) = **215**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dachshund Av.** High Volume Approach (VPH) = **178**
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

Intersection ID: #9

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

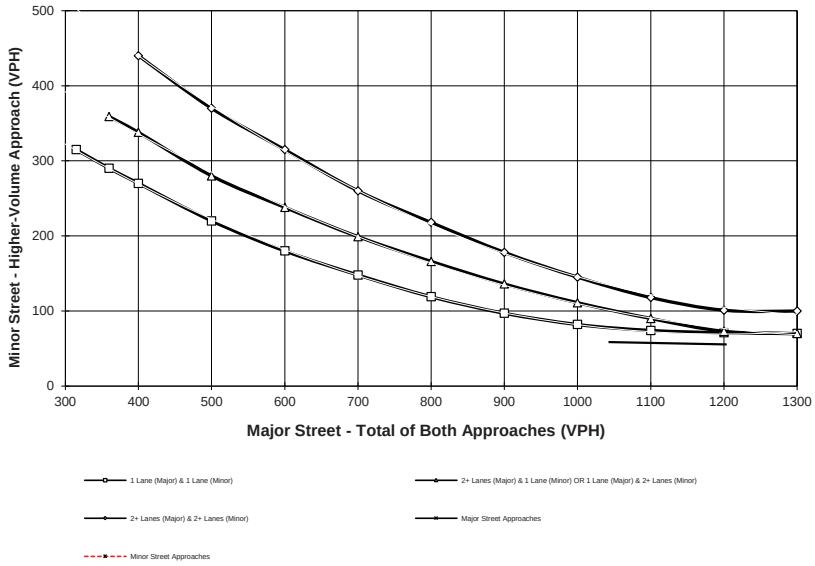
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **EAPC (2025) PM PEAK HOUR WARRANTS**

Major Street Name = **Cordova Rd.** Total of Both Approaches (VPH) = **282**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dachshund Av.** High Volume Approach (VPH) = **146**
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

Intersection ID: #9

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

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	EAPC (2025)
				CALC JC	DATE 12/04/23
				CHK	DATE

Jurisdiction: **Town of Apple Valley**

Major Street: **Cordova Rd.** — Critical Approach Speed (Major) 45 mph

Minor Street: **Dachshund Av.** — Critical Approach Speed (Minor) 35 mph

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

Major Street Future ADT = **3,642** vpd — Minor Street Future ADT = **2,096** 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 …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL — XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied — XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements ADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **3,642**	1 **2,096**	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

Satisfied / Not Satisfied — XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **3,642**	1 **2,096**	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

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 65% **B** 43%

2 CONDITIONS 80%

2 CONDITIONS 80%

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 (2025)
				CALC JC	DATE 12/04/23
				CHK	DATE

Jurisdiction: **Town of Apple Valley**

Major Street: **Dachshund Av.** — Critical Approach Speed (Major) 45 mph

Minor Street: **Dwy. 1** — Critical Approach Speed (Minor) 35 mph

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

Major Street Future ADT = **299** vpd — Minor Street Future ADT = **299** vpd

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

or **RURAL (R)**

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

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements ADT			
	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 **299**	*1* **299**	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 **299**	*1* **299**	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** 5% **B** 4%				

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 (2025)
				CALC JC	DATE 12/04/23
				CHK	DATE

Jurisdiction: **Town of Apple Valley**

Major Street: **Dachshund Av.** — Critical Approach Speed (Major) 45 mph

Minor Street: **Dwy. 2** — Critical Approach Speed (Minor) 35 mph

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

Major Street Future ADT = **914** vpd — Minor Street Future ADT = **316** vpd

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

or **RURAL (R)**

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

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements ADT			
	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 **914**	*1* **316**	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 **914**	*1* **316**	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** 16% **B** 11%				

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 (2025)
				CALC JC	DATE 12/04/23
Jurisdiction: **Town of Apple Valley**				CHK	DATE
Major Street: **Dachshund Av.**				Critical Approach Speed (Major)	45 mph
Minor Street: **Dwy. 3**				Critical Approach Speed (Minor)	35 mph

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

Major Street Future ADT = **1,671** vpd Minor Street Future ADT = **441** 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 …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements ADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **1,671**	1 **441**	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

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **1,671**	1 **441**	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

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 26% **B** 20%

2 CONDITIONS 80%

2 CONDITIONS 80%

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 (2025)
				CALC JC	DATE 12/04/23
Jurisdiction: **Town of Apple Valley**				CHK	DATE
Major Street: **Dachshund Av.**				Critical Approach Speed (Major)	45 mph
Minor Street: **Dwy. 4**				Critical Approach Speed (Minor)	35 mph

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

Major Street Future ADT = **2,411** vpd Minor Street Future ADT = **299** 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 …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach		Minimum Requirements ADT			
Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
		Urban	Rural	Urban	Rural
1 **2,411**	*1* **299**	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

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **2,411**	*1* **299**	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

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 18% **B** 29%

2 CONDITIONS 80%

2 CONDITIONS 80%

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 (2025)
				CALC JC	DATE 12/04/23
Jurisdiction: **Town of Apple Valley**				CHK	DATE
Major Street: **Cordova Rd.**				Critical Approach Speed (Major)	45 mph
Minor Street: **Dwy. 5**				Critical Approach Speed (Minor)	35 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **3,385** vpd Minor Street Future ADT = **505** 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 …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements ADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **3,385**	1 **505**	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

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **3,385**	1 **505**	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

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 30% **B** 34%

2 CONDITIONS 80%

2 CONDITIONS 80%

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 (2025)
				CALC JC	DATE 12/04/23
Jurisdiction: **Town of Apple Valley**				CHK	DATE
Major Street: **Cordova Rd.**				Critical Approach Speed (Major)	45 mph
Minor Street: **Dwy. 6**				Critical Approach Speed (Minor)	35 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **2,481** vpd Minor Street Future ADT = **399** 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 …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements ADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **2,481**	1 **399**	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

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **2,481**	1 **399**	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

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 24% **B** 25%

2 CONDITIONS 80%

2 CONDITIONS 80%

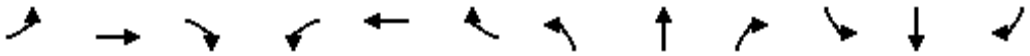
Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

This Page Intentionally Left Blank

APPENDIX 6.1: HORIZON YEAR (2040) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

This Page Intentionally Left Blank



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	1214	23	4	756	10	6	1	7	10	1	24
Future Volume (vph)	86	1214	23	4	756	10	6	1	7	10	1	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	86	1214	23	4	756	10	6	1	7	10	1	24
Future Vol, veh/h	86	1214	23	4	756	10	6	1	7	10	1	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	91	1278	24	4	796	11	6	1	7	11	1	25

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	807	0	0	1302	0	0	2295	2287	1290	2286	2294	802
Stage 1	-	-	-	-	-	-	1472	1472	-	810	810	-
Stage 2	-	-	-	-	-	-	823	815	-	1476	1484	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	818	-	-	532	-	-	27	39	200	28	39	384
Stage 1	-	-	-	-	-	-	158	191	-	374	393	-
Stage 2	-	-	-	-	-	-	368	391	-	157	188	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	818	-	-	532	-	-	22	34	200	24	34	384
Mov Cap-2 Maneuver	-	-	-	-	-	-	22	34	-	24	34	-
Stage 1	-	-	-	-	-	-	140	170	-	332	390	-
Stage 2	-	-	-	-	-	-	340	388	-	134	167	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.1	116.9	83.2
HCM LOS			F	F

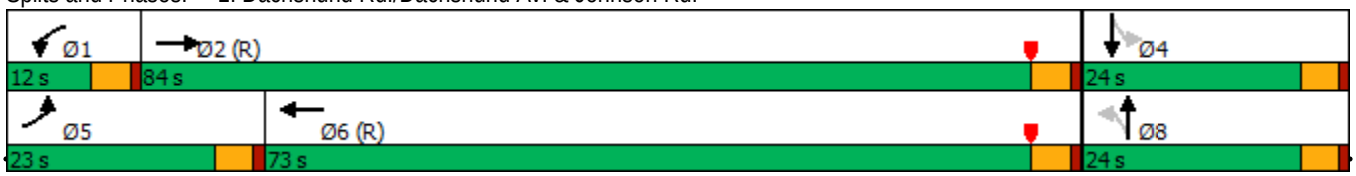
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	22	124	818	-	-	532	-	-	24	272
HCM Lane V/C Ratio	0.287	0.068	0.111	-	-	0.008	-	-	0.439	0.097
HCM Control Delay (s)	224.7	36.1	9.9	-	-	11.8	-	-	242.1	19.6
HCM Lane LOS	F	E	A	-	-	B	-	-	F	C
HCM 95th %tile Q(veh)	0.8	0.2	0.4	-	-	0	-	-	1.3	0.3

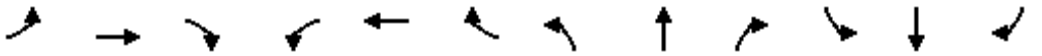
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	1214	23	4	756	10	6	1	7	10	1	24
Future Volume (vph)	86	1214	23	4	756	10	6	1	7	10	1	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	22.5		10.0	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	23.0	84.0		12.0	73.0		24.0	24.0		24.0	24.0	
Total Split (%)	19.2%	70.0%		10.0%	60.8%		20.0%	20.0%		20.0%	20.0%	
Maximum Green (s)	18.5	79.5		7.5	68.5		19.5	19.5		19.5	19.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 74.9 (62%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 1: Dachshund Rd./Dachshund Av. & Johnson Rd.

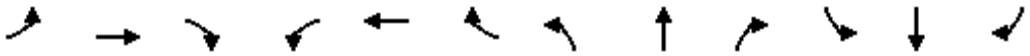




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	1214	23	4	756	10	6	1	7	10	1	24
Future Volume (veh/h)	86	1214	23	4	756	10	6	1	7	10	1	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	91	1278	24	4	796	11	6	1	7	11	1	25
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	2568	48	9	2369	33	264	33	228	281	10	247
Arrive On Green	0.06	0.72	0.72	0.01	0.66	0.66	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1781	3568	67	1781	3588	50	1373	200	1402	1395	61	1519
Grp Volume(v), veh/h	91	636	666	4	394	413	6	0	8	11	0	26
Grp Sat Flow(s),veh/h/ln	1781	1777	1858	1781	1777	1861	1373	0	1603	1395	0	1580
Q Serve(g_s), s	6.0	18.8	18.8	0.3	11.6	11.6	0.4	0.0	0.5	0.8	0.0	1.7
Cycle Q Clear(g_c), s	6.0	18.8	18.8	0.3	11.6	11.6	2.1	0.0	0.5	1.3	0.0	1.7
Prop In Lane	1.00		0.04	1.00		0.03	1.00		0.88	1.00		0.96
Lane Grp Cap(c), veh/h	115	1279	1337	9	1173	1229	264	0	260	281	0	257
V/C Ratio(X)	0.79	0.50	0.50	0.43	0.34	0.34	0.02	0.00	0.03	0.04	0.00	0.10
Avail Cap(c_a), veh/h	275	1279	1337	111	1173	1229	264	0	260	281	0	257
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.52	0.52	0.52	1.00	1.00	1.00	1.00	0.00	1.00	0.97	0.00	0.97
Uniform Delay (d), s/veh	55.3	7.3	7.3	59.5	8.9	8.9	43.7	0.0	42.3	42.8	0.0	42.8
Incr Delay (d2), s/veh	6.1	0.7	0.7	28.7	0.8	0.7	0.2	0.0	0.2	0.3	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	6.0	6.2	0.2	4.2	4.4	0.2	0.0	0.2	0.3	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.5	8.1	8.0	88.2	9.7	9.6	43.9	0.0	42.5	43.1	0.0	43.6
LnGrp LOS	E	A	A	F	A	A	D	A	D	D	A	D
Approach Vol, veh/h		1393			811			14			37	
Approach Delay, s/veh		11.5			10.0			43.1			43.4	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	90.9		24.0	12.3	83.7		24.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.5	79.5		19.5	18.5	68.5		19.5				
Max Q Clear Time (g_c+I1), s	2.3	20.8		3.7	8.0	13.6		4.1				
Green Ext Time (p_c), s	0.0	10.9		0.1	0.1	5.2		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		11.7	
HCM 6th LOS		B	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	714	258	337	362	87	172	423	381	228	188	19
Future Volume (vph)	23	714	258	337	362	87	172	423	381	228	188	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		165	100		0	325		0
Storage Lanes	0		0	0		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		7616			2660			2620			1074	
Travel Time (s)		115.4			40.3			32.5			13.3	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	567.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	714	258	337	362	87	172	423	381	228	188	19
Future Vol, veh/h	23	714	258	337	362	87	172	423	381	228	188	19
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	752	272	355	381	92	181	445	401	240	198	20
Number of Lanes	0	1	0	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	1139.6	625.8	160.8	64.4
HCM LOS	F	F	F	F

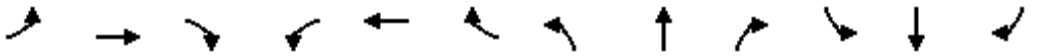
Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	2%	48%	0%	100%	0%
Vol Thru, %	0%	100%	0%	72%	52%	0%	0%	91%
Vol Right, %	0%	0%	100%	26%	0%	100%	0%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	172	423	381	995	699	87	228	207
LT Vol	172	0	0	23	337	0	228	0
Through Vol	0	423	0	714	362	0	0	188
RT Vol	0	0	381	258	0	87	0	19
Lane Flow Rate	181	445	401	1047	736	92	240	218
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.561	1.317	1.108	3.449	2.454	0.282	0.806	0.698
Departure Headway (Hd)	19.913	19.356	18.578	14.605	16.676	15.623	19.188	18.534
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	183	191	201	262	228	232	192	198
Service Time	17.613	17.056	16.278	12.305	14.376	13.323	16.888	16.234
HCM Lane V/C Ratio	0.989	2.33	1.995	3.996	3.228	0.397	1.25	1.101
HCM Control Delay	45.4	222.1	144.8	1139.6	700.7	24.3	72.4	55.5
HCM Lane LOS	E	F	F	F	F	C	F	F
HCM 95th-tile Q	3	14	10.4	79.5	43.8	1.1	5.6	4.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	714	258	337	362	87	172	423	381	228	188	19
Future Volume (vph)	23	714	258	337	362	87	172	423	381	228	188	19
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		165	100		150	325		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		6652			2660			2620			1074	
Travel Time (s)		100.8			40.3			32.5			13.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Free	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases						Free			8			
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	10.0	5.0	5.0	10.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		10.0	22.5	9.5	10.0	22.5	
Total Split (s)	10.5	48.5		34.0	72.0		22.0	23.0	34.0	24.0	25.0	
Total Split (%)	8.1%	37.5%		26.3%	55.6%		17.0%	17.8%	26.3%	18.5%	19.3%	
Maximum Green (s)	6.0	44.0		29.5	67.5		17.5	18.5	29.5	19.5	20.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			5			5	

Intersection Summary

Area Type: Other
Cycle Length: 129.5
Actuated Cycle Length: 129.5
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 2: Dale Evans Pkwy. & Johnson Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	714	258	337	362	87	172	423	381	228	188	19
Future Volume (veh/h)	23	714	258	337	362	87	172	423	381	228	188	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	24	752	272	355	381	0	181	445	401	240	198	20
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	38	892	323	371	1944		202	506	572	253	563	56
Arrive On Green	0.02	0.35	0.35	0.44	1.00	0.00	0.24	0.28	0.28	0.15	0.17	0.17
Sat Flow, veh/h	1688	2553	923	1688	3554	1585	1688	3554	1568	1688	3260	326
Grp Volume(v), veh/h	24	523	501	355	381	0	181	445	401	240	107	111
Grp Sat Flow(s),veh/h/ln	1688	1777	1699	1688	1777	1585	1688	1777	1568	1688	1777	1808
Q Serve(g_s), s	1.8	35.3	35.3	26.5	0.0	0.0	13.5	15.5	18.5	18.3	6.9	7.0
Cycle Q Clear(g_c), s	1.8	35.3	35.3	26.5	0.0	0.0	13.5	15.5	18.5	18.3	6.9	7.0
Prop In Lane	1.00		0.54	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	38	621	594	371	1944		202	506	572	253	307	312
V/C Ratio(X)	0.64	0.84	0.84	0.96	0.20		0.90	0.88	0.70	0.95	0.35	0.36
Avail Cap(c_a), veh/h	78	621	594	383	1944		227	506	572	253	307	312
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.00	0.49	0.49	0.49	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.0	39.0	39.0	35.8	0.0	0.0	48.7	45.4	30.8	54.7	47.4	47.4
Incr Delay (d2), s/veh	16.5	13.1	13.7	33.1	0.2	0.0	18.4	8.9	1.9	42.4	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	17.0	16.4	11.4	0.1	0.0	5.8	6.2	9.5	10.4	3.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.6	52.1	52.7	68.9	0.2	0.0	67.0	54.3	32.7	97.1	48.0	48.1
LnGrp LOS	E	D	D	E	A		E	D	C	F	D	D
Approach Vol, veh/h		1048			736			1027			458	
Approach Delay, s/veh		53.0			33.3			48.1			73.8	
Approach LOS		D			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.1	49.9	20.1	26.9	7.4	75.6	24.0	23.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	29.5	44.0	17.5	20.5	6.0	67.5	19.5	18.5
Max Q Clear Time (g_c+I1), s	28.5	37.3	15.5	9.0	3.8	2.0	20.3	20.5
Green Ext Time (p_c), s	0.1	3.3	0.1	0.7	0.0	2.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	50.0
HCM 6th LOS	D

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	407	70	400	842	20	120
Future Volume (vph)	407	70	400	842	20	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	7616		549			661
Travel Time (s)	115.4		8.3			10.0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	121.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	407	70	400	842	20	120
Future Vol, veh/h	407	70	400	842	20	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	428	74	421	886	21	126

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1032	864	0	0	1307	0
Stage 1	864	-	-	-	-	-
Stage 2	168	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 258	354	-	-	530	-
Stage 1	~ 413	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 247	354	-	-	530	-
Mov Cap-2 Maneuver	~ 247	-	-	-	-	-
Stage 1	~ 413	-	-	-	-	-
Stage 2	825	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 471.7	0	1.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	258	530	-
HCM Lane V/C Ratio	-	-	1.946	0.04	-
HCM Control Delay (s)	-	-	$ 471.7	12.1	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	35.8	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	407	70	400	842	20	120
Future Volume (vph)	407	70	400	842	20	120
Ideal Flow (vphpl)	1800	1900	1900	1900	1800	1900
Storage Length (ft)	150	0		150	150	
Storage Lanes	1	1		1	1	
Taper Length (ft)	90				90	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	964		549			661
Travel Time (s)	14.6		8.3			10.0
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA	pm+ov	Perm	NA
Protected Phases	6		8	6		4
Permitted Phases		6		8	4	
Detector Phase	6	6	8	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	89.0	89.0	31.0	89.0	31.0	31.0
Total Split (%)	74.2%	74.2%	25.8%	74.2%	25.8%	25.8%
Maximum Green (s)	84.5	84.5	26.5	84.5	26.5	26.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	Max	C-Max	Max	Max
Walk Time (s)			7.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			5			

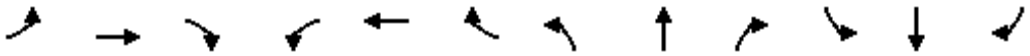
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2: and 6:WBL, Start of Yellow	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Stoddard Wells Rd. & Johnson Rd.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	407	70	400	842	20	120
Future Volume (veh/h)	407	70	400	842	20	120
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1772	1870	1870	1870	1772	1870
Adj Flow Rate, veh/h	428	74	421	886	21	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1188	1116	785	1462	106	785
Arrive On Green	0.70	0.70	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1688	1585	3647	1567	399	3647
Grp Volume(v), veh/h	428	74	421	886	21	126
Grp Sat Flow(s),veh/h/ln	1688	1585	1777	1567	399	1777
Q Serve(g_s), s	12.1	1.7	12.6	11.7	5.9	3.4
Cycle Q Clear(g_c), s	12.1	1.7	12.6	11.7	18.5	3.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1188	1116	785	1462	106	785
V/C Ratio(X)	0.36	0.07	0.54	0.61	0.20	0.16
Avail Cap(c_a), veh/h	1188	1116	785	1462	106	785
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.0	5.5	41.3	0.8	49.5	37.8
Incr Delay (d2), s/veh	0.9	0.1	2.6	1.9	4.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.5	5.6	27.1	0.7	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.9	5.6	43.9	2.6	53.6	38.2
LnGrp LOS	A	A	D	A	D	D
Approach Vol, veh/h	502		1307			147
Approach Delay, s/veh	7.6		16.0			40.4
Approach LOS	A		B			D

Timer - Assigned Phs				4		6	8
Phs Duration (G+Y+Rc), s				31.0		89.0	31.0
Change Period (Y+Rc), s				4.5		4.5	4.5
Max Green Setting (Gmax), s				26.5		84.5	26.5
Max Q Clear Time (g_c+I1), s				20.5		14.1	14.6
Green Ext Time (p_c), s				0.4		1.6	5.2

Intersection Summary			
HCM 6th Ctrl Delay		15.6	
HCM 6th LOS		B	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	131	91	18	632	81	10	69	32	1206	2	36
Future Volume (vph)	15	131	91	18	632	81	10	69	32	1206	2	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2070.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	15	131	91	18	632	81	10	69	32	1206	2	36
Future Vol, veh/h	15	131	91	18	632	81	10	69	32	1206	2	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	142	99	20	687	88	11	75	35	1311	2	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	775	0	0	241	0	0	1016	1039	192	1050	1044	731
Stage 1	-	-	-	-	-	-	224	224	-	771	771	-
Stage 2	-	-	-	-	-	-	792	815	-	279	273	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	841	-	-	1326	-	-	216	231	850	~ 205	229	422
Stage 1	-	-	-	-	-	-	779	718	-	~ 393	410	-
Stage 2	-	-	-	-	-	-	382	391	-	~ 728	684	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	841	-	-	1326	-	-	187	220	850	~ 140	218	422
Mov Cap-2 Maneuver	-	-	-	-	-	-	187	220	-	~ 140	218	-
Stage 1	-	-	-	-	-	-	762	702	-	~ 384	399	-
Stage 2	-	-	-	-	-	-	335	380	-	~ 610	669	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	28.1	$ 3863.2
HCM LOS			D	F

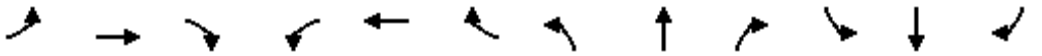
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	274	841	-	-	1326	-	-	143
HCM Lane V/C Ratio	0.44	0.019	-	-	0.015	-	-	9.456
HCM Control Delay (s)	28.1	9.4	0	-	7.8	0	-	$ 3863.2
HCM Lane LOS	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	2.1	0.1	-	-	0	-	-	154.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	131	91	18	632	81	10	69	32	1206	2	36
Future Volume (vph)	15	131	91	18	632	81	10	69	32	1206	2	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		0	150		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)										48%		
Turn Type	Perm	NA		Perm	NA		Split	NA		Split	NA	
Protected Phases		2			6		8	8		4	4	
Permitted Phases	2			6								
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	14.5	14.5		14.5	14.5		9.5	9.5		9.5	9.5	
Total Split (s)	41.0	41.0		41.0	41.0		15.0	15.0		64.0	64.0	
Total Split (%)	34.2%	34.2%		34.2%	34.2%		12.5%	12.5%		53.3%	53.3%	
Maximum Green (s)	36.5	36.5		36.5	36.5		10.5	10.5		59.5	59.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 116.1	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 4: Frontage Rd./I-15 NB Ramps & Stoddard Wells Rd.



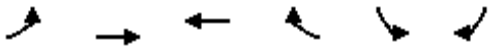
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	131	91	18	632	81	10	69	32	1206	2	36
Future Volume (veh/h)	15	131	91	18	632	81	10	69	32	1206	2	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	16	142	99	20	687	88	11	75	35	1349	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	360	283	45	803	102	156	111	52	1770	981	0
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.09	0.09	0.09	0.52	0.00	0.00
Sat Flow, veh/h	36	1364	1069	46	3038	384	1688	1199	560	3375	1870	0
Grp Volume(v), veh/h	118	0	139	422	0	373	11	0	110	1349	0	0
Grp Sat Flow(s),veh/h/ln	972	0	1497	1840	0	1628	1688	0	1759	1688	1870	0
Q Serve(g_s), s	1.1	0.0	8.5	10.9	0.0	24.8	0.7	0.0	6.9	35.9	0.0	0.0
Cycle Q Clear(g_c), s	25.9	0.0	8.5	24.8	0.0	24.8	0.7	0.0	6.9	35.9	0.0	0.0
Prop In Lane	0.14		0.71	0.05		0.24	1.00		0.32	1.00		0.00
Lane Grp Cap(c), veh/h	293	0	396	520	0	430	156	0	163	1770	981	0
V/C Ratio(X)	0.40	0.00	0.35	0.81	0.00	0.87	0.07	0.00	0.68	0.76	0.00	0.00
Avail Cap(c_a), veh/h	380	0	482	624	0	524	156	0	163	1770	981	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	33.7	0.0	33.9	39.7	0.0	39.8	47.0	0.0	49.8	21.4	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.5	6.9	0.0	12.3	0.9	0.0	20.3	3.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	3.1	11.7	0.0	11.0	0.3	0.0	3.9	14.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	0.0	34.4	46.6	0.0	52.2	47.9	0.0	70.1	24.6	0.0	0.0
LnGrp LOS	C	A	C	D	A	D	D	A	E	C	A	A
Approach Vol, veh/h		257			795			121			1349	
Approach Delay, s/veh		34.5			49.2			68.1			24.6	
Approach LOS		C			D			E			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		34.5		64.0		34.5		15.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		36.5		59.5		36.5		10.5				
Max Q Clear Time (g_c+I1), s		27.9		37.9		26.8		8.9				
Green Ext Time (p_c), s		0.9		6.1		3.2		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		35.4
HCM 6th LOS		D

Notes

User approved volume balancing among the lanes for turning movement.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	33	40	85	588	202	8
Future Volume (vph)	33	40	85	588	202	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			0	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

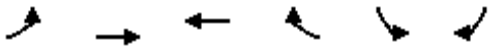
Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	40	85	588	202	8
Future Vol, veh/h	33	40	85	588	202	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	51	109	754	259	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	109	0	-	0	621	486
Stage 1	-	-	-	-	486	-
Stage 2	-	-	-	-	135	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1481	-	-	-	451	581
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	891	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1481	-	-	-	438	581
Mov Cap-2 Maneuver	-	-	-	-	438	-
Stage 1	-	-	-	-	600	-
Stage 2	-	-	-	-	891	-

Approach	EB	WB	SB
HCM Control Delay, s	3.4	0	25
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1481	-	-	-	442
HCM Lane V/C Ratio	0.029	-	-	-	0.609
HCM Control Delay (s)	7.5	0	-	-	25
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	4



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	33	40	85	588	202	8
Future Volume (vph)	33	40	85	588	202	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			150	0	25
Storage Lanes	0			1	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	40	85	588	202	8
Future Vol, veh/h	33	40	85	588	202	8
Conflicting Peds, #/hr	5	0	0	5	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	43	92	639	220	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	736	0	-	0	196	56
Stage 1	-	-	-	-	97	-
Stage 2	-	-	-	-	99	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	865	-	-	-	774	999
Stage 1	-	-	-	-	916	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	861	-	-	-	733	990
Mov Cap-2 Maneuver	-	-	-	-	733	-
Stage 1	-	-	-	-	872	-
Stage 2	-	-	-	-	909	-

Approach	EB	WB	SB
HCM Control Delay, s	4.3	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	861	-	-	-	740
HCM Lane V/C Ratio	0.042	-	-	-	0.308
HCM Control Delay (s)	9.4	0.1	-	-	12
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.3

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	203	10	7	614	8	7
Future Volume (vph)	203	10	7	614	8	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	4.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	203	10	7	614	8	7
Future Vol, veh/h	203	10	7	614	8	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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	248	12	9	749	10	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	413	384	0	0	758	0
Stage 1	384	-	-	-	-	-
Stage 2	29	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	595	664	-	-	853	-
Stage 1	688	-	-	-	-	-
Stage 2	994	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	588	664	-	-	853	-
Mov Cap-2 Maneuver	588	-	-	-	-	-
Stage 1	688	-	-	-	-	-
Stage 2	982	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.8	0	4.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	591	853	-
HCM Lane V/C Ratio	-	-	0.44	0.011	-
HCM Control Delay (s)	-	-	15.8	9.3	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	2.2	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	203	10	7	614	8	7
Future Volume (vph)	203	10	7	614	8	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		150	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	90				90	
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

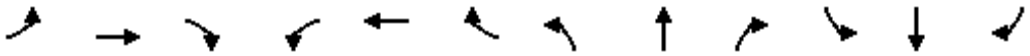
Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	203	10	7	614	8	7
Future Vol, veh/h	203	10	7	614	8	7
Conflicting Peds, #/hr	5	5	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	248	12	9	749	10	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	48	19	0	0	763	0
Stage 1	14	-	-	-	-	-
Stage 2	34	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	962	1059	-	-	850	-
Stage 1	1009	-	-	-	-	-
Stage 2	988	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	941	1049	-	-	846	-
Mov Cap-2 Maneuver	941	-	-	-	-	-
Stage 1	1004	-	-	-	-	-
Stage 2	971	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	946	846	-
HCM Lane V/C Ratio	-	-	0.275	0.012	-
HCM Control Delay (s)	-	-	10.2	9.3	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.1	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	266	413	184	174	362	76	174	553	384	173	402	194
Future Volume (vph)	266	413	184	174	362	76	174	553	384	173	402	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		400	415		0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		414			304			1385			2620	
Travel Time (s)		6.3			4.6			17.2			32.5	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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	266	413	184	174	362	76	174	553	384	173	402	194
Future Vol, veh/h	266	413	184	174	362	76	174	553	384	173	402	194
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	-	-	-	-	-	-	150	-	400	415	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	306	475	211	200	416	87	200	636	441	199	462	223

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2480	2449	574	2351	2119	636	685	0	0	1077	0	0
Stage 1	972	972	-	1036	1036	-	-	-	-	-	-	-
Stage 2	1508	1477	-	1315	1083	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 20	~ 31	518	~ 25	~ 50	478	908	-	-	647	-	-
Stage 1	~ 304	~ 331	-	280	~ 309	-	-	-	-	-	-	-
Stage 2	~ 151	~ 190	-	~ 194	~ 293	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 17	518	-	~ 27	478	908	-	-	647	-	-
Mov Cap-2 Maneuver	-	~ 17	-	-	~ 27	-	-	-	-	-	-	-
Stage 1	~ 237	~ 229	-	218	~ 241	-	-	-	-	-	-	-
Stage 2	-	~ 148	-	-	~ 203	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			1.6	2.9
HCM LOS	-	-		

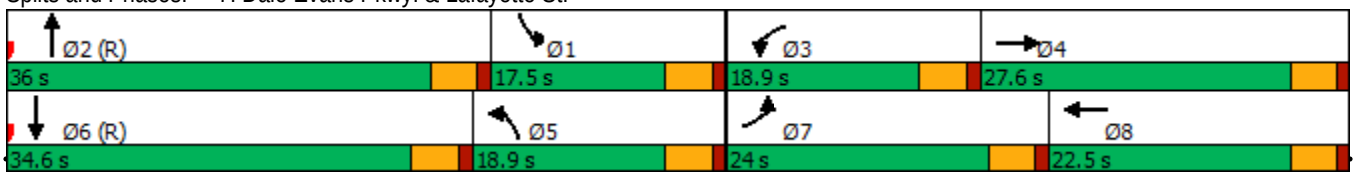
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	908	-	-	-	-	647	-	-
HCM Lane V/C Ratio	0.22	-	-	-	-	0.307	-	-
HCM Control Delay (s)	10.1	-	-	-	-	13	-	-
HCM Lane LOS	B	-	-	-	-	B	-	-
HCM 95th %tile Q(veh)	0.8	-	-	-	-	1.3	-	-

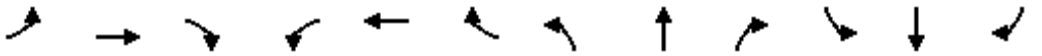
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	266	413	184	174	362	76	174	553	384	173	402	194
Future Volume (vph)	266	413	184	174	362	76	174	553	384	173	402	194
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		400	415		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		539			304			1385			2620	
Travel Time (s)		12.3			4.6			17.2			32.5	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	24.0	27.6		18.9	22.5		18.9	36.0		17.5	34.6	
Total Split (%)	24.0%	27.6%		18.9%	22.5%		18.9%	36.0%		17.5%	34.6%	
Maximum Green (s)	19.5	23.1		14.4	18.0		14.4	31.5		13.0	30.1	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			5			5	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Dale Evans Pkwy. & Lafayette St.

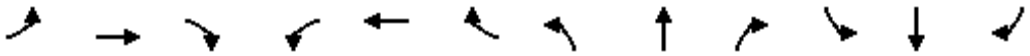




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	413	184	174	362	76	174	553	384	173	402	194
Future Volume (veh/h)	266	413	184	174	362	76	174	553	384	173	402	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	280	435	194	183	381	80	183	582	404	182	423	204
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	310	516	228	213	464	96	298	630	437	275	701	335
Arrive On Green	0.18	0.22	0.22	0.13	0.16	0.16	0.18	0.31	0.31	0.16	0.30	0.30
Sat Flow, veh/h	1688	2392	1056	1688	2924	607	1688	2001	1389	1688	2329	1111
Grp Volume(v), veh/h	280	322	307	183	230	231	183	517	469	182	322	305
Grp Sat Flow(s),veh/h/ln	1688	1777	1672	1688	1777	1754	1688	1777	1613	1688	1777	1664
Q Serve(g_s), s	16.2	17.4	17.6	10.6	12.5	12.8	10.0	28.1	28.1	10.1	15.4	15.7
Cycle Q Clear(g_c), s	16.2	17.4	17.6	10.6	12.5	12.8	10.0	28.1	28.1	10.1	15.4	15.7
Prop In Lane	1.00		0.63	1.00		0.35	1.00		0.86	1.00		0.67
Lane Grp Cap(c), veh/h	310	384	361	213	282	278	298	560	508	275	535	501
V/C Ratio(X)	0.90	0.84	0.85	0.86	0.82	0.83	0.61	0.92	0.92	0.66	0.60	0.61
Avail Cap(c_a), veh/h	329	410	386	243	320	316	298	560	508	275	535	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.63	0.63	0.63
Uniform Delay (d), s/veh	40.0	37.5	37.7	42.8	40.7	40.8	38.0	33.1	33.1	39.3	29.8	29.9
Incr Delay (d2), s/veh	26.1	13.7	15.7	23.1	13.6	15.3	3.7	23.2	24.9	3.7	3.1	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	8.9	8.7	5.6	6.3	6.5	4.2	14.5	13.4	4.2	6.5	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.1	51.2	53.3	65.9	54.3	56.0	41.7	56.3	57.9	43.0	33.0	33.4
LnGrp LOS	E	D	D	E	D	E	D	E	E	D	C	C
Approach Vol, veh/h		909			644			1169			809	
Approach Delay, s/veh		56.5			58.2			54.7			35.4	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.8	36.0	17.1	26.1	22.2	34.6	22.9	20.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.0	31.5	14.4	23.1	14.4	30.1	19.5	18.0
Max Q Clear Time (g_c+I1), s	12.1	30.1	12.6	19.6	12.0	17.7	18.2	14.8
Green Ext Time (p_c), s	0.0	0.8	0.1	1.3	0.1	2.7	0.1	0.8

Intersection Summary	
HCM 6th Ctrl Delay	51.4
HCM 6th LOS	D



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	25	12	18	17	15	11	775	28	12	296	61
Future Volume (vph)	136	25	12	18	17	15	11	775	28	12	296	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	98.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	136	25	12	18	17	15	11	775	28	12	296	61
Future Vol, veh/h	136	25	12	18	17	15	11	775	28	12	296	61
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	143	26	13	19	18	16	12	816	29	13	312	64
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	14.4	11.7	157.7	18.2
HCM LOS	B	B	F	C

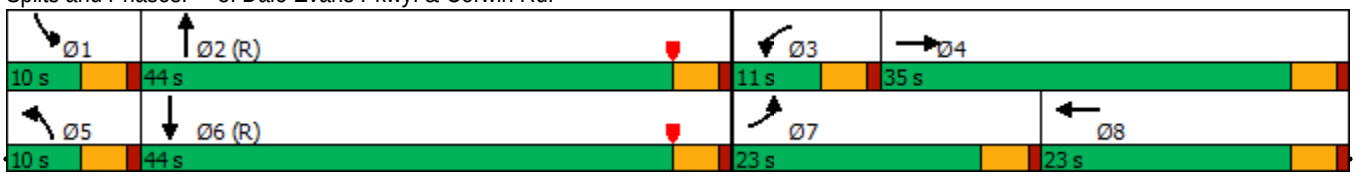
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	79%	36%	3%
Vol Thru, %	95%	14%	34%	80%
Vol Right, %	3%	7%	30%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	814	173	50	369
LT Vol	11	136	18	12
Through Vol	775	25	17	296
RT Vol	28	12	15	61
Lane Flow Rate	857	182	53	388
Geometry Grp	1	1	1	1
Degree of Util (X)	1.285	0.348	0.104	0.612
Departure Headway (Hd)	5.398	7.481	7.838	6.069
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	677	484	460	598
Service Time	3.429	5.481	5.838	4.069
HCM Lane V/C Ratio	1.266	0.376	0.115	0.649
HCM Control Delay	157.7	14.4	11.7	18.2
HCM Lane LOS	F	B	B	C
HCM 95th-tile Q	33.2	1.5	0.3	4.1

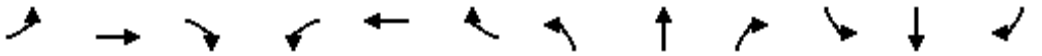
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	25	12	18	17	15	11	775	28	12	296	61
Future Volume (vph)	136	25	12	18	17	15	11	775	28	12	296	61
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	23.0	35.0		11.0	23.0		10.0	44.0		10.0	44.0	
Total Split (%)	23.0%	35.0%		11.0%	23.0%		10.0%	44.0%		10.0%	44.0%	
Maximum Green (s)	18.5	30.5		6.5	18.5		5.5	39.5		5.5	39.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			5			5	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 8: Dale Evans Pkwy. & Corwin Rd.

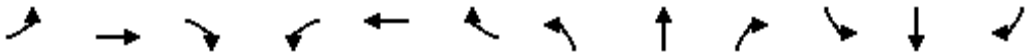




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	136	25	12	18	17	15	11	775	28	12	296	61
Future Volume (veh/h)	136	25	12	18	17	15	11	775	28	12	296	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	143	26	13	19	18	16	12	816	29	13	312	64
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	174	439	203	35	197	152	24	2093	74	26	1763	357
Arrive On Green	0.10	0.19	0.19	0.02	0.10	0.10	0.01	0.60	0.60	0.02	0.60	0.60
Sat Flow, veh/h	1688	2354	1087	1688	1898	1461	1688	3500	124	1688	2943	596
Grp Volume(v), veh/h	143	19	20	19	17	17	12	414	431	13	187	189
Grp Sat Flow(s),veh/h/ln	1688	1777	1664	1688	1777	1582	1688	1777	1848	1688	1777	1761
Q Serve(g_s), s	8.3	0.9	1.0	1.1	0.8	1.0	0.7	12.2	12.2	0.8	4.7	4.8
Cycle Q Clear(g_c), s	8.3	0.9	1.0	1.1	0.8	1.0	0.7	12.2	12.2	0.8	4.7	4.8
Prop In Lane	1.00		0.65	1.00		0.92	1.00		0.07	1.00		0.34
Lane Grp Cap(c), veh/h	174	331	310	35	184	164	24	1063	1105	26	1064	1055
V/C Ratio(X)	0.82	0.06	0.06	0.55	0.09	0.11	0.50	0.39	0.39	0.51	0.18	0.18
Avail Cap(c_a), veh/h	312	542	508	110	329	293	93	1063	1105	93	1064	1055
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.0	33.5	33.5	48.5	40.5	40.6	48.9	10.5	10.5	48.9	9.0	9.0
Incr Delay (d2), s/veh	9.3	0.1	0.1	12.9	0.2	0.3	15.3	1.1	1.0	14.7	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.4	0.4	0.6	0.4	0.4	0.4	4.2	4.3	0.4	1.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.3	33.5	33.6	61.4	40.7	40.9	64.3	11.6	11.6	63.6	9.3	9.4
LnGrp LOS	D	C	C	E	D	D	E	B	B	E	A	A
Approach Vol, veh/h		182			53			857			389	
Approach Delay, s/veh		49.0			48.2			12.3			11.2	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	64.3	6.6	23.1	5.9	64.4	14.8	14.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	39.5	6.5	30.5	5.5	39.5	18.5	18.5
Max Q Clear Time (g_c+I1), s	2.8	14.2	3.1	3.0	2.7	6.8	10.3	3.0
Green Ext Time (p_c), s	0.0	4.7	0.0	0.1	0.0	1.9	0.2	0.1

Intersection Summary	
HCM 6th Ctrl Delay	17.8
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	168	114	10	170	30	131	5	5	50	10	86
Future Volume (vph)	54	168	114	10	170	30	131	5	5	50	10	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		787			1189			2650			316	
Travel Time (s)		11.9			18.0			40.2			4.8	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	6.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	54	168	114	10	170	30	131	5	5	50	10	86
Future Vol, veh/h	54	168	114	10	170	30	131	5	5	50	10	86
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	57	177	120	11	179	32	138	5	5	53	11	91

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	211	0	0	297	0	0	619	584	237	573	628	195
Stage 1	-	-	-	-	-	-	351	351	-	217	217	-
Stage 2	-	-	-	-	-	-	268	233	-	356	411	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1360	-	-	1264	-	-	401	423	802	430	400	846
Stage 1	-	-	-	-	-	-	666	632	-	785	723	-
Stage 2	-	-	-	-	-	-	738	712	-	661	595	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1360	-	-	1264	-	-	334	398	802	403	376	846
Mov Cap-2 Maneuver	-	-	-	-	-	-	334	398	-	403	376	-
Stage 1	-	-	-	-	-	-	632	600	-	745	716	-
Stage 2	-	-	-	-	-	-	643	705	-	618	565	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0.4	23.3	13.4
HCM LOS			C	B

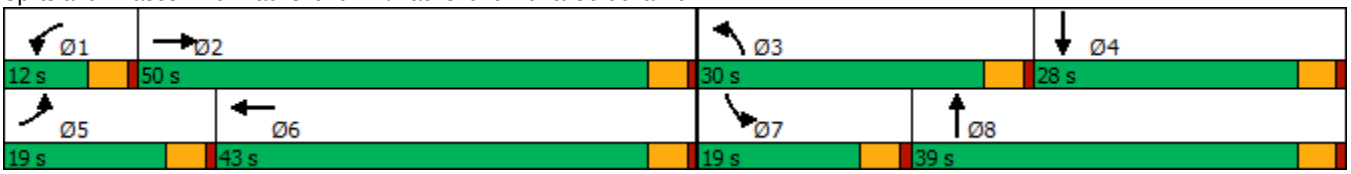
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	343	1360	-	-	1264	-	-	579
HCM Lane V/C Ratio	0.433	0.042	-	-	0.008	-	-	0.265
HCM Control Delay (s)	23.3	7.8	0	-	7.9	0	-	13.4
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	2.1	0.1	-	-	0	-	-	1.1

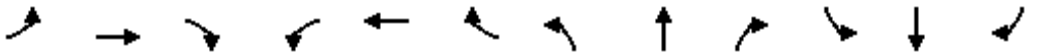
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	168	114	10	170	30	131	5	5	50	10	86
Future Volume (vph)	54	168	114	10	170	30	131	5	5	50	10	86
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		787			1189			2650			316	
Travel Time (s)		11.9			18.0			40.2			4.8	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	19.0	50.0		12.0	43.0		30.0	39.0		19.0	28.0	
Total Split (%)	15.8%	41.7%		10.0%	35.8%		25.0%	32.5%		15.8%	23.3%	
Maximum Green (s)	14.5	45.5		7.5	38.5		25.5	34.5		14.5	23.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			5			5	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 51.8
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Dachshund Av./Dachshund Rd. & Cordova Rd.

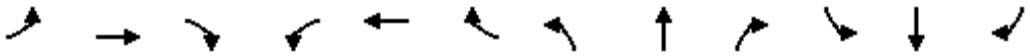




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	168	114	10	170	30	131	5	5	50	10	86
Future Volume (veh/h)	54	168	114	10	170	30	131	5	5	50	10	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	57	177	120	11	179	32	138	5	5	53	11	91
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	270	183	24	334	60	182	170	170	95	25	210
Arrive On Green	0.06	0.26	0.26	0.01	0.22	0.22	0.11	0.20	0.20	0.06	0.15	0.15
Sat Flow, veh/h	1688	1035	701	1688	1541	276	1688	852	852	1688	171	1416
Grp Volume(v), veh/h	57	0	297	11	0	211	138	0	10	53	0	102
Grp Sat Flow(s),veh/h/ln	1688	0	1736	1688	0	1817	1688	0	1704	1688	0	1587
Q Serve(g_s), s	1.3	0.0	5.9	0.2	0.0	4.0	3.1	0.0	0.2	1.2	0.0	2.2
Cycle Q Clear(g_c), s	1.3	0.0	5.9	0.2	0.0	4.0	3.1	0.0	0.2	1.2	0.0	2.2
Prop In Lane	1.00		0.40	1.00		0.15	1.00		0.50	1.00		0.89
Lane Grp Cap(c), veh/h	100	0	454	24	0	393	182	0	340	95	0	235
V/C Ratio(X)	0.57	0.00	0.65	0.45	0.00	0.54	0.76	0.00	0.03	0.56	0.00	0.43
Avail Cap(c_a), veh/h	637	0	2056	329	0	1821	1120	0	1530	637	0	971
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.6	0.0	12.6	18.8	0.0	13.3	16.7	0.0	12.4	17.7	0.0	14.9
Incr Delay (d2), s/veh	5.0	0.0	1.6	12.6	0.0	1.1	6.4	0.0	0.0	5.1	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.7	0.2	0.0	1.3	1.2	0.0	0.1	0.5	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.6	0.0	14.3	31.3	0.0	14.5	23.0	0.0	12.4	22.7	0.0	16.2
LnGrp LOS	C	A	B	C	A	B	C	A	B	C	A	B
Approach Vol, veh/h		354			222			148			155	
Approach Delay, s/veh		15.6			15.3			22.3			18.4	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	14.5	8.6	10.2	6.8	12.8	6.7	12.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	45.5	25.5	23.5	14.5	38.5	14.5	34.5
Max Q Clear Time (g_c+I1), s	2.2	7.9	5.1	4.2	3.3	6.0	3.2	2.2
Green Ext Time (p_c), s	0.0	1.8	0.3	0.4	0.1	1.1	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	937	165	30	1121	10	158	1	28	10	1	75
Future Volume (vph)	38	937	165	30	1121	10	158	1	28	10	1	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	395.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	937	165	30	1121	10	158	1	28	10	1	75
Future Vol, veh/h	38	937	165	30	1121	10	158	1	28	10	1	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	986	174	32	1180	11	166	1	29	11	1	79

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1191	0	0	1160	0	0	2443	2408	1073	2418	2490	1186
Stage 1	-	-	-	-	-	-	1153	1153	-	1250	1250	-
Stage 2	-	-	-	-	-	-	1290	1255	-	1168	1240	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	586	-	-	602	-	-	~ 21	33	268	22	29	230
Stage 1	-	-	-	-	-	-	240	272	-	212	244	-
Stage 2	-	-	-	-	-	-	201	243	-	236	247	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	586	-	-	602	-	-	~ 12	29	268	17	26	230
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 12	29	-	17	26	-
Stage 1	-	-	-	-	-	-	224	254	-	198	231	-
Stage 2	-	-	-	-	-	-	~ 124	230	-	195	230	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.3	$ 5410.4	74.1
HCM LOS			F	F

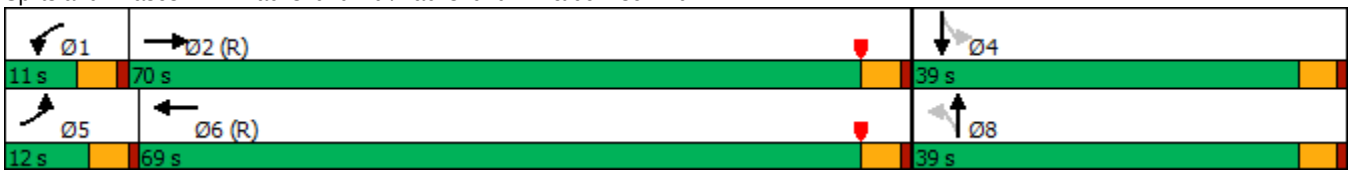
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	12	209	586	-	-	602	-	-	17	208
HCM Lane V/C Ratio	13.86	0.146	0.068	-	-	0.052	-	-	0.619	0.385
HCM Control Delay (s)	$ 6398.9	25.1	11.6	-	-	11.3	-	-	$ 388.7	32.7
HCM Lane LOS	F	D	B	-	-	B	-	-	F	D
HCM 95th %tile Q(veh)	22.1	0.5	0.2	-	-	0.2	-	-	1.6	1.7

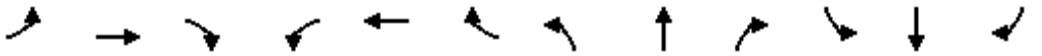
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	937	165	30	1121	10	158	1	28	10	1	75
Future Volume (vph)	38	937	165	30	1121	10	158	1	28	10	1	75
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	22.5		10.0	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	12.0	70.0		11.0	69.0		39.0	39.0		39.0	39.0	
Total Split (%)	10.0%	58.3%		9.2%	57.5%		32.5%	32.5%		32.5%	32.5%	
Maximum Green (s)	7.5	65.5		6.5	64.5		34.5	34.5		34.5	34.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 78.5 (65%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Dachshund Rd./Dachshund Av. & Johnson Rd.

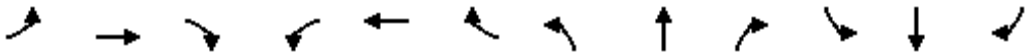




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	937	165	30	1121	10	158	1	28	10	1	75
Future Volume (veh/h)	38	937	165	30	1121	10	158	1	28	10	1	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	40	986	174	32	1180	11	166	1	29	11	1	79
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	1638	289	44	1945	18	352	14	419	397	5	427
Arrive On Green	0.01	0.19	0.19	0.03	0.57	0.57	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1594	2860	504	1594	3418	32	1180	50	1459	1234	19	1486
Grp Volume(v), veh/h	40	580	580	32	581	610	166	0	30	11	0	80
Grp Sat Flow(s),veh/h/ln	1594	1683	1681	1594	1683	1766	1180	0	1509	1234	0	1504
Q Serve(g_s), s	3.0	37.8	37.9	2.4	27.3	27.3	14.8	0.0	1.7	0.8	0.0	4.8
Cycle Q Clear(g_c), s	3.0	37.8	37.9	2.4	27.3	27.3	19.6	0.0	1.7	2.5	0.0	4.8
Prop In Lane	1.00		0.30	1.00		0.02	1.00		0.97	1.00		0.99
Lane Grp Cap(c), veh/h	49	964	963	44	958	1005	352	0	434	397	0	433
V/C Ratio(X)	0.82	0.60	0.60	0.73	0.61	0.61	0.47	0.00	0.07	0.03	0.00	0.18
Avail Cap(c_a), veh/h	100	964	963	86	958	1005	352	0	434	397	0	433
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.60	0.60	1.00	1.00	1.00	1.00	0.00	1.00	0.94	0.00	0.94
Uniform Delay (d), s/veh	59.1	36.1	36.2	57.9	17.0	17.0	39.5	0.0	31.1	32.0	0.0	32.2
Incr Delay (d2), s/veh	17.4	1.7	1.7	21.0	2.8	2.7	4.5	0.0	0.3	0.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	17.4	17.4	1.2	10.3	10.8	4.7	0.0	0.7	0.3	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.4	37.8	37.8	79.0	19.9	19.7	44.0	0.0	31.4	32.1	0.0	33.1
LnGrp LOS	E	D	D	E	B	B	D	A	C	C	A	C
Approach Vol, veh/h		1200			1223			196			91	
Approach Delay, s/veh		39.1			21.3			42.1			32.9	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	73.2		39.0	8.2	72.8		39.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	65.5		34.5	7.5	64.5		34.5				
Max Q Clear Time (g_c+I1), s	4.4	39.9		6.8	5.0	29.3		21.6				
Green Ext Time (p_c), s	0.0	7.9		0.5	0.0	8.7		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		31.1	
HCM 6th LOS		C	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	575	305	389	757	208	204	273	434	131	511	35
Future Volume (vph)	18	575	305	389	757	208	204	273	434	131	511	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		165	100		0	325		0
Storage Lanes	0		0	0		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		7616			2660			2620			1074	
Travel Time (s)		115.4			40.3			32.5			13.3	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	766.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	575	305	389	757	208	204	273	434	131	511	35
Future Vol, veh/h	18	575	305	389	757	208	204	273	434	131	511	35
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	605	321	409	797	219	215	287	457	138	538	37
Number of Lanes	0	1	0	0	1	1	1	1	1	1	1	0

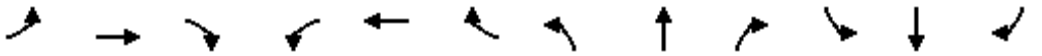
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	1036.2	1193.7	151.2	384.3
HCM LOS	F	F	F	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	2%	34%	0%	100%	0%
Vol Thru, %	0%	100%	0%	64%	66%	0%	0%	94%
Vol Right, %	0%	0%	100%	34%	0%	100%	0%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	204	273	434	898	1146	208	131	546
LT Vol	204	0	0	18	389	0	131	0
Through Vol	0	273	0	575	757	0	0	511
RT Vol	0	0	434	305	0	208	0	35
Lane Flow Rate	215	287	457	945	1206	219	138	575
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.687	0.879	1.309	3.212	4.018	0.677	0.481	1.92
Departure Headway (Hd)	22.963	22.408	21.631	15.756	17.657	16.677	18.081	17.453
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	161	164	174	246	217	219	201	213
Service Time	20.663	20.108	19.331	13.456	15.357	14.377	15.781	15.153
HCM Lane V/C Ratio	1.335	1.75	2.626	3.841	5.558	1	0.687	2.7
HCM Control Delay	65.1	95.9	226.4	1036.2	1401.6	48.5	36.5	467.8
HCM Lane LOS	F	F	F	F	F	E	E	F
HCM 95th-tile Q	4	6.2	12.8	67.3	80.7	4.2	2.4	28.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	575	305	389	757	208	204	273	434	131	511	35
Future Volume (vph)	18	575	305	389	757	208	204	273	434	131	511	35
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1800	1800	1900	1900
Storage Length (ft)	150		0	150		165	100		150	325		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		6652			2660			2620			1074	
Travel Time (s)		100.8			40.3			32.5			13.3	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Free	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases						Free			8			
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	5.0		5.0	10.0	5.0	5.0	10.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		20.0	22.5	9.5	20.0	22.5	
Total Split (s)	10.1	40.0		35.0	64.9		20.0	24.0	35.0	21.0	25.0	
Total Split (%)	8.4%	33.3%		29.2%	54.1%		16.7%	20.0%	29.2%	17.5%	20.8%	
Maximum Green (s)	5.6	35.5		30.5	60.4		15.5	19.5	30.5	16.5	20.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			5			5	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Dale Evans Pkwy. & Johnson Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	575	305	389	757	208	204	273	434	131	511	35
Future Volume (veh/h)	18	575	305	389	757	208	204	273	434	131	511	35
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	1772	1870	1870	1772	1870	1870	1772	1870	1772	1772	1870	1870
Adj Flow Rate, veh/h	19	605	321	409	797	0	215	287	457	138	538	37
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	33	670	355	424	1885		218	721	682	164	576	40
Arrive On Green	0.02	0.30	0.30	0.50	1.00	0.00	0.13	0.20	0.20	0.10	0.17	0.17
Sat Flow, veh/h	1688	2243	1190	1688	3554	1585	1688	3554	1502	1688	3374	232
Grp Volume(v), veh/h	19	479	447	409	797	0	215	287	457	138	283	292
Grp Sat Flow(s),veh/h/ln	1688	1777	1656	1688	1777	1585	1688	1777	1502	1688	1777	1829
Q Serve(g_s), s	1.3	31.1	31.1	28.1	0.0	0.0	15.3	8.4	24.3	9.6	18.8	18.9
Cycle Q Clear(g_c), s	1.3	31.1	31.1	28.1	0.0	0.0	15.3	8.4	24.3	9.6	18.8	18.9
Prop In Lane	1.00		0.72	1.00		1.00	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	33	531	495	424	1885		218	721	682	164	304	312
V/C Ratio(X)	0.58	0.90	0.90	0.96	0.42		0.99	0.40	0.67	0.84	0.93	0.94
Avail Cap(c_a), veh/h	79	531	495	429	1885		218	721	682	232	304	312
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.75	0.75	0.00	0.70	0.70	0.70	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	40.4	40.4	29.3	0.0	0.0	52.1	41.5	25.7	53.3	49.1	49.1
Incr Delay (d2), s/veh	14.9	21.2	22.4	28.7	0.5	0.0	47.1	0.2	1.8	17.2	34.2	34.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	16.1	15.2	10.9	0.1	0.0	9.0	3.5	9.7	4.7	10.8	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.2	61.6	62.8	58.1	0.5	0.0	99.3	41.7	27.5	70.5	83.3	83.4
LnGrp LOS	E	E	E	E	A		F	D	C	E	F	F
Approach Vol, veh/h		945			1206			959			713	
Approach Delay, s/veh		62.4			20.0			47.8			80.9	
Approach LOS		E			C			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.6	40.4	20.0	25.0	6.8	68.2	16.2	28.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	30.5	35.5	15.5	20.5	5.6	60.4	16.5	19.5
Max Q Clear Time (g_c+I1), s	30.1	33.1	17.3	20.9	3.3	2.0	11.6	26.3
Green Ext Time (p_c), s	0.1	1.3	0.0	0.0	0.0	5.9	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	48.8
HCM 6th LOS	D

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	934	98	239	681	95	403
Future Volume (vph)	934	98	239	681	95	403
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	7616		549			661
Travel Time (s)	115.4		8.3			10.0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1043.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	934	98	239	681	95	403
Future Vol, veh/h	934	98	239	681	95	403
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	983	103	252	717	100	424

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1235	611	0	0	969	0
Stage 1	611	-	-	-	-	-
Stage 2	624	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 195	494	-	-	711	-
Stage 1	~ 542	-	-	-	-	-
Stage 2	~ 534	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 159	494	-	-	711	-
Mov Cap-2 Maneuver	~ 159	-	-	-	-	-
Stage 1	~ 542	-	-	-	-	-
Stage 2	~ 436	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 2476.6	0	2.1
HCM LOS	F		

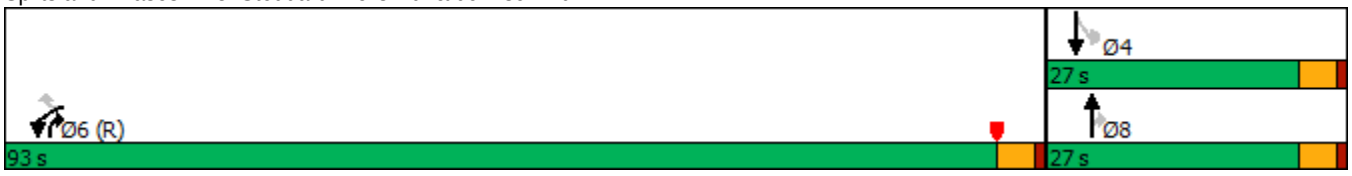
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	170	711	-
HCM Lane V/C Ratio	-	-	6.39	0.141	-
HCM Control Delay (s)	-	-	$ 2476.6	10.9	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	118	0.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	934	98	239	681	95	403
Future Volume (vph)	934	98	239	681	95	403
Ideal Flow (vphpl)	1800	1900	1900	1900	1800	1900
Storage Length (ft)	150	0		150	150	
Storage Lanes	1	1		1	1	
Taper Length (ft)	90				90	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	964		549			661
Travel Time (s)	14.6		8.3			10.0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA	pm+ov	Perm	NA
Protected Phases	6		8	6		4
Permitted Phases		6		8	4	
Detector Phase	6	6	8	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	93.0	93.0	27.0	93.0	27.0	27.0
Total Split (%)	77.5%	77.5%	22.5%	77.5%	22.5%	22.5%
Maximum Green (s)	88.5	88.5	22.5	88.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	Max	C-Max	Max	Max
Walk Time (s)			7.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			5			

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2: and 6:WBL, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Stoddard Wells Rd. & Johnson Rd.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	934	98	239	681	95	403
Future Volume (veh/h)	934	98	239	681	95	403
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1772	1870	1870	1870	1772	1870
Adj Flow Rate, veh/h	983	103	252	717	100	424
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1245	1169	666	1466	129	666
Arrive On Green	0.74	0.74	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1688	1585	3647	1585	550	3647
Grp Volume(v), veh/h	983	103	252	717	100	424
Grp Sat Flow(s),veh/h/ln	1688	1585	1777	1585	550	1777
Q Serve(g_s), s	43.9	2.2	7.4	7.4	15.1	13.2
Cycle Q Clear(g_c), s	43.9	2.2	7.4	7.4	22.5	13.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1245	1169	666	1466	129	666
V/C Ratio(X)	0.79	0.09	0.38	0.49	0.78	0.64
Avail Cap(c_a), veh/h	1245	1169	666	1466	129	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.9	4.4	42.6	0.6	54.8	45.0
Incr Delay (d2), s/veh	5.2	0.1	1.6	1.2	35.6	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.0	0.6	3.3	21.8	4.3	6.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.1	4.6	44.3	1.8	90.4	49.6
LnGrp LOS	B	A	D	A	F	D
Approach Vol, veh/h	1086		969			524
Approach Delay, s/veh	14.1		12.8			57.4
Approach LOS	B		B			E

Timer - Assigned Phs				4		6	8
Phs Duration (G+Y+Rc), s				27.0		93.0	27.0
Change Period (Y+Rc), s				4.5		4.5	4.5
Max Green Setting (Gmax), s				22.5		88.5	22.5
Max Q Clear Time (g_c+I1), s				24.5		45.9	9.4
Green Ext Time (p_c), s				0.0		4.8	3.7

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	145	77	34	1270	115	3	77	33	923	2	37
Future Volume (vph)	10	145	77	34	1270	115	3	77	33	923	2	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	14.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	145	77	34	1270	115	3	77	33	923	2	37
Future Vol, veh/h	10	145	77	34	1270	115	3	77	33	923	2	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	158	84	37	1380	125	3	84	36	1003	2	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1505	0	0	242	0	0	1760	1801	200	1799	1781	1443
Stage 1	-	-	-	-	-	-	222	222	-	1517	1517	-
Stage 2	-	-	-	-	-	-	1538	1579	-	282	264	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	445	-	-	1324	-	-	66	~ 80	841	~ 62	82	162
Stage 1	-	-	-	-	-	-	780	720	-	~ 149	182	-
Stage 2	-	-	-	-	-	-	145	169	-	~ 725	690	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	445	-	-	1324	-	-	41	~ 63	841	-	65	162
Mov Cap-2 Maneuver	-	-	-	-	-	-	41	~ 63	-	-	65	-
Stage 1	-	-	-	-	-	-	757	699	-	~ 145	148	-
Stage 2	-	-	-	-	-	-	87	137	-	~ 593	670	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	$ 341.3	
HCM LOS			F	-

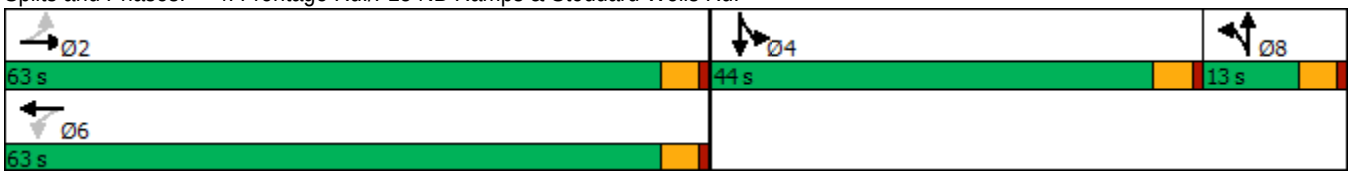
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	85	445	-	-	1324	-	-	-
HCM Lane V/C Ratio	1.445	0.024	-	-	0.028	-	-	-
HCM Control Delay (s)	$ 341.3	13.3	0	-	7.8	0	-	-
HCM Lane LOS	F	B	A	-	A	A	-	-
HCM 95th %tile Q(veh)	9.6	0.1	-	-	0.1	-	-	-

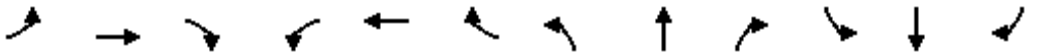
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	145	77	34	1270	115	3	77	33	923	2	37
Future Volume (vph)	10	145	77	34	1270	115	3	77	33	923	2	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		0	150		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)										48%		
Turn Type	Perm	NA		Perm	NA		Split	NA		Split	NA	
Protected Phases		2			6		8	8		4	4	
Permitted Phases	2			6								
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	14.5	14.5		14.5	14.5		9.5	9.5		9.5	9.5	
Total Split (s)	63.0	63.0		63.0	63.0		13.0	13.0		44.0	44.0	
Total Split (%)	52.5%	52.5%		52.5%	52.5%		10.8%	10.8%		36.7%	36.7%	
Maximum Green (s)	58.5	58.5		58.5	58.5		8.5	8.5		39.5	39.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 119.5	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 4: Frontage Rd./I-15 NB Ramps & Stoddard Wells Rd.





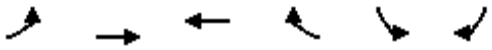
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	145	77	34	1270	115	3	77	33	923	2	37
Future Volume (veh/h)	10	145	77	34	1270	115	3	77	33	923	2	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	11	158	84	37	1380	125	3	84	36	1042	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	665	419	59	1477	132	124	91	39	1150	638	0
Arrive On Green	0.47	0.47	0.47	0.70	0.70	0.70	0.07	0.07	0.07	0.44	0.00	0.00
Sat Flow, veh/h	22	1417	894	55	3148	282	1688	1242	532	3375	1870	0
Grp Volume(v), veh/h	108	0	145	811	0	731	3	0	120	1042	0	0
Grp Sat Flow(s),veh/h/ln	792	0	1541	1835	0	1651	1688	0	1775	1688	1870	0
Q Serve(g_s), s	2.6	0.0	6.4	26.7	0.0	45.2	0.2	0.0	7.8	33.3	0.0	0.0
Cycle Q Clear(g_c), s	47.9	0.0	6.4	44.7	0.0	45.2	0.2	0.0	7.8	33.3	0.0	0.0
Prop In Lane	0.10		0.58	0.05		0.17	1.00		0.30	1.00		0.00
Lane Grp Cap(c), veh/h	406	0	723	893	0	775	124	0	130	1150	638	0
V/C Ratio(X)	0.27	0.00	0.20	0.91	0.00	0.94	0.02	0.00	0.92	0.91	0.00	0.00
Avail Cap(c_a), veh/h	452	0	778	958	0	834	124	0	130	1150	638	0
HCM Platoon Ratio	1.00	1.00	1.00	1.50	1.50	1.50	1.00	1.00	1.00	1.30	1.30	1.30
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.2	0.0	18.0	15.6	0.0	15.8	49.8	0.0	53.4	30.5	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.1	11.7	0.0	18.3	0.4	0.0	60.2	11.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	2.2	12.7	0.0	13.1	0.1	0.0	5.6	14.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.5	0.0	18.1	27.3	0.0	34.1	50.2	0.0	113.6	42.3	0.0	0.0
LnGrp LOS	C	A	B	C	A	C	D	A	F	D	A	A
Approach Vol, veh/h		253			1542			123			1042	
Approach Delay, s/veh		19.6			30.5			112.0			42.3	
Approach LOS		B			C			F			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	58.9	44.0	58.9	13.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	58.5	39.5	58.5	8.5
Max Q Clear Time (g_c+I1), s	49.9	35.3	47.2	9.8
Green Ext Time (p_c), s	0.9	1.8	7.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	37.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	25	55	68	1241	177	12
Future Volume (vph)	25	55	68	1241	177	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			0	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	33.7

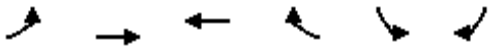
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	55	68	1241	177	12
Future Vol, veh/h	25	55	68	1241	177	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	85	105	1909	272	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	105	0	-	0	1221	1060
Stage 1	-	-	-	-	1060	-
Stage 2	-	-	-	-	161	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1486	-	-	-	~ 199	272
Stage 1	-	-	-	-	333	-
Stage 2	-	-	-	-	868	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1486	-	-	-	~ 194	272
Mov Cap-2 Maneuver	-	-	-	-	~ 194	-
Stage 1	-	-	-	-	324	-
Stage 2	-	-	-	-	868	-

Approach	EB	WB	SB
HCM Control Delay, s	2.3	0	280.7
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1486	-	-	-	198
HCM Lane V/C Ratio	0.026	-	-	-	1.469
HCM Control Delay (s)	7.5	0	-	-	280.7
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	17.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	25	55	68	1241	177	12
Future Volume (vph)	25	55	68	1241	177	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			150	0	25
Storage Lanes	0			1	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	55	68	1241	177	12
Future Vol, veh/h	25	55	68	1241	177	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	60	74	1349	192	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1423	0	-	0	158	37
Stage 1	-	-	-	-	74	-
Stage 2	-	-	-	-	84	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	474	-	-	-	818	1027
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	474	-	-	-	770	1027
Mov Cap-2 Maneuver	-	-	-	-	770	-
Stage 1	-	-	-	-	885	-
Stage 2	-	-	-	-	930	-

Approach	EB	WB	SB
HCM Control Delay, s	4.2	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	474	-	-	-	782
HCM Lane V/C Ratio	0.057	-	-	-	0.263
HCM Control Delay (s)	13.1	0.2	-	-	11.2
HCM Lane LOS	B	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	1.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	183	6	6	1260	6	6
Future Volume (vph)	183	6	6	1260	6	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	17

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	183	6	6	1260	6	6
Future Vol, veh/h	183	6	6	1260	6	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	282	9	9	1938	9	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1005	978	0	0	1947	0
Stage 1	978	-	-	-	-	-
Stage 2	27	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 268	304	-	-	300	-
Stage 1	364	-	-	-	-	-
Stage 2	996	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 260	304	-	-	300	-
Mov Cap-2 Maneuver	~ 260	-	-	-	-	-
Stage 1	364	-	-	-	-	-
Stage 2	966	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	131.5	0	8.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	261	300	-
HCM Lane V/C Ratio	-	-	1.114	0.031	-
HCM Control Delay (s)	-	-	131.5	17.4	0
HCM Lane LOS	-	-	F	C	A
HCM 95th %tile Q(veh)	-	-	12.5	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	183	6	6	1260	6	6
Future Volume (vph)	183	6	6	1260	6	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		150	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	90				90	
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

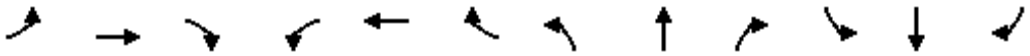
Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	183	6	6	1260	6	6
Future Vol, veh/h	183	6	6	1260	6	6
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	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	282	9	9	1938	9	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	36	9	0	0	1947	0
Stage 1	9	-	-	-	-	-
Stage 2	27	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	977	1073	-	-	300	-
Stage 1	1014	-	-	-	-	-
Stage 2	996	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	948	1073	-	-	300	-
Mov Cap-2 Maneuver	948	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	966	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	8.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	952	300	-
HCM Lane V/C Ratio	-	-	0.305	0.031	-
HCM Control Delay (s)	-	-	10.4	17.4	0
HCM Lane LOS	-	-	B	C	A
HCM 95th %tile Q(veh)	-	-	1.3	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	263	124	216	436	243	241	370	302	161	776	206
Future Volume (vph)	223	263	124	216	436	243	241	370	302	161	776	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		400	415		0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		414			304			1385			2620	
Travel Time (s)		9.4			4.6			17.2			32.5	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	223	263	124	216	436	243	241	370	302	161	776	206
Future Vol, veh/h	223	263	124	216	436	243	241	370	302	161	776	206
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	-	-	-	-	-	-	150	-	400	415	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	293	346	163	284	574	320	317	487	397	212	1021	271

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3348	3099	1157	2956	2837	487	1292	0	0	884	0	0
Stage 1	1581	1581	-	1121	1121	-	-	-	-	-	-	-
Stage 2	1767	1518	-	1835	1716	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 5	~ 12	239	~ 9	~ 17	581	537	-	-	765	-	-
Stage 1	~ 137	~ 169	-	~ 250	~ 282	-	-	-	-	-	-	-
Stage 2	~ 107	~ 181	-	~ 97	~ 145	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 4	239	-	~ 5	581	537	-	-	765	-	-
Mov Cap-2 Maneuver	-	~ 4	-	-	~ 5	-	-	-	-	-	-	-
Stage 1	~ 56	~ 122	-	~ 103	~ 116	-	-	-	-	-	-	-
Stage 2	-	~ 74	-	-	~ 105	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			5.5	1.6
HCM LOS	-	-		

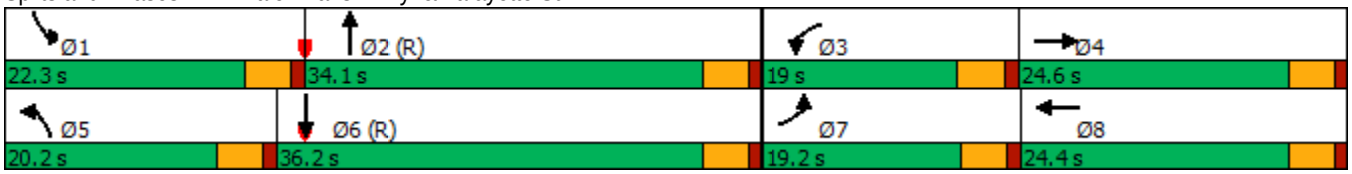
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	537	-	-	-	-	765	-	-
HCM Lane V/C Ratio	0.591	-	-	-	-	0.277	-	-
HCM Control Delay (s)	20.9	-	-	-	-	11.5	-	-
HCM Lane LOS	C	-	-	-	-	B	-	-
HCM 95th %tile Q(veh)	3.8	-	-	-	-	1.1	-	-

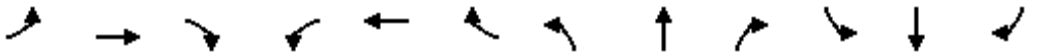
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	263	124	216	436	243	241	370	302	161	776	206
Future Volume (vph)	223	263	124	216	436	243	241	370	302	161	776	206
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		400	415		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		539			304			1385			2620	
Travel Time (s)		12.3			4.6			17.2			32.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	19.2	24.6		19.0	24.4		20.2	34.1		22.3	36.2	
Total Split (%)	19.2%	24.6%		19.0%	24.4%		20.2%	34.1%		22.3%	36.2%	
Maximum Green (s)	14.7	20.1		14.5	19.9		15.7	29.6		17.8	31.7	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			5			5	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Dale Evans Pkwy. & Lafayette St.

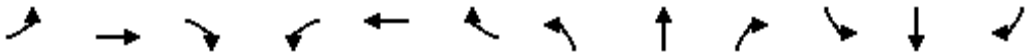




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	263	124	216	436	243	241	370	302	161	776	206
Future Volume (veh/h)	223	263	124	216	436	243	241	370	302	161	776	206
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	235	277	131	227	459	256	254	389	318	169	817	217
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	475	219	245	439	243	265	664	538	199	880	234
Arrive On Green	0.15	0.20	0.20	0.14	0.20	0.20	0.31	0.71	0.71	0.18	0.48	0.48
Sat Flow, veh/h	1688	2363	1088	1688	2205	1222	1688	1866	1510	1688	2777	737
Grp Volume(v), veh/h	235	206	202	227	369	346	254	370	337	169	523	511
Grp Sat Flow(s),veh/h/ln	1688	1777	1675	1688	1777	1650	1688	1777	1599	1688	1777	1738
Q Serve(g_s), s	13.8	10.5	10.9	13.3	19.9	19.9	14.8	10.3	10.5	9.7	27.6	27.6
Cycle Q Clear(g_c), s	13.8	10.5	10.9	13.3	19.9	19.9	14.8	10.3	10.5	9.7	27.6	27.6
Prop In Lane	1.00		0.65	1.00		0.74	1.00		0.94	1.00		0.42
Lane Grp Cap(c), veh/h	248	357	337	245	354	328	265	633	569	199	563	551
V/C Ratio(X)	0.95	0.58	0.60	0.93	1.04	1.05	0.96	0.59	0.59	0.85	0.93	0.93
Avail Cap(c_a), veh/h	248	357	337	245	354	328	265	633	569	300	563	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.50	1.50	1.50
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.21	0.21	0.21
Uniform Delay (d), s/veh	42.3	36.1	36.3	42.2	40.1	40.1	34.0	10.7	10.8	40.3	25.2	25.2
Incr Delay (d2), s/veh	42.7	2.3	2.9	38.4	59.8	64.2	43.9	3.9	4.5	3.2	7.1	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	4.7	4.7	7.9	14.1	13.5	7.8	3.2	3.0	3.7	9.1	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.0	38.4	39.2	80.6	99.9	104.3	77.9	14.7	15.2	43.5	32.2	32.4
LnGrp LOS	F	D	D	F	F	F	E	B	B	D	C	C
Approach Vol, veh/h		643			942			961			1203	
Approach Delay, s/veh		55.7			96.9			31.6			33.9	
Approach LOS		E			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	40.1	19.0	24.6	20.2	36.2	19.2	24.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	17.8	29.6	14.5	20.1	15.7	31.7	14.7	19.9
Max Q Clear Time (g_c+I1), s	11.7	12.5	15.3	12.9	16.8	29.6	15.8	21.9
Green Ext Time (p_c), s	0.2	3.6	0.0	1.4	0.0	1.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.9
HCM 6th LOS	D



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	18	15	28	30	13	9	543	25	14	709	151
Future Volume (vph)	83	18	15	28	30	13	9	543	25	14	709	151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	134.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	83	18	15	28	30	13	9	543	25	14	709	151
Future Vol, veh/h	83	18	15	28	30	13	9	543	25	14	709	151
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	87	19	16	29	32	14	9	572	26	15	746	159
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

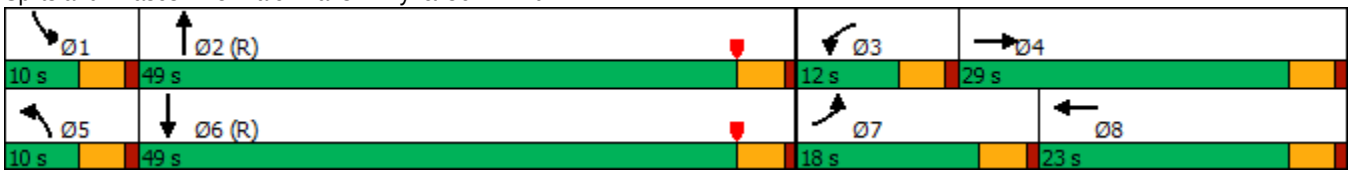
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.9	13	50.7	214.9
HCM LOS	B	B	F	F

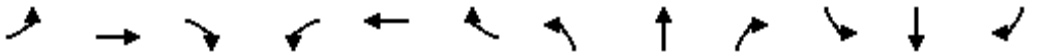
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	72%	39%	2%
Vol Thru, %	94%	16%	42%	81%
Vol Right, %	4%	13%	18%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	577	116	71	874
LT Vol	9	83	28	14
Through Vol	543	18	30	709
RT Vol	25	15	13	151
Lane Flow Rate	607	122	75	920
Geometry Grp	1	1	1	1
Degree of Util (X)	0.951	0.251	0.156	1.42
Departure Headway (Hd)	6.17	8.212	8.411	5.557
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	595	441	429	653
Service Time	4.17	6.212	6.411	3.6
HCM Lane V/C Ratio	1.02	0.277	0.175	1.409
HCM Control Delay	50.7	13.9	13	214.9
HCM Lane LOS	F	B	B	F
HCM 95th-tile Q	12.7	1	0.5	41.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	18	15	28	30	13	9	543	25	14	709	151
Future Volume (vph)	83	18	15	28	30	13	9	543	25	14	709	151
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	18.0	29.0		12.0	23.0		10.0	49.0		10.0	49.0	
Total Split (%)	18.0%	29.0%		12.0%	23.0%		10.0%	49.0%		10.0%	49.0%	
Maximum Green (s)	13.5	24.5		7.5	18.5		5.5	44.5		5.5	44.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			5			5	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Dale Evans Pkwy. & Corwin Rd.

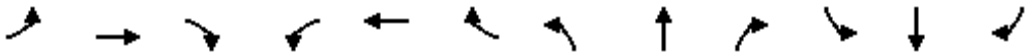




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	18	15	28	30	13	9	543	25	14	709	151
Future Volume (veh/h)	83	18	15	28	30	13	9	543	25	14	709	151
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	87	19	16	29	32	14	9	572	26	15	746	159
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	258	192	47	234	96	19	2224	101	29	1890	403
Arrive On Green	0.07	0.13	0.13	0.03	0.10	0.10	0.01	0.64	0.64	0.02	0.65	0.65
Sat Flow, veh/h	1688	1944	1444	1688	2459	1007	1688	3462	157	1688	2914	621
Grp Volume(v), veh/h	87	17	18	29	23	23	9	293	305	15	455	450
Grp Sat Flow(s),veh/h/ln	1688	1777	1611	1688	1777	1689	1688	1777	1842	1688	1777	1759
Q Serve(g_s), s	5.1	0.8	1.0	1.7	1.2	1.3	0.5	7.1	7.1	0.9	12.1	12.1
Cycle Q Clear(g_c), s	5.1	0.8	1.0	1.7	1.2	1.3	0.5	7.1	7.1	0.9	12.1	12.1
Prop In Lane	1.00		0.90	1.00		0.60	1.00		0.09	1.00		0.35
Lane Grp Cap(c), veh/h	110	236	214	47	169	161	19	1142	1183	29	1152	1140
V/C Ratio(X)	0.79	0.07	0.08	0.62	0.13	0.15	0.48	0.26	0.26	0.52	0.39	0.39
Avail Cap(c_a), veh/h	228	435	395	127	329	312	93	1142	1183	93	1152	1140
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.1	38.0	38.0	48.1	41.5	41.5	49.2	7.7	7.7	48.7	8.3	8.3
Incr Delay (d2), s/veh	11.9	0.1	0.2	12.7	0.4	0.4	18.0	0.5	0.5	13.9	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.4	0.4	0.8	0.5	0.5	0.3	2.3	2.3	0.5	3.8	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.9	38.1	38.2	60.8	41.8	41.9	67.2	8.2	8.2	62.6	9.3	9.3
LnGrp LOS	E	D	D	E	D	D	E	A	A	E	A	A
Approach Vol, veh/h		122			75			607			920	
Approach Delay, s/veh		52.3			49.2			9.1			10.2	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	68.7	7.3	17.8	5.6	69.3	11.0	14.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	44.5	7.5	24.5	5.5	44.5	13.5	18.5
Max Q Clear Time (g_c+I1), s	2.9	9.1	3.7	3.0	2.5	14.1	7.1	3.3
Green Ext Time (p_c), s	0.0	3.2	0.0	0.1	0.0	5.4	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	217	201	3	245	66	162	10	10	53	5	83
Future Volume (vph)	115	217	201	3	245	66	162	10	10	53	5	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		787			1189			2650			316	
Travel Time (s)		11.9			18.0			40.2			4.8	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	18.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	115	217	201	3	245	66	162	10	10	53	5	83
Future Vol, veh/h	115	217	201	3	245	66	162	10	10	53	5	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	121	228	212	3	258	69	171	11	11	56	5	87

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	327	0	0	440	0	0	921	909	334	886	981	293
Stage 1	-	-	-	-	-	-	576	576	-	299	299	-
Stage 2	-	-	-	-	-	-	345	333	-	587	682	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1233	-	-	1120	-	-	251	275	708	265	249	746
Stage 1	-	-	-	-	-	-	503	502	-	710	666	-
Stage 2	-	-	-	-	-	-	671	644	-	496	450	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1233	-	-	1120	-	-	195	237	708	226	215	746
Mov Cap-2 Maneuver	-	-	-	-	-	-	195	237	-	226	215	-
Stage 1	-	-	-	-	-	-	436	435	-	615	664	-
Stage 2	-	-	-	-	-	-	586	642	-	413	390	-

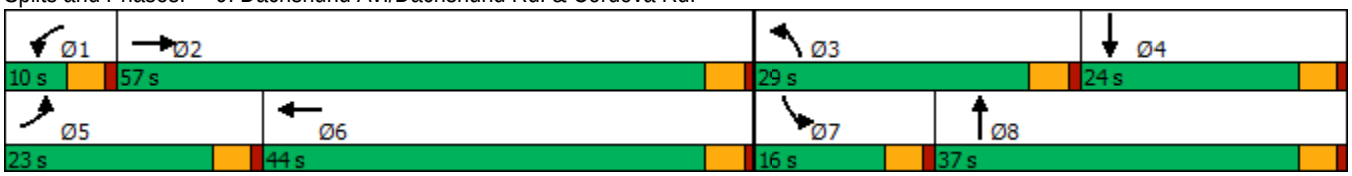
Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0.1	95	20.3
HCM LOS			F	C

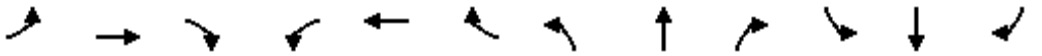
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	205	1233	-	-	1120	-	-	382
HCM Lane V/C Ratio	0.935	0.098	-	-	0.003	-	-	0.389
HCM Control Delay (s)	95	8.2	0	-	8.2	0	-	20.3
HCM Lane LOS	F	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	7.7	0.3	-	-	0	-	-	1.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	217	201	3	245	66	162	10	10	53	5	83
Future Volume (vph)	115	217	201	3	245	66	162	10	10	53	5	83
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		787			1189			2650			316	
Travel Time (s)		11.9			18.0			40.2			4.8	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	23.0	57.0		10.0	44.0		29.0	37.0		16.0	24.0	
Total Split (%)	19.2%	47.5%		8.3%	36.7%		24.2%	30.8%		13.3%	20.0%	
Maximum Green (s)	18.5	52.5		5.5	39.5		24.5	32.5		11.5	19.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Min		None	Min	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 66.1	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 9: Dachshund Av./Dachshund Rd. & Cordova Rd.





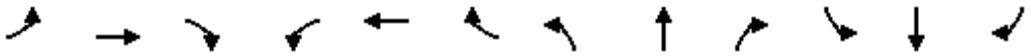
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	217	201	3	245	66	162	10	10	53	5	83
Future Volume (veh/h)	115	217	201	3	245	66	162	10	10	53	5	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	121	228	212	3	258	69	171	11	11	56	5	87
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	305	283	7	360	96	225	163	163	95	10	171
Arrive On Green	0.09	0.34	0.34	0.00	0.25	0.25	0.13	0.19	0.19	0.06	0.11	0.11
Sat Flow, veh/h	1688	892	829	1688	1422	380	1688	858	858	1688	87	1511
Grp Volume(v), veh/h	121	0	440	3	0	327	171	0	22	56	0	92
Grp Sat Flow(s),veh/h/ln	1688	0	1721	1688	0	1802	1688	0	1716	1688	0	1598
Q Serve(g_s), s	3.1	0.0	10.0	0.1	0.0	7.3	4.3	0.0	0.5	1.4	0.0	2.4
Cycle Q Clear(g_c), s	3.1	0.0	10.0	0.1	0.0	7.3	4.3	0.0	0.5	1.4	0.0	2.4
Prop In Lane	1.00		0.48	1.00		0.21	1.00		0.50	1.00		0.95
Lane Grp Cap(c), veh/h	157	0	588	7	0	456	225	0	326	95	0	181
V/C Ratio(X)	0.77	0.00	0.75	0.43	0.00	0.72	0.76	0.00	0.07	0.59	0.00	0.51
Avail Cap(c_a), veh/h	707	0	2046	210	0	1612	936	0	1263	440	0	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	12.9	21.9	0.0	15.1	18.5	0.0	14.7	20.3	0.0	18.4
Incr Delay (d2), s/veh	7.8	0.0	1.9	37.7	0.0	2.1	5.2	0.0	0.1	5.7	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	3.0	0.1	0.0	2.5	1.7	0.0	0.1	0.6	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.3	0.0	14.8	59.6	0.0	17.2	23.7	0.0	14.8	26.1	0.0	20.6
LnGrp LOS	C	A	B	E	A	B	C	A	B	C	A	C
Approach Vol, veh/h		561			330			193			148	
Approach Delay, s/veh		17.5			17.6			22.7			22.7	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	19.6	10.4	9.5	8.6	15.7	7.0	12.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	52.5	24.5	19.5	18.5	39.5	11.5	32.5
Max Q Clear Time (g_c+I1), s	2.1	12.0	6.3	4.4	5.1	9.3	3.4	2.5
Green Ext Time (p_c), s	0.0	2.9	0.4	0.3	0.2	1.9	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

APPENDIX 6.2: HORIZON YEAR (2040) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

This Page Intentionally Left Blank



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	1214	23	4	756	25	6	1	7	15	1	70
Future Volume (vph)	241	1214	23	4	756	25	6	1	7	15	1	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	241	1214	23	4	756	25	6	1	7	15	1	70
Future Vol, veh/h	241	1214	23	4	756	25	6	1	7	15	1	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	254	1278	24	4	796	26	6	1	7	16	1	74

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	822	0	0	1302	0	0	2653	2628	1290	2619	2627	809
Stage 1	-	-	-	-	-	-	1798	1798	-	817	817	-
Stage 2	-	-	-	-	-	-	855	830	-	1802	1810	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	807	-	-	532	-	-	15	24	200	16	24	380
Stage 1	-	-	-	-	-	-	102	132	-	370	390	-
Stage 2	-	-	-	-	-	-	353	385	-	102	130	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	807	-	-	532	-	-	9	16	200	~ 11	16	380
Mov Cap-2 Maneuver	-	-	-	-	-	-	9	16	-	~ 11	16	-
Stage 1	-	-	-	-	-	-	70	90	-	253	387	-
Stage 2	-	-	-	-	-	-	282	382	-	67	89	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.9	0.1	$ 330.6	175
HCM LOS			F	F

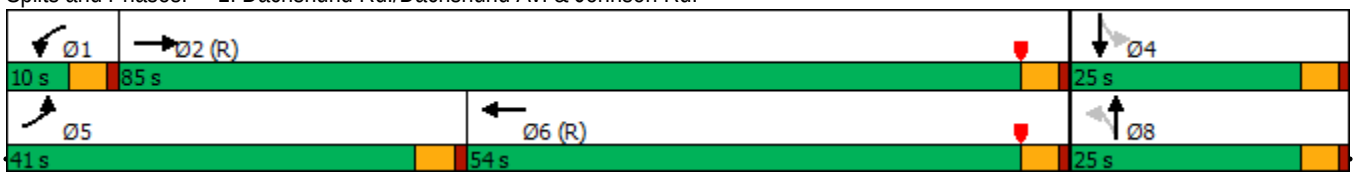
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	9	82	807	-	-	532	-	-	11	288
HCM Lane V/C Ratio	0.702	0.103	0.314	-	-	0.008	-	-	1.435	0.26
HCM Control Delay (s)	$ 699.6	53.9	11.5	-	-	11.8	-	-	$ 900.3	21.8
HCM Lane LOS	F	F	B	-	-	B	-	-	F	C
HCM 95th %tile Q(veh)	1.4	0.3	1.3	-	-	0	-	-	2.8	1

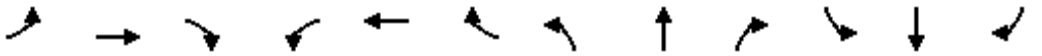
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	1214	23	4	756	25	6	1	7	15	1	70
Future Volume (vph)	241	1214	23	4	756	25	6	1	7	15	1	70
Ideal Flow (vphpl)	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	22.5		10.0	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	41.0	85.0		10.0	54.0		25.0	25.0		25.0	25.0	
Total Split (%)	34.2%	70.8%		8.3%	45.0%		20.8%	20.8%		20.8%	20.8%	
Maximum Green (s)	36.5	80.5		5.5	49.5		20.5	20.5		20.5	20.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Dachshund Rd./Dachshund Av. & Johnson Rd.

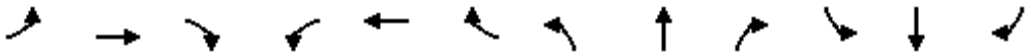




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	1214	23	4	756	25	6	1	7	15	1	70
Future Volume (veh/h)	241	1214	23	4	756	25	6	1	7	15	1	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1673	1772	1772	1673	1772	1772	1673	1772	1772	1673	1772	1772
Adj Flow Rate, veh/h	254	1278	24	4	796	26	6	1	7	16	1	74
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	278	2405	45	8	1805	59	209	32	227	268	3	251
Arrive On Green	0.35	1.00	1.00	0.01	0.54	0.54	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1594	3380	63	1594	3326	109	1178	190	1329	1248	20	1472
Grp Volume(v), veh/h	254	636	666	4	403	419	6	0	8	16	0	75
Grp Sat Flow(s),veh/h/ln	1594	1683	1760	1594	1683	1752	1178	0	1519	1248	0	1492
Q Serve(g_s), s	18.3	0.0	0.0	0.3	17.3	17.3	0.5	0.0	0.5	1.3	0.0	5.3
Cycle Q Clear(g_c), s	18.3	0.0	0.0	0.3	17.3	17.3	5.8	0.0	0.5	1.8	0.0	5.3
Prop In Lane	1.00		0.04	1.00		0.06	1.00		0.88	1.00		0.99
Lane Grp Cap(c), veh/h	278	1198	1252	8	913	950	209	0	259	268	0	255
V/C Ratio(X)	0.91	0.53	0.53	0.48	0.44	0.44	0.03	0.00	0.03	0.06	0.00	0.29
Avail Cap(c_a), veh/h	485	1198	1252	73	913	950	209	0	259	268	0	255
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.36	0.36	0.36	1.00	1.00	1.00	1.00	0.00	1.00	0.99	0.00	0.99
Uniform Delay (d), s/veh	38.2	0.0	0.0	59.5	16.5	16.5	46.0	0.0	41.5	42.2	0.0	43.4
Incr Delay (d2), s/veh	5.6	0.6	0.6	37.7	1.5	1.5	0.3	0.0	0.2	0.4	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	0.2	0.2	0.2	6.6	6.8	0.2	0.0	0.2	0.4	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.8	0.6	0.6	97.2	18.1	18.0	46.2	0.0	41.7	42.7	0.0	46.3
LnGrp LOS	D	A	A	F	B	B	D	A	D	D	A	D
Approach Vol, veh/h		1556			826			14			91	
Approach Delay, s/veh		7.7			18.4			43.6			45.7	
Approach LOS		A			B			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	89.9		25.0	25.4	69.6		25.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	80.5		20.5	36.5	49.5		20.5				
Max Q Clear Time (g_c+I1), s	2.3	2.0		7.3	20.3	19.3		7.8				
Green Ext Time (p_c), s	0.0	11.0		0.3	0.6	5.1		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			12.8									
HCM 6th LOS			B									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	812	258	354	391	87	172	423	438	228	188	19
Future Volume (vph)	23	812	258	354	391	87	172	423	438	228	188	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		165	100		0	325		0
Storage Lanes	0		0	0		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		7616			2660			2620			1074	
Travel Time (s)		115.4			40.3			32.5			13.3	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	654.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	812	258	354	391	87	172	423	438	228	188	19
Future Vol, veh/h	23	812	258	354	391	87	172	423	438	228	188	19
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	855	272	373	412	92	181	445	461	240	198	20
Number of Lanes	0	1	0	0	1	1	1	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	1297.9	696.6	189	64.6
HCM LOS	F	F	F	F

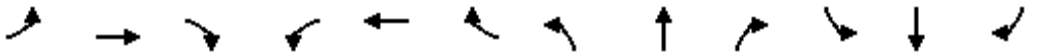
Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	2%	48%	0%	100%	0%
Vol Thru, %	0%	100%	0%	74%	52%	0%	0%	91%
Vol Right, %	0%	0%	100%	24%	0%	100%	0%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	172	423	438	1093	745	87	228	207
LT Vol	172	0	0	23	354	0	228	0
Through Vol	0	423	0	812	391	0	0	188
RT Vol	0	0	438	258	0	87	0	19
Lane Flow Rate	181	445	461	1151	784	92	240	218
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.562	1.319	1.277	3.801	2.619	0.282	0.806	0.698
Departure Headway (Hd)	21.07	20.511	19.729	14.869	17.067	16.01	19.299	18.641
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	174	183	189	265	220	226	190	196
Service Time	18.77	18.211	17.429	12.569	14.767	13.71	16.999	16.341
HCM Lane V/C Ratio	1.04	2.432	2.439	4.343	3.564	0.407	1.263	1.112
HCM Control Delay	47.9	226.6	208.1	1297.9	775	24.9	72.7	55.7
HCM Lane LOS	E	F	F	F	F	C	F	F
HCM 95th-tile Q	2.9	13.5	13	88.7	47.1	1.1	5.6	4.3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	812	258	354	391	87	172	423	438	228	188	19
Future Volume (vph)	23	812	258	354	391	87	172	423	438	228	188	19
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		165	100		150	325		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		6652			2660			2620			1074	
Travel Time (s)		100.8			40.3			32.5			13.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Free	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases						Free			8			
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	10.0	5.0	5.0	10.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		10.0	22.5	9.5	10.0	22.5	
Total Split (s)	10.4	45.0		31.4	66.0		20.0	22.6	31.4	21.0	23.6	
Total Split (%)	8.7%	37.5%		26.2%	55.0%		16.7%	18.8%	26.2%	17.5%	19.7%	
Maximum Green (s)	5.9	40.5		26.9	61.5		15.5	18.1	26.9	16.5	19.1	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			5			5	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 2: Dale Evans Pkwy. & Johnson Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	812	258	354	391	87	172	423	438	228	188	19
Future Volume (veh/h)	23	812	258	354	391	87	172	423	438	228	188	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	24	855	272	373	412	0	181	445	461	240	198	20
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	894	284	378	1914		203	536	592	232	547	55
Arrive On Green	0.02	0.34	0.34	0.45	1.00	0.00	0.24	0.30	0.30	0.14	0.17	0.17
Sat Flow, veh/h	1688	2650	842	1688	3554	1585	1688	3554	1569	1688	3259	326
Grp Volume(v), veh/h	24	573	554	373	412	0	181	445	461	240	107	111
Grp Sat Flow(s),veh/h/ln	1688	1777	1714	1688	1777	1585	1688	1777	1569	1688	1777	1808
Q Serve(g_s), s	1.7	37.8	38.0	26.2	0.0	0.0	12.4	14.0	18.1	16.5	6.4	6.5
Cycle Q Clear(g_c), s	1.7	37.8	38.0	26.2	0.0	0.0	12.4	14.0	18.1	16.5	6.4	6.5
Prop In Lane	1.00		0.49	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	39	600	579	378	1914		203	536	592	232	298	304
V/C Ratio(X)	0.62	0.96	0.96	0.99	0.22		0.89	0.83	0.78	1.03	0.36	0.37
Avail Cap(c_a), veh/h	83	600	579	378	1914		218	536	592	232	298	304
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.87	0.87	0.00	0.43	0.43	0.43	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	38.9	38.9	32.9	0.0	0.0	44.8	40.5	28.8	51.8	44.2	44.3
Incr Delay (d2), s/veh	15.1	27.3	28.3	39.4	0.2	0.0	16.9	4.9	2.9	68.3	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	20.2	19.7	11.7	0.1	0.0	5.3	5.3	10.6	11.1	2.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.2	66.1	67.2	72.3	0.2	0.0	61.7	45.3	31.7	120.1	44.9	45.0
LnGrp LOS	E	E	E	E	A		E	D	C	F	D	D
Approach Vol, veh/h		1151			785			1087			458	
Approach Delay, s/veh		66.8			34.5			42.3			84.3	
Approach LOS		E			C			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.4	45.0	19.0	24.6	7.3	69.1	21.0	22.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	26.9	40.5	15.5	19.1	5.9	61.5	16.5	18.1
Max Q Clear Time (g_c+I1), s	28.2	40.0	14.4	8.5	3.7	2.0	18.5	20.1
Green Ext Time (p_c), s	0.0	0.4	0.0	0.7	0.0	2.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.1
HCM 6th LOS	D

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	436	70	400	940	20	120
Future Volume (vph)	436	70	400	940	20	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	7616		549			661
Travel Time (s)	115.4		8.3			10.0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	152.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	436	70	400	940	20	120
Future Vol, veh/h	436	70	400	940	20	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	459	74	421	989	21	126

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1084	916	0	0	1410	0
Stage 1	916	-	-	-	-	-
Stage 2	168	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 240	330	-	-	484	-
Stage 1	~ 390	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 229	330	-	-	484	-
Mov Cap-2 Maneuver	~ 229	-	-	-	-	-
Stage 1	~ 390	-	-	-	-	-
Stage 2	821	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 599	0	1.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	239	484	-
HCM Lane V/C Ratio	-	-	2.229	0.043	-
HCM Control Delay (s)	-	-	$ 599	12.8	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	41.5	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	436	70	400	940	20	120
Future Volume (vph)	436	70	400	940	20	120
Ideal Flow (vphpl)	1800	1900	1900	1900	1800	1900
Storage Length (ft)	150	0		150	150	
Storage Lanes	1	1		1	1	
Taper Length (ft)	90				90	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	964		549			661
Travel Time (s)	14.6		8.3			10.0
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA	pm+ov	Perm	NA
Protected Phases	6		8	6		4
Permitted Phases		6		8	4	
Detector Phase	6	6	8	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	92.0	92.0	28.0	92.0	28.0	28.0
Total Split (%)	76.7%	76.7%	23.3%	76.7%	23.3%	23.3%
Maximum Green (s)	87.5	87.5	23.5	87.5	23.5	23.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	Max	C-Max	Max	Max
Walk Time (s)			7.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			5			

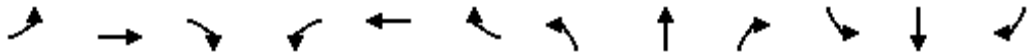
Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2: and 6:WBL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Stoddard Wells Rd. & Johnson Rd.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	436	70	400	940	20	120
Future Volume (veh/h)	436	70	400	940	20	120
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.99	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1772	1870	1870	1870	1772	1870
Adj Flow Rate, veh/h	459	74	421	989	21	126
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1231	1156	696	1462	92	696
Arrive On Green	0.73	0.73	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1688	1585	3647	1565	361	3647
Grp Volume(v), veh/h	459	74	421	989	21	126
Grp Sat Flow(s),veh/h/ln	1688	1585	1777	1565	361	1777
Q Serve(g_s), s	12.1	1.6	13.0	15.5	6.8	3.5
Cycle Q Clear(g_c), s	12.1	1.6	13.0	15.5	19.7	3.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1231	1156	696	1462	92	696
V/C Ratio(X)	0.37	0.06	0.60	0.68	0.23	0.18
Avail Cap(c_a), veh/h	1231	1156	696	1462	92	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.0	4.6	44.0	0.9	53.0	40.2
Incr Delay (d2), s/veh	0.9	0.1	3.9	2.5	5.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.5	5.9	30.4	0.7	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.9	4.7	47.9	3.4	58.7	40.8
LnGrp LOS	A	A	D	A	E	D
Approach Vol, veh/h	533		1410			147
Approach Delay, s/veh	6.6		16.7			43.4
Approach LOS	A		B			D

Timer - Assigned Phs				4		6	8
Phs Duration (G+Y+Rc), s				28.0		92.0	28.0
Change Period (Y+Rc), s				4.5		4.5	4.5
Max Green Setting (Gmax), s				23.5		87.5	23.5
Max Q Clear Time (g_c+I1), s				21.7		14.1	17.5
Green Ext Time (p_c), s				0.1		1.7	3.6

Intersection Summary			
HCM 6th Ctrl Delay		16.0	
HCM 6th LOS		B	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	131	91	18	661	81	10	69	32	1304	2	36
Future Volume (vph)	15	131	91	18	661	81	10	69	32	1304	2	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2512.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	15	131	91	18	661	81	10	69	32	1304	2	36
Future Vol, veh/h	15	131	91	18	661	81	10	69	32	1304	2	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	142	99	20	718	88	11	75	35	1417	2	39

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	806	0	0	241	0	0	1047	1070	192	1081	1075	762
Stage 1	-	-	-	-	-	-	224	224	-	802	802	-
Stage 2	-	-	-	-	-	-	823	846	-	279	273	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	819	-	-	1326	-	-	206	221	850	~ 195	220	405
Stage 1	-	-	-	-	-	-	779	718	-	~ 378	396	-
Stage 2	-	-	-	-	-	-	368	378	-	~ 728	684	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	819	-	-	1326	-	-	178	210	850	~ 130	209	405
Mov Cap-2 Maneuver	-	-	-	-	-	-	178	210	-	~ 130	209	-
Stage 1	-	-	-	-	-	-	761	701	-	~ 369	385	-
Stage 2	-	-	-	-	-	-	321	367	-	~ 609	668	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	29.8	$ 4584.9
HCM LOS			D	F

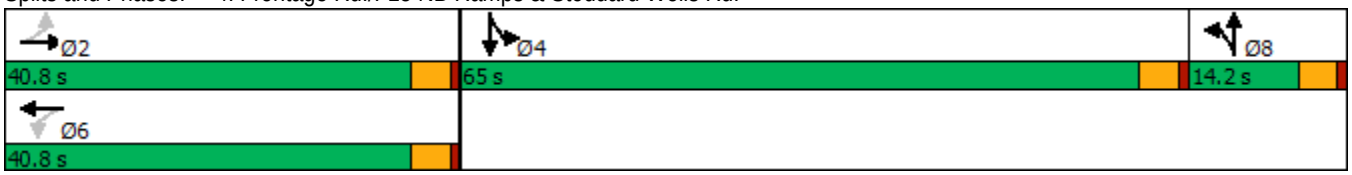
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	263	819	-	-	1326	-	-	132
HCM Lane V/C Ratio	0.459	0.02	-	-	0.015	-	-	11.051
HCM Control Delay (s)	29.8	9.5	0	-	7.8	0	-	$ 4584.9
HCM Lane LOS	D	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	2.3	0.1	-	-	0	-	-	169.1

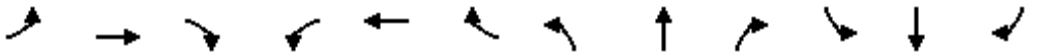
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	131	91	18	661	81	10	69	32	1304	2	36
Future Volume (vph)	15	131	91	18	661	81	10	69	32	1304	2	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		0	150		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)										48%		
Turn Type	Perm	NA		Perm	NA		Split	NA		Split	NA	
Protected Phases		2			6		8	8		4	4	
Permitted Phases	2			6								
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	14.5	14.5		14.5	14.5		9.5	9.5		9.5	9.5	
Total Split (s)	40.8	40.8		40.8	40.8		14.2	14.2		65.0	65.0	
Total Split (%)	34.0%	34.0%		34.0%	34.0%		11.8%	11.8%		54.2%	54.2%	
Maximum Green (s)	36.3	36.3		36.3	36.3		9.7	9.7		60.5	60.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 117.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 4: Frontage Rd./I-15 NB Ramps & Stoddard Wells Rd.





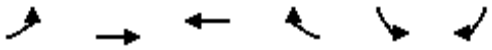
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	131	91	18	661	81	10	69	32	1304	2	36
Future Volume (veh/h)	15	131	91	18	661	81	10	69	32	1304	2	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	16	142	99	20	718	88	11	75	35	1455	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	360	287	45	828	100	143	101	47	1779	986	0
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.08	0.08	0.08	0.53	0.00	0.00
Sat Flow, veh/h	33	1331	1060	44	3058	370	1688	1198	559	3375	1870	0
Grp Volume(v), veh/h	117	0	140	438	0	388	11	0	110	1455	0	0
Grp Sat Flow(s),veh/h/ln	924	0	1500	1841	0	1631	1688	0	1758	1688	1870	0
Q Serve(g_s), s	1.2	0.0	8.6	11.7	0.0	26.1	0.7	0.0	7.0	41.1	0.0	0.0
Cycle Q Clear(g_c), s	27.3	0.0	8.6	26.1	0.0	26.1	0.7	0.0	7.0	41.1	0.0	0.0
Prop In Lane	0.14		0.71	0.05		0.23	1.00		0.32	1.00		0.00
Lane Grp Cap(c), veh/h	286	0	406	531	0	442	143	0	149	1779	986	0
V/C Ratio(X)	0.41	0.00	0.35	0.83	0.00	0.88	0.08	0.00	0.74	0.82	0.00	0.00
Avail Cap(c_a), veh/h	354	0	474	614	0	516	143	0	149	1779	986	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	33.6	0.0	33.7	39.9	0.0	40.0	48.4	0.0	51.3	22.6	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.5	8.0	0.0	14.1	1.1	0.0	27.9	4.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	3.1	12.5	0.0	11.7	0.3	0.0	4.2	16.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.5	0.0	34.2	47.9	0.0	54.2	49.5	0.0	79.2	26.9	0.0	0.0
LnGrp LOS	C	A	C	D	A	D	D	A	E	C	A	A
Approach Vol, veh/h		257			826			121			1455	
Approach Delay, s/veh		34.3			50.9			76.5			26.9	
Approach LOS		C			D			E			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		35.6		65.0		35.6		14.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		36.3		60.5		36.3		9.7				
Max Q Clear Time (g_c+I1), s		29.3		43.1		28.1		9.0				
Green Ext Time (p_c), s		0.7		6.3		3.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			37.3									
HCM 6th LOS			D									

Notes

User approved volume balancing among the lanes for turning movement.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	33	40	85	617	202	8
Future Volume (vph)	33	40	85	617	202	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			0	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

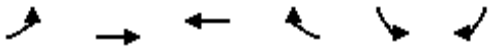
Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	40	85	617	202	8
Future Vol, veh/h	33	40	85	617	202	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	51	109	791	259	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	109	0	-	0	640	505
Stage 1	-	-	-	-	505	-
Stage 2	-	-	-	-	135	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1481	-	-	-	440	567
Stage 1	-	-	-	-	606	-
Stage 2	-	-	-	-	891	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1481	-	-	-	427	567
Mov Cap-2 Maneuver	-	-	-	-	427	-
Stage 1	-	-	-	-	588	-
Stage 2	-	-	-	-	891	-

Approach	EB	WB	SB
HCM Control Delay, s	3.4	0	26.3
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1481	-	-	-	431
HCM Lane V/C Ratio	0.029	-	-	-	0.625
HCM Control Delay (s)	7.5	0	-	-	26.3
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	4.1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	33	40	85	617	202	8
Future Volume (vph)	33	40	85	617	202	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			150	0	25
Storage Lanes	0			1	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Confl. Peds. (#/hr)	5			5	5	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	40	85	617	202	8
Future Vol, veh/h	33	40	85	617	202	8
Conflicting Peds, #/hr	5	0	0	5	5	5
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	43	92	671	220	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	768	0	-	0	196	56
Stage 1	-	-	-	-	97	-
Stage 2	-	-	-	-	99	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	842	-	-	-	774	999
Stage 1	-	-	-	-	916	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	838	-	-	-	732	990
Mov Cap-2 Maneuver	-	-	-	-	732	-
Stage 1	-	-	-	-	871	-
Stage 2	-	-	-	-	909	-

Approach	EB	WB	SB
HCM Control Delay, s	4.3	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	838	-	-	-	739
HCM Lane V/C Ratio	0.043	-	-	-	0.309
HCM Control Delay (s)	9.5	0.1	-	-	12
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	1.3

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	203	10	7	643	8	7
Future Volume (vph)	203	10	7	643	8	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	203	10	7	643	8	7
Future Vol, veh/h	203	10	7	643	8	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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	248	12	9	784	10	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	430	401	0	0	793	0
Stage 1	401	-	-	-	-	-
Stage 2	29	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	582	649	-	-	828	-
Stage 1	676	-	-	-	-	-
Stage 2	994	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	575	649	-	-	828	-
Mov Cap-2 Maneuver	575	-	-	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	982	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.2	0	5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	578	828	-
HCM Lane V/C Ratio	-	-	0.449	0.012	-
HCM Control Delay (s)	-	-	16.2	9.4	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	2.3	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	203	10	7	643	8	7
Future Volume (vph)	203	10	7	643	8	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		150	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	90				90	
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Confl. Peds. (#/hr)	5	5		5	5	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

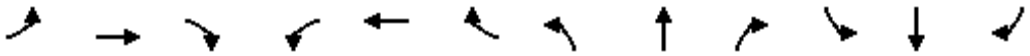
Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	203	10	7	643	8	7
Future Vol, veh/h	203	10	7	643	8	7
Conflicting Peds, #/hr	5	5	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	248	12	9	784	10	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	48	19	0	0	798	0
Stage 1	14	-	-	-	-	-
Stage 2	34	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	962	1059	-	-	824	-
Stage 1	1009	-	-	-	-	-
Stage 2	988	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	941	1049	-	-	820	-
Mov Cap-2 Maneuver	941	-	-	-	-	-
Stage 1	1004	-	-	-	-	-
Stage 2	971	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	946	820	-
HCM Lane V/C Ratio	-	-	0.275	0.012	-
HCM Control Delay (s)	-	-	10.2	9.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.1	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	266	413	184	174	362	76	174	610	384	173	419	194
Future Volume (vph)	266	413	184	174	362	76	174	610	384	173	419	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		400	415		0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		414			304			1385			2620	
Travel Time (s)		9.4			4.6			17.2			32.5	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

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	266	413	184	174	362	76	174	610	384	173	419	194
Future Vol, veh/h	266	413	184	174	362	76	174	610	384	173	419	194
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	-	-	-	-	-	-	150	-	400	415	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	306	475	211	200	416	87	200	701	441	199	482	223

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2565	2534	594	2436	2204	701	705	0	0	1142	0	0
Stage 1	992	992	-	1101	1101	-	-	-	-	-	-	-
Stage 2	1573	1542	-	1335	1103	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 17	~ 27	505	~ 22	~ 45	439	893	-	-	612	-	-
Stage 1	~ 296	~ 324	-	257	~ 288	-	-	-	-	-	-	-
Stage 2	~ 138	~ 177	-	~ 189	~ 287	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 14	505	-	~ 24	439	893	-	-	612	-	-
Mov Cap-2 Maneuver	-	~ 14	-	-	~ 24	-	-	-	-	-	-	-
Stage 1	~ 230	~ 219	-	~ 199	~ 223	-	-	-	-	-	-	-
Stage 2	-	~ 137	-	-	~ 194	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			1.5	3
HCM LOS	-	-		

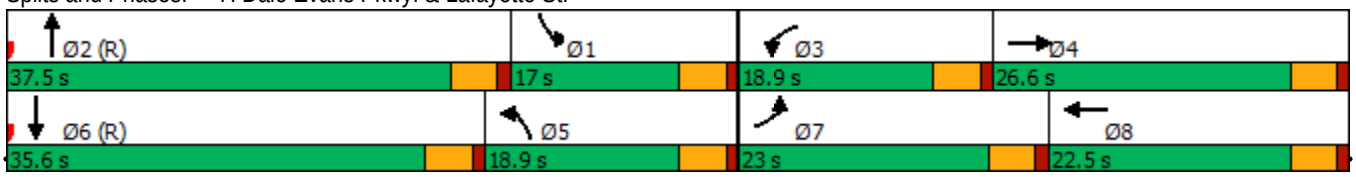
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	893	-	-	-	-	612	-	-
HCM Lane V/C Ratio	0.224	-	-	-	-	0.325	-	-
HCM Control Delay (s)	10.2	-	-	-	-	13.7	-	-
HCM Lane LOS	B	-	-	-	-	B	-	-
HCM 95th %tile Q(veh)	0.9	-	-	-	-	1.4	-	-

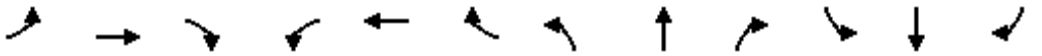
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	266	413	184	174	362	76	174	610	384	173	419	194
Future Volume (vph)	266	413	184	174	362	76	174	610	384	173	419	194
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		400	415		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		539			304			1385			2620	
Travel Time (s)		12.3			4.6			17.2			32.5	
Confl. Peds. (#/hr)				5		5			5	5		
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	23.0	26.6		18.9	22.5		18.9	37.5		17.0	35.6	
Total Split (%)	23.0%	26.6%		18.9%	22.5%		18.9%	37.5%		17.0%	35.6%	
Maximum Green (s)	18.5	22.1		14.4	18.0		14.4	33.0		12.5	31.1	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			5			5	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 7: Dale Evans Pkwy. & Lafayette St.

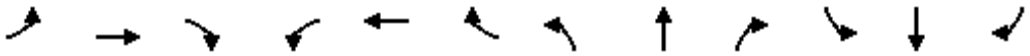




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	413	184	174	362	76	174	610	384	173	419	194
Future Volume (veh/h)	266	413	184	174	362	76	174	610	384	173	419	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	280	435	194	183	381	80	183	642	404	182	441	204
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	512	226	213	460	96	285	690	434	253	735	337
Arrive On Green	0.18	0.21	0.21	0.13	0.16	0.16	0.17	0.33	0.33	0.15	0.31	0.31
Sat Flow, veh/h	1688	2397	1059	1688	2924	607	1688	2090	1314	1688	2363	1083
Grp Volume(v), veh/h	280	321	308	183	230	231	183	546	500	182	331	314
Grp Sat Flow(s),veh/h/ln	1688	1777	1680	1688	1777	1754	1688	1777	1627	1688	1777	1669
Q Serve(g_s), s	16.3	17.4	17.6	10.6	12.5	12.8	10.1	29.7	29.7	10.3	15.7	16.0
Cycle Q Clear(g_c), s	16.3	17.4	17.6	10.6	12.5	12.8	10.1	29.7	29.7	10.3	15.7	16.0
Prop In Lane	1.00		0.63	1.00		0.35	1.00		0.81	1.00		0.65
Lane Grp Cap(c), veh/h	308	380	359	213	279	276	285	586	537	253	553	519
V/C Ratio(X)	0.91	0.85	0.86	0.86	0.82	0.84	0.64	0.93	0.93	0.72	0.60	0.61
Avail Cap(c_a), veh/h	312	393	371	243	320	316	285	586	537	253	553	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.59	0.59	0.59
Uniform Delay (d), s/veh	40.0	37.7	37.8	42.8	40.8	40.9	38.7	32.4	32.4	40.5	29.2	29.2
Incr Delay (d2), s/veh	28.6	15.3	17.3	23.1	14.2	16.0	4.8	23.5	25.1	5.7	2.8	3.1
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	9.1	9.0	8.9	5.6	6.3	6.5	4.3	15.3	14.3	4.4	6.6	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.6	53.0	55.2	65.9	55.0	56.9	43.5	55.9	57.6	46.2	32.0	32.3
LnGrp LOS	E	D	E	E	E	E	D	E	E	D	C	C
Approach Vol, veh/h		909			644			1229			827	
Approach Delay, s/veh		58.6			58.8			54.8			35.2	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	37.5	17.1	25.9	21.4	35.6	22.8	20.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	33.0	14.4	22.1	14.4	31.1	18.5	18.0
Max Q Clear Time (g_c+I1), s	12.3	31.7	12.6	19.6	12.1	18.0	18.3	14.8
Green Ext Time (p_c), s	0.0	0.8	0.1	1.0	0.1	2.8	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	52.0
HCM 6th LOS	D



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	166	25	12	18	17	15	11	802	28	12	304	70
Future Volume (vph)	166	25	12	18	17	15	11	802	28	12	304	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	119.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	166	25	12	18	17	15	11	802	28	12	304	70
Future Vol, veh/h	166	25	12	18	17	15	11	802	28	12	304	70
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	175	26	13	19	18	16	12	844	29	13	320	74
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

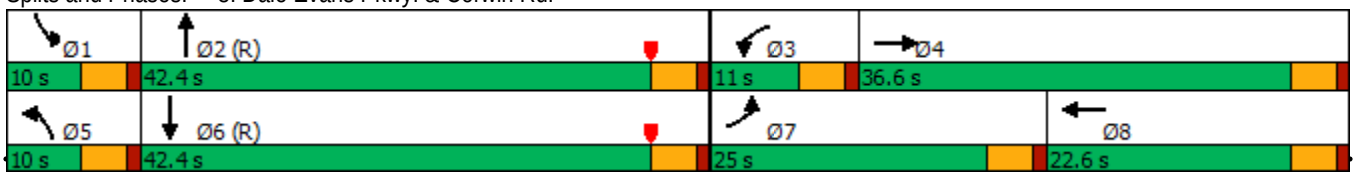
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	16	12.2	196	20.6
HCM LOS	C	B	F	C

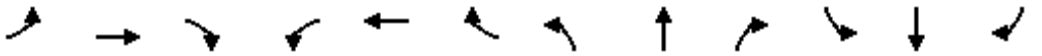
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	82%	36%	3%
Vol Thru, %	95%	12%	34%	79%
Vol Right, %	3%	6%	30%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	841	203	50	386
LT Vol	11	166	18	12
Through Vol	802	25	17	304
RT Vol	28	12	15	70
Lane Flow Rate	885	214	53	406
Geometry Grp	1	1	1	1
Degree of Util (X)	1.375	0.412	0.107	0.656
Departure Headway (Hd)	5.59	7.702	8.245	6.331
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	655	470	437	573
Service Time	3.626	5.702	6.245	4.331
HCM Lane V/C Ratio	1.351	0.455	0.121	0.709
HCM Control Delay	196	16	12.2	20.6
HCM Lane LOS	F	C	B	C
HCM 95th-tile Q	38.6	2	0.4	4.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	166	25	12	18	17	15	11	802	28	12	304	70
Future Volume (vph)	166	25	12	18	17	15	11	802	28	12	304	70
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	25.0	36.6		11.0	22.6		10.0	42.4		10.0	42.4	
Total Split (%)	25.0%	36.6%		11.0%	22.6%		10.0%	42.4%		10.0%	42.4%	
Maximum Green (s)	20.5	32.1		6.5	18.1		5.5	37.9		5.5	37.9	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			5			5	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

Splits and Phases: 8: Dale Evans Pkwy. & Corwin Rd.

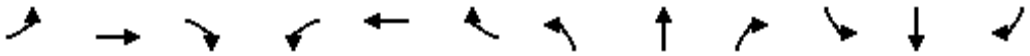




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	25	12	18	17	15	11	802	28	12	304	70
Future Volume (veh/h)	166	25	12	18	17	15	11	802	28	12	304	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	175	26	13	19	18	16	12	844	29	13	320	74
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	486	224	35	197	152	24	2025	70	26	1663	379
Arrive On Green	0.12	0.21	0.21	0.02	0.10	0.10	0.01	0.58	0.58	0.02	0.58	0.58
Sat Flow, veh/h	1688	2355	1088	1688	1898	1461	1688	3505	120	1688	2872	655
Grp Volume(v), veh/h	175	19	20	19	17	17	12	428	445	13	196	198
Grp Sat Flow(s),veh/h/ln	1688	1777	1665	1688	1777	1582	1688	1777	1848	1688	1777	1750
Q Serve(g_s), s	10.1	0.9	1.0	1.1	0.8	1.0	0.7	13.4	13.4	0.8	5.2	5.4
Cycle Q Clear(g_c), s	10.1	0.9	1.0	1.1	0.8	1.0	0.7	13.4	13.4	0.8	5.2	5.4
Prop In Lane	1.00		0.65	1.00		0.92	1.00		0.07	1.00		0.37
Lane Grp Cap(c), veh/h	208	367	344	35	184	164	24	1027	1068	26	1029	1013
V/C Ratio(X)	0.84	0.05	0.06	0.55	0.09	0.11	0.50	0.42	0.42	0.51	0.19	0.20
Avail Cap(c_a), veh/h	346	570	535	110	322	286	93	1027	1068	93	1029	1013
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	31.8	31.9	48.5	40.5	40.6	48.9	11.7	11.7	48.9	10.0	10.0
Incr Delay (d2), s/veh	9.2	0.1	0.1	12.9	0.2	0.3	15.3	1.2	1.2	14.7	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.4	0.4	0.6	0.4	0.4	0.4	4.7	4.9	0.4	1.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.1	31.9	31.9	61.4	40.7	40.9	64.3	13.0	12.9	63.6	10.4	10.4
LnGrp LOS	D	C	C	E	D	D	E	B	B	E	B	B
Approach Vol, veh/h		214			53			885			407	
Approach Delay, s/veh		48.4			48.2			13.7			12.1	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	62.3	6.6	25.1	5.9	62.4	16.8	14.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	37.9	6.5	32.1	5.5	37.9	20.5	18.1
Max Q Clear Time (g_c+I1), s	2.8	15.4	3.1	3.0	2.7	7.4	12.1	3.0
Green Ext Time (p_c), s	0.0	4.7	0.0	0.1	0.0	2.0	0.3	0.1

Intersection Summary	
HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	183	114	29	175	30	131	112	68	50	42	89
Future Volume (vph)	64	183	114	29	175	30	131	112	68	50	42	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		787			1189			2650			316	
Travel Time (s)		11.9			18.0			40.2			4.8	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	26.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	64	183	114	29	175	30	131	112	68	50	42	89
Future Vol, veh/h	64	183	114	29	175	30	131	112	68	50	42	89
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	193	120	31	184	32	138	118	72	53	44	94

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	216	0	0	313	0	0	718	665	253	744	709	200
Stage 1	-	-	-	-	-	-	387	387	-	262	262	-
Stage 2	-	-	-	-	-	-	331	278	-	482	447	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1354	-	-	1247	-	-	344	381	786	331	359	841
Stage 1	-	-	-	-	-	-	637	610	-	743	691	-
Stage 2	-	-	-	-	-	-	682	680	-	565	573	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1354	-	-	1247	-	-	256	348	786	208	328	841
Mov Cap-2 Maneuver	-	-	-	-	-	-	256	348	-	208	328	-
Stage 1	-	-	-	-	-	-	598	573	-	698	672	-
Stage 2	-	-	-	-	-	-	550	661	-	383	538	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	1	77.1	23.4
HCM LOS			F	C

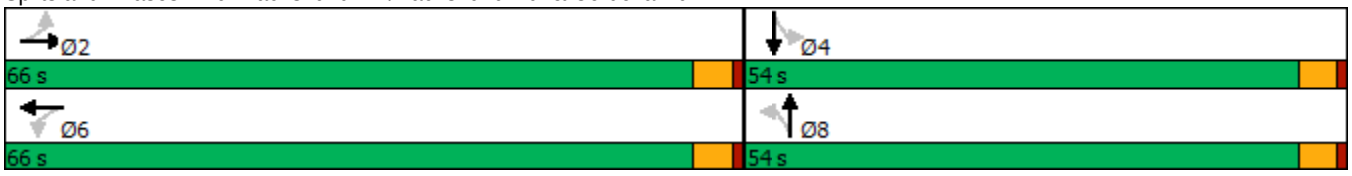
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	338	1354	-	-	1247	-	-	382
HCM Lane V/C Ratio	0.969	0.05	-	-	0.024	-	-	0.499
HCM Control Delay (s)	77.1	7.8	0	-	8	0	-	23.4
HCM Lane LOS	F	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	10.4	0.2	-	-	0.1	-	-	2.7

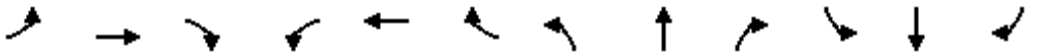
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	183	114	29	175	30	131	112	68	50	42	89
Future Volume (vph)	64	183	114	29	175	30	131	112	68	50	42	89
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		787			1189			2650			316	
Travel Time (s)		11.9			18.0			40.2			4.8	
Confl. Peds. (#/hr)	5		5	5		5	5		5	5		5
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
Shared Lane Traffic (%)												
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	66.0	66.0		66.0	66.0		54.0	54.0		54.0	54.0	
Total Split (%)	55.0%	55.0%		55.0%	55.0%		45.0%	45.0%		45.0%	45.0%	
Maximum Green (s)	61.5	61.5		61.5	61.5		49.5	49.5		49.5	49.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 31.2
Natural Cycle: 45
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Dachshund Av./Dachshund Rd. & Cordova Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	183	114	29	175	30	131	112	68	50	42	89
Future Volume (veh/h)	64	183	114	29	175	30	131	112	68	50	42	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	67	193	120	31	184	32	138	118	72	53	44	94
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	543	349	217	464	503	87	588	344	210	550	168	359
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1099	1075	669	1006	1550	270	1178	1084	661	1124	528	1128
Grp Volume(v), veh/h	67	0	313	31	0	216	138	0	190	53	0	138
Grp Sat Flow(s),veh/h/ln	1099	0	1744	1006	0	1819	1178	0	1745	1124	0	1657
Q Serve(g_s), s	1.3	0.0	3.7	0.7	0.0	2.3	2.5	0.0	2.1	1.0	0.0	1.6
Cycle Q Clear(g_c), s	3.5	0.0	3.7	4.4	0.0	2.3	4.0	0.0	2.1	3.0	0.0	1.6
Prop In Lane	1.00		0.38	1.00		0.15	1.00		0.38	1.00		0.68
Lane Grp Cap(c), veh/h	543	0	566	464	0	590	588	0	555	550	0	526
V/C Ratio(X)	0.12	0.00	0.55	0.07	0.00	0.37	0.23	0.00	0.34	0.10	0.00	0.26
Avail Cap(c_a), veh/h	2872	0	4264	2598	0	4448	2532	0	3434	2405	0	3260
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.9	0.0	7.0	8.8	0.0	6.5	7.9	0.0	6.6	7.7	0.0	6.4
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.1	0.0	0.4	0.2	0.0	0.4	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.6	0.1	0.0	0.3	0.3	0.0	0.3	0.1	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.0	0.0	7.8	8.9	0.0	6.9	8.1	0.0	6.9	7.8	0.0	6.6
LnGrp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		380			247			328			191	
Approach Delay, s/veh		7.9			7.1			7.4			7.0	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.7		12.5		12.7		12.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		61.5		49.5		61.5		49.5				
Max Q Clear Time (g_c+I1), s		5.7		5.0		6.4		6.0				
Green Ext Time (p_c), s		2.2		1.0		1.4		1.6				

Intersection Summary												
HCM 6th Ctrl Delay			7.4									
HCM 6th LOS			A									

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	1	0	26	1	0
Future Volume (vph)	8	1	0	26	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	335		269			195
Travel Time (s)	7.6		4.1			3.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	1	0	26	1	0
Future Vol, veh/h	8	1	0	26	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	1	0	28	1	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	16	14	0	0	28	0
Stage 1	14	-	-	-	-	-
Stage 2	2	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1002	1066	-	-	1585	-
Stage 1	1009	-	-	-	-	-
Stage 2	1021	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1001	1066	-	-	1585	-
Mov Cap-2 Maneuver	1001	-	-	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	1020	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	7.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1008	1585	-
HCM Lane V/C Ratio	-	-	0.01	0.001	-
HCM Control Delay (s)	-	-	8.6	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	1	26	27	1	8
Future Volume (vph)	8	1	26	27	1	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	313		1795			269
Travel Time (s)	7.1		27.2			4.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	1	26	27	1	8
Future Vol, veh/h	8	1	26	27	1	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	1	28	29	1	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	54	43	0	0	57	0
Stage 1	43	-	-	-	-	-
Stage 2	11	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	954	1027	-	-	1547	-
Stage 1	979	-	-	-	-	-
Stage 2	1012	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	953	1027	-	-	1547	-
Mov Cap-2 Maneuver	953	-	-	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	1011	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	0.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	961	1547	-
HCM Lane V/C Ratio	-	-	0.01	0.001	-
HCM Control Delay (s)	-	-	8.8	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	11	1	137	38	1	162
Future Volume (vph)	11	1	137	38	1	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	333		257			1795
Travel Time (s)	7.6		3.9			27.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	1	137	38	1	162
Future Vol, veh/h	11	1	137	38	1	162
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	1	149	41	1	176

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	348	170	0	0	190	0
Stage 1	170	-	-	-	-	-
Stage 2	178	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	649	874	-	-	1384	-
Stage 1	860	-	-	-	-	-
Stage 2	853	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	648	874	-	-	1384	-
Mov Cap-2 Maneuver	648	-	-	-	-	-
Stage 1	860	-	-	-	-	-
Stage 2	852	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	662	1384	-
HCM Lane V/C Ratio	-	-	0.02	0.001	-
HCM Control Delay (s)	-	-	10.5	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	1	175	26	1	173
Future Volume (vph)	8	1	175	26	1	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	340		316			257
Travel Time (s)	7.7		4.8			3.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

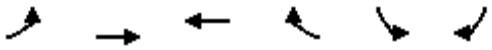
Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	1	175	26	1	173
Future Vol, veh/h	8	1	175	26	1	173
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	1	190	28	1	188

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	394	204	0	0	218	0
Stage 1	204	-	-	-	-	-
Stage 2	190	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	611	837	-	-	1352	-
Stage 1	830	-	-	-	-	-
Stage 2	842	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	610	837	-	-	1352	-
Mov Cap-2 Maneuver	610	-	-	-	-	-
Stage 1	830	-	-	-	-	-
Stage 2	841	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	629	1352	-
HCM Lane V/C Ratio	-	-	0.016	0.001	-
HCM Control Delay (s)	-	-	10.8	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	43	143	96	1	1	13
Future Volume (vph)	43	143	96	1	1	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45	45		30	
Link Distance (ft)		1189	461		387	
Travel Time (s)		18.0	7.0		8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

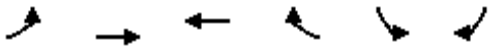
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	43	143	96	1	1	13
Future Vol, veh/h	43	143	96	1	1	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	155	104	1	1	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	105	0	-	0	354	105
Stage 1	-	-	-	-	105	-
Stage 2	-	-	-	-	249	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1486	-	-	-	644	949
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	792	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1486	-	-	-	621	949
Mov Cap-2 Maneuver	-	-	-	-	621	-
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	792	-

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1486	-	-	-	914
HCM Lane V/C Ratio	0.031	-	-	-	0.017
HCM Control Delay (s)	7.5	0	-	-	9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	109	87	1	1	10
Future Volume (vph)	35	109	87	1	1	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45	45		30	
Link Distance (ft)		461	686		374	
Travel Time (s)		7.0	10.4		8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

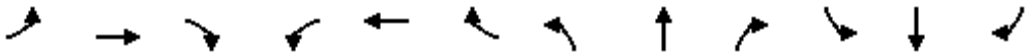
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	35	109	87	1	1	10
Future Vol, veh/h	35	109	87	1	1	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	118	95	1	1	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	96	0	-	0	290	96
Stage 1	-	-	-	-	96	-
Stage 2	-	-	-	-	194	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1498	-	-	-	701	960
Stage 1	-	-	-	-	928	-
Stage 2	-	-	-	-	839	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1498	-	-	-	682	960
Mov Cap-2 Maneuver	-	-	-	-	682	-
Stage 1	-	-	-	-	903	-
Stage 2	-	-	-	-	839	-

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1498	-	-	-	926
HCM Lane V/C Ratio	0.025	-	-	-	0.013
HCM Control Delay (s)	7.5	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	937	165	30	1121	17	158	1	28	29	1	267
Future Volume (vph)	112	937	165	30	1121	17	158	1	28	29	1	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	33.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	112	937	165	30	1121	17	158	1	28	29	1	267
Future Vol, veh/h	112	937	165	30	1121	17	158	1	28	29	1	267
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	118	986	174	32	1180	18	166	1	29	31	1	281

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1198	0	0	1160	0	0	2703	2571	1073	2577	2649	1189
Stage 1	-	-	-	-	-	-	1309	1309	-	1253	1253	-
Stage 2	-	-	-	-	-	-	1394	1262	-	1324	1396	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	583	-	-	602	-	-	~ 14	26	268	~ 17	23	~ 229
Stage 1	-	-	-	-	-	-	196	229	-	211	244	-
Stage 2	-	-	-	-	-	-	175	241	-	192	208	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	583	-	-	602	-	-	-	20	268	~ 12	17	~ 229
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	20	-	~ 12	17	-
Stage 1	-	-	-	-	-	-	~ 156	183	-	168	231	-
Stage 2	-	-	-	-	-	-	-	228	-	136	166	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0.3		$ 313.8
HCM LOS			-	F

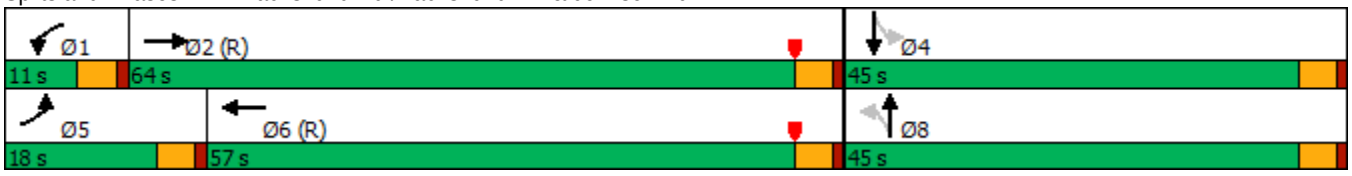
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	188	583	-	-	602	-	-	12	219
HCM Lane V/C Ratio	-	0.162	0.202	-	-	0.052	-	-	2.544	1.288
HCM Control Delay (s)	-	27.8	12.7	-	-	11.3	-	-	$ 1333.6	203.5
HCM Lane LOS	-	D	B	-	-	B	-	-	F	F
HCM 95th %tile Q(veh)	-	0.6	0.8	-	-	0.2	-	-	4.7	15

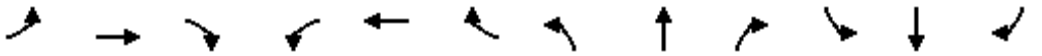
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	937	165	30	1121	17	158	1	28	29	1	267
Future Volume (vph)	112	937	165	30	1121	17	158	1	28	29	1	267
Ideal Flow (vphpl)	1800	1900	1900	1700	1900	1900	1700	1900	1900	1700	1900	1900
Storage Length (ft)	150		0	150		0	150		100	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		2660			1835			433			2650	
Travel Time (s)		40.3			27.8			9.8			60.2	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	10.0	22.5		10.0	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	18.0	64.0		11.0	57.0		45.0	45.0		45.0	45.0	
Total Split (%)	15.0%	53.3%		9.2%	47.5%		37.5%	37.5%		37.5%	37.5%	
Maximum Green (s)	13.5	59.5		6.5	52.5		40.5	40.5		40.5	40.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 65.1 (54%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	

Splits and Phases: 1: Dachshund Rd./Dachshund Av. & Johnson Rd.

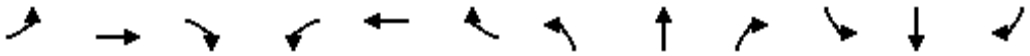




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	937	165	30	1121	17	158	1	28	29	1	267
Future Volume (veh/h)	112	937	165	30	1121	17	158	1	28	29	1	267
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	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	1772	1870	1870	1673	1870	1870	1673	1870	1870	1673	1870	1870
Adj Flow Rate, veh/h	118	986	174	32	1180	18	166	1	29	31	1	281
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	1578	278	44	1666	25	251	18	520	461	2	533
Arrive On Green	0.03	0.17	0.17	0.03	0.46	0.46	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1688	3019	532	1594	3583	55	982	53	1540	1234	6	1580
Grp Volume(v), veh/h	118	580	580	32	585	613	166	0	30	31	0	282
Grp Sat Flow(s),veh/h/ln	1688	1777	1775	1594	1777	1861	982	0	1593	1234	0	1586
Q Serve(g_s), s	8.3	36.3	36.4	2.4	31.5	31.5	19.7	0.0	1.5	2.1	0.0	17.2
Cycle Q Clear(g_c), s	8.3	36.3	36.4	2.4	31.5	31.5	36.9	0.0	1.5	3.6	0.0	17.2
Prop In Lane	1.00		0.30	1.00		0.03	1.00		0.97	1.00		1.00
Lane Grp Cap(c), veh/h	144	929	928	44	826	865	251	0	538	461	0	535
V/C Ratio(X)	0.82	0.62	0.63	0.73	0.71	0.71	0.66	0.00	0.06	0.07	0.00	0.53
Avail Cap(c_a), veh/h	190	929	928	86	826	865	251	0	538	461	0	535
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.48	0.48	0.48	1.00	1.00	1.00	1.00	0.00	1.00	0.60	0.00	0.60
Uniform Delay (d), s/veh	57.4	38.7	38.8	57.9	25.6	25.6	46.9	0.0	26.8	28.1	0.0	32.0
Incr Delay (d2), s/veh	10.0	1.5	1.5	21.0	5.1	4.9	13.0	0.0	0.2	0.2	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	17.6	17.6	1.2	13.6	14.2	5.7	0.0	0.6	0.6	0.0	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.4	40.3	40.3	79.0	30.7	30.5	59.9	0.0	27.0	28.2	0.0	34.3
LnGrp LOS	E	D	D	E	C	C	E	A	C	C	A	C
Approach Vol, veh/h		1278			1230			196			313	
Approach Delay, s/veh		42.8			31.9			54.8			33.7	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	67.2		45.0	14.7	60.3		45.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	59.5		40.5	13.5	52.5		40.5				
Max Q Clear Time (g_c+I1), s	4.4	38.4		19.2	10.3	33.5		38.9				
Green Ext Time (p_c), s	0.0	7.4		1.9	0.1	7.2		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			38.2									
HCM 6th LOS			D									



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	622	305	460	878	208	204	273	461	131	511	35
Future Volume (vph)	18	622	305	460	878	208	204	273	461	131	511	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		165	100		0	325		0
Storage Lanes	0		0	0		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		7616			2660			2620			1074	
Travel Time (s)		115.4			40.3			32.5			13.3	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Intersection Delay, s/veh	917.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	622	305	460	878	208	204	273	461	131	511	35
Future Vol, veh/h	18	622	305	460	878	208	204	273	461	131	511	35
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	655	321	484	924	219	215	287	485	138	538	37
Number of Lanes	0	1	0	0	1	1	1	1	1	1	1	0

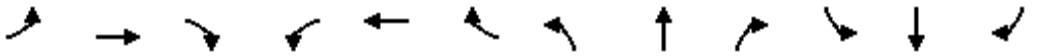
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	1	2	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	3	1	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	2	2	1
HCM Control Delay	1114.2	1482	172.8	384.2
HCM LOS	F	F	F	F

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	2%	34%	0%	100%	0%
Vol Thru, %	0%	100%	0%	66%	66%	0%	0%	94%
Vol Right, %	0%	0%	100%	32%	0%	100%	0%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	204	273	461	945	1338	208	131	546
LT Vol	204	0	0	18	460	0	131	0
Through Vol	0	273	0	622	878	0	0	511
RT Vol	0	0	461	305	0	208	0	35
Lane Flow Rate	215	287	485	995	1408	219	138	575
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.687	0.879	1.39	3.385	4.693	0.677	0.481	1.92
Departure Headway (Hd)	24.341	23.787	23.01	16.006	17.863	16.876	18.034	17.402
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	150	155	165	239	225	217	201	213
Service Time	22.041	21.487	20.71	13.706	15.563	14.576	15.734	15.102
HCM Lane V/C Ratio	1.433	1.852	2.939	4.163	6.258	1.009	0.687	2.7
HCM Control Delay	68.4	100	262.1	1114.2	1704.8	49	36.4	467.7
HCM Lane LOS	F	F	F	F	F	E	E	F
HCM 95th-tile Q	3.9	6	13.6	71.1	96.7	4.2	2.4	28.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	622	305	460	878	208	204	273	461	131	511	35
Future Volume (vph)	18	622	305	460	878	208	204	273	461	131	511	35
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		165	100		150	325		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		6652			2660			2620			1074	
Travel Time (s)		100.8			40.3			32.5			13.3	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA	Free	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases						Free			8			
Detector Phase	5	2		1	6		3	8	1	7	4	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	10.0	5.0	5.0	10.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		20.0	22.5	9.5	20.0	22.5	
Total Split (s)	10.1	38.6		37.4	65.9		20.0	23.0	37.4	21.0	24.0	
Total Split (%)	8.4%	32.2%		31.2%	54.9%		16.7%	19.2%	31.2%	17.5%	20.0%	
Maximum Green (s)	5.6	34.1		32.9	61.4		15.5	18.5	32.9	16.5	19.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead	Lead	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			5			5	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	

Splits and Phases: 2: Dale Evans Pkwy. & Johnson Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	622	305	460	878	208	204	273	461	131	511	35
Future Volume (veh/h)	18	622	305	460	878	208	204	273	461	131	511	35
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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	19	655	321	484	924	0	215	287	485	138	538	37
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	33	657	322	463	1915		218	548	679	232	548	38
Arrive On Green	0.02	0.28	0.28	0.55	1.00	0.00	0.13	0.15	0.15	0.14	0.16	0.16
Sat Flow, veh/h	1688	2311	1132	1688	3554	1585	1688	3554	1585	1688	3374	232
Grp Volume(v), veh/h	19	504	472	484	924	0	215	287	485	138	283	292
Grp Sat Flow(s),veh/h/ln	1688	1777	1667	1688	1777	1585	1688	1777	1585	1688	1777	1829
Q Serve(g_s), s	1.3	34.0	34.0	32.9	0.0	0.0	15.3	8.9	17.0	9.2	19.0	19.1
Cycle Q Clear(g_c), s	1.3	34.0	34.0	32.9	0.0	0.0	15.3	8.9	17.0	9.2	19.0	19.1
Prop In Lane	1.00		0.68	1.00		1.00	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	33	505	474	463	1915		218	548	679	232	289	297
V/C Ratio(X)	0.58	1.00	1.00	1.05	0.48		0.99	0.52	0.71	0.59	0.98	0.98
Avail Cap(c_a), veh/h	79	505	474	463	1915		218	548	679	232	289	297
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.59	0.59	0.00	0.69	0.69	0.69	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	42.9	42.9	27.1	0.0	0.0	52.1	46.7	11.6	48.6	50.1	50.1
Incr Delay (d2), s/veh	14.9	39.4	40.7	44.8	0.5	0.0	46.8	0.6	2.5	4.1	47.2	47.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	19.8	18.7	13.9	0.1	0.0	9.0	3.8	5.2	4.0	11.8	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.2	82.3	83.6	71.9	0.5	0.0	98.9	47.3	14.1	52.7	97.2	97.5
LnGrp LOS	E	F	F	F	A		F	D	B	D	F	F
Approach Vol, veh/h		995			1408			987			713	
Approach Delay, s/veh		82.8			25.1			42.2			88.7	
Approach LOS		F			C			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.4	38.6	20.0	24.0	6.8	69.2	21.0	23.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	32.9	34.1	15.5	19.5	5.6	61.4	16.5	18.5
Max Q Clear Time (g_c+I1), s	34.9	36.0	17.3	21.1	3.3	2.0	11.2	19.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	7.3	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.3
HCM 6th LOS	D

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	1055	98	239	728	95	403
Future Volume (vph)	1055	98	239	728	95	403
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	45		45			45
Link Distance (ft)	7616		549			661
Travel Time (s)	115.4		8.3			10.0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1319.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1055	98	239	728	95	403
Future Vol, veh/h	1055	98	239	728	95	403
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1111	103	252	766	100	424

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1259	635	0	0	1018	0
Stage 1	635	-	-	-	-	-
Stage 2	624	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 188	478	-	-	682	-
Stage 1	~ 528	-	-	-	-	-
Stage 2	~ 534	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 152	478	-	-	682	-
Mov Cap-2 Maneuver	~ 152	-	-	-	-	-
Stage 1	~ 528	-	-	-	-	-
Stage 2	~ 431	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 2995.2	0	2.1
HCM LOS	F		

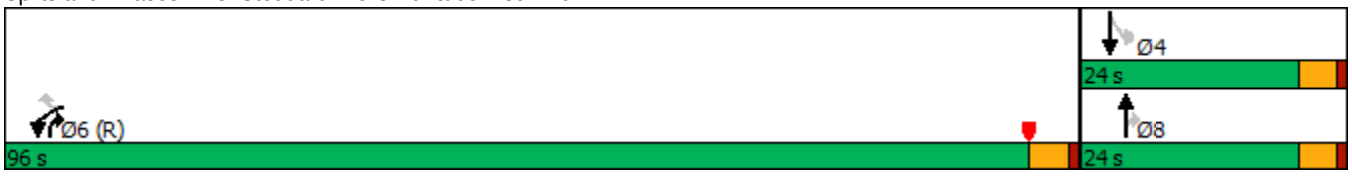
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	161	682	-
HCM Lane V/C Ratio	-	-	7.538	0.147	-
HCM Control Delay (s)	-	-	$ 2995.2	11.2	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	135	0.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	1055	98	239	728	95	403
Future Volume (vph)	1055	98	239	728	95	403
Ideal Flow (vphpl)	1800	1900	1900	1900	1800	1900
Storage Length (ft)	150	0		150	150	
Storage Lanes	1	1		1	1	
Taper Length (ft)	90				90	
Right Turn on Red		Yes		Yes		
Link Speed (mph)	45		45			45
Link Distance (ft)	964		549			661
Travel Time (s)	14.6		8.3			10.0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)						
Turn Type	Prot	Perm	NA	pm+ov	Perm	NA
Protected Phases	6		8	6		4
Permitted Phases		6		8	4	
Detector Phase	6	6	8	6	4	4
Switch Phase						
Minimum Initial (s)	5.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.5	9.5	22.5	9.5	14.5	14.5
Total Split (s)	96.0	96.0	24.0	96.0	24.0	24.0
Total Split (%)	80.0%	80.0%	20.0%	80.0%	20.0%	20.0%
Maximum Green (s)	91.5	91.5	19.5	91.5	19.5	19.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	C-Max	C-Max	Max	C-Max	None	None
Walk Time (s)			7.0			
Flash Dont Walk (s)			11.0			
Pedestrian Calls (#/hr)			5			

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2: and 6:WBL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 3: Stoddard Wells Rd. & Johnson Rd.



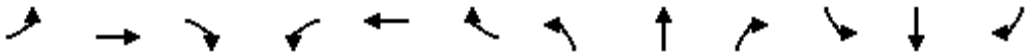
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1055	98	239	728	95	403
Future Volume (veh/h)	1055	98	239	728	95	403
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1772	1870	1870	1870	1772	1870
Adj Flow Rate, veh/h	1111	103	252	766	100	424
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1287	1209	577	1466	112	577
Arrive On Green	0.76	0.76	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1688	1585	3647	1585	525	3647
Grp Volume(v), veh/h	1111	103	252	766	100	424
Grp Sat Flow(s),veh/h/ln	1688	1585	1777	1585	525	1777
Q Serve(g_s), s	54.9	2.0	7.7	8.4	11.8	13.6
Cycle Q Clear(g_c), s	54.9	2.0	7.7	8.4	19.5	13.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	1287	1209	577	1466	112	577
V/C Ratio(X)	0.86	0.09	0.44	0.52	0.90	0.73
Avail Cap(c_a), veh/h	1287	1209	577	1466	112	577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.9	3.6	45.3	0.7	56.9	47.8
Incr Delay (d2), s/veh	7.8	0.1	2.4	1.3	53.7	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.9	0.5	3.5	23.3	4.6	6.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.7	3.8	47.7	2.0	110.7	52.6
LnGrp LOS	B	A	D	A	F	D
Approach Vol, veh/h	1214		1018			524
Approach Delay, s/veh	16.6		13.3			63.7
Approach LOS	B		B			E

Timer - Assigned Phs				4		6	8
Phs Duration (G+Y+Rc), s				24.0		96.0	24.0
Change Period (Y+Rc), s				4.5		4.5	4.5
Max Green Setting (Gmax), s				19.5		91.5	19.5
Max Q Clear Time (g_c+I1), s				21.5		56.9	10.4
Green Ext Time (p_c), s				0.0		5.9	3.3

Intersection Summary	
HCM 6th Ctrl Delay	24.3
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	145	77	34	1391	115	3	77	33	970	2	37
Future Volume (vph)	10	145	77	34	1391	115	3	77	33	970	2	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	28.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	10	145	77	34	1391	115	3	77	33	970	2	37
Future Vol, veh/h	10	145	77	34	1391	115	3	77	33	970	2	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	158	84	37	1512	125	3	84	36	1054	2	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1637	0	0	242	0	0	1892	1933	200	1931	1913	1575
Stage 1	-	-	-	-	-	-	222	222	-	1649	1649	-
Stage 2	-	-	-	-	-	-	1670	1711	-	282	264	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	396	-	-	1324	-	-	53	~ 66	841	~ 50	68	135
Stage 1	-	-	-	-	-	-	780	720	-	~ 125	156	-
Stage 2	-	-	-	-	-	-	121	146	-	~ 725	690	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	396	-	-	1324	-	-	25	~ 41	841	-	42	135
Mov Cap-2 Maneuver	-	-	-	-	-	-	25	~ 41	-	-	42	-
Stage 1	-	-	-	-	-	-	755	697	-	~ 121	99	-
Stage 2	-	-	-	-	-	-	53	93	-	~ 591	668	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	$ 725.8	
HCM LOS			F	-

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	55	396	-	-	1324	-	-	-
HCM Lane V/C Ratio	2.233	0.027	-	-	0.028	-	-	-
HCM Control Delay (s)	$ 725.8	14.3	0	-	7.8	0	-	-
HCM Lane LOS	F	B	A	-	A	A	-	-
HCM 95th %tile Q(veh)	12.2	0.1	-	-	0.1	-	-	-

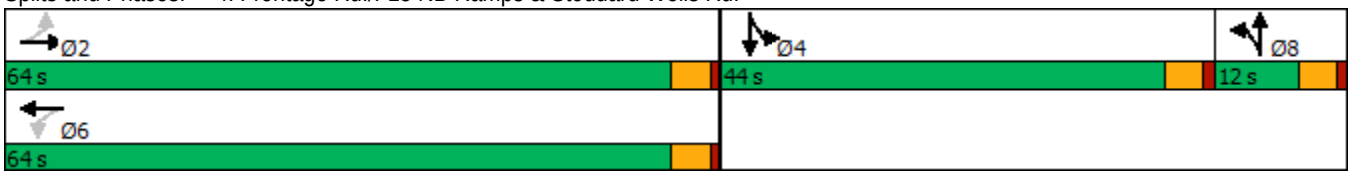
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

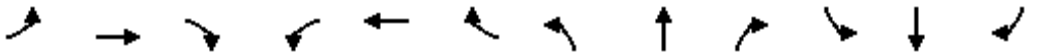
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	145	77	34	1391	115	3	77	33	970	2	37
Future Volume (vph)	10	145	77	34	1391	115	3	77	33	970	2	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		0	150		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		889			1144			979			330	
Travel Time (s)		13.5			17.3			22.3			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)										48%		
Turn Type	Perm	NA		Perm	NA		Split	NA		Split	NA	
Protected Phases		2			6		8	8		4	4	
Permitted Phases	2			6								
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	14.5	14.5		14.5	14.5		9.5	9.5		9.5	9.5	
Total Split (s)	64.0	64.0		64.0	64.0		12.0	12.0		44.0	44.0	
Total Split (%)	53.3%	53.3%		53.3%	53.3%		10.0%	10.0%		36.7%	36.7%	
Maximum Green (s)	59.5	59.5		59.5	59.5		7.5	7.5		39.5	39.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		Max	Max		None	None		None	None	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Frontage Rd./I-15 NB Ramps & Stoddard Wells Rd.





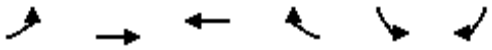
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	145	77	34	1391	115	3	77	33	970	2	37
Future Volume (veh/h)	10	145	77	34	1391	115	3	77	33	970	2	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	11	158	84	37	1512	125	3	84	36	1093	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	947	509	57	1577	129	105	78	33	1111	616	0
Arrive On Green	0.50	0.50	0.50	0.99	0.99	0.99	0.06	0.06	0.06	0.43	0.00	0.00
Sat Flow, veh/h	74	1910	1026	52	3180	260	1688	1242	532	3375	1870	0
Grp Volume(v), veh/h	129	0	124	879	0	795	3	0	120	1093	0	0
Grp Sat Flow(s),veh/h/ln	1493	0	1517	1837	0	1655	1688	0	1775	1688	1870	0
Q Serve(g_s), s	0.0	0.0	5.4	0.0	0.0	12.2	0.2	0.0	7.5	38.4	0.0	0.0
Cycle Q Clear(g_c), s	4.5	0.0	5.4	7.8	0.0	12.2	0.2	0.0	7.5	38.4	0.0	0.0
Prop In Lane	0.09		0.68	0.04		0.16	1.00		0.30	1.00		0.00
Lane Grp Cap(c), veh/h	773	0	752	942	0	821	105	0	111	1111	616	0
V/C Ratio(X)	0.17	0.00	0.17	0.93	0.00	0.97	0.03	0.00	1.08	0.98	0.00	0.00
Avail Cap(c_a), veh/h	773	0	752	942	0	821	105	0	111	1111	616	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.30	1.30	1.30
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.4	0.0	16.6	0.3	0.0	0.3	52.8	0.0	56.3	34.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.5	17.0	0.0	24.7	0.1	0.0	109.2	23.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	1.9	4.6	0.0	5.8	0.1	0.0	6.7	18.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.8	0.0	17.1	17.3	0.0	25.0	52.9	0.0	165.5	57.1	0.0	0.0
LnGrp LOS	B	A	B	B	A	C	D	A	F	E	A	A
Approach Vol, veh/h		253			1674			123			1093	
Approach Delay, s/veh		17.0			20.9			162.7			57.1	
Approach LOS		B			C			F			E	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	64.0	44.0	64.0	12.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	59.5	39.5	59.5	7.5
Max Q Clear Time (g_c+I1), s	7.4	40.4	14.2	9.5
Green Ext Time (p_c), s	1.7	0.0	17.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	38.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	25	55	68	1362	177	12
Future Volume (vph)	25	55	68	1362	177	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			0	0	25
Storage Lanes	0			0	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	42.5

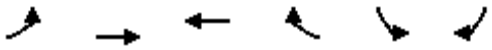
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	55	68	1362	177	12
Future Vol, veh/h	25	55	68	1362	177	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	85	105	2095	272	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	105	0	-	0	1314	1153
Stage 1	-	-	-	-	1153	-
Stage 2	-	-	-	-	161	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1486	-	-	-	~ 174	240
Stage 1	-	-	-	-	301	-
Stage 2	-	-	-	-	868	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1486	-	-	-	~ 169	240
Mov Cap-2 Maneuver	-	-	-	-	~ 169	-
Stage 1	-	-	-	-	293	-
Stage 2	-	-	-	-	868	-

Approach	EB	WB	SB
HCM Control Delay, s	2.3	0	$ 381.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1486	-	-	-	172
HCM Lane V/C Ratio	0.026	-	-	-	1.691
HCM Control Delay (s)	7.5	0	-	-	$ 381.5
HCM Lane LOS	A	A	-	-	F
HCM 95th %tile Q(veh)	0.1	-	-	-	20.2

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	25	55	68	1362	177	12
Future Volume (vph)	25	55	68	1362	177	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			150	0	25
Storage Lanes	0			1	1	0
Taper Length (ft)	90				90	
Link Speed (mph)		45	45		45	
Link Distance (ft)		1552	889		1482	
Travel Time (s)		23.5	13.5		22.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	55	68	1362	177	12
Future Vol, veh/h	25	55	68	1362	177	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	150	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	60	74	1480	192	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1554	0	-	0	158	37
Stage 1	-	-	-	-	74	-
Stage 2	-	-	-	-	84	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	422	-	-	-	818	1027
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	422	-	-	-	764	1027
Mov Cap-2 Maneuver	-	-	-	-	764	-
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	930	-

Approach	EB	WB	SB
HCM Control Delay, s	4.5	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	422	-	-	-	777
HCM Lane V/C Ratio	0.064	-	-	-	0.264
HCM Control Delay (s)	14.1	0.2	-	-	11.3
HCM Lane LOS	B	A	-	-	B
HCM 95th %tile Q(veh)	0.2	-	-	-	1.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	183	6	6	1381	6	6
Future Volume (vph)	183	6	6	1381	6	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	23.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	183	6	6	1381	6	6
Future Vol, veh/h	183	6	6	1381	6	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	282	9	9	2125	9	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1099	1072	0	0	2134	0
Stage 1	1072	-	-	-	-	-
Stage 2	27	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 235	268	-	-	254	-
Stage 1	329	-	-	-	-	-
Stage 2	996	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 227	268	-	-	254	-
Mov Cap-2 Maneuver	~ 227	-	-	-	-	-
Stage 1	329	-	-	-	-	-
Stage 2	960	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	196.3	0	9.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	228	254	-
HCM Lane V/C Ratio	-	-	1.275	0.036	-
HCM Control Delay (s)	-	-	196.3	19.7	0
HCM Lane LOS	-	-	F	C	A
HCM 95th %tile Q(veh)	-	-	15.1	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	183	6	6	1381	6	6
Future Volume (vph)	183	6	6	1381	6	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		150	0	
Storage Lanes	1	0		1	0	
Taper Length (ft)	90				90	
Link Speed (mph)	30		45			45
Link Distance (ft)	263		1482			525
Travel Time (s)	6.0		22.5			8.0
Peak Hour Factor	0.65	0.65	0.65	0.65	0.65	0.65
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

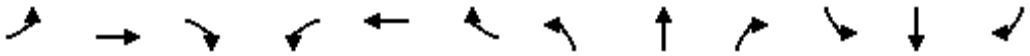
Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	183	6	6	1381	6	6
Future Vol, veh/h	183	6	6	1381	6	6
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	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	65	65	65	65	65	65
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	282	9	9	2125	9	9

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	36	9	0	0	2134	0
Stage 1	9	-	-	-	-	-
Stage 2	27	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	977	1073	-	-	254	-
Stage 1	1014	-	-	-	-	-
Stage 2	996	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	942	1073	-	-	254	-
Mov Cap-2 Maneuver	942	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	960	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	9.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	946	254	-
HCM Lane V/C Ratio	-	-	0.307	0.036	-
HCM Control Delay (s)	-	-	10.5	19.7	0
HCM Lane LOS	-	-	B	C	A
HCM 95th %tile Q(veh)	-	-	1.3	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	263	124	216	436	243	241	397	302	161	847	206
Future Volume (vph)	223	263	124	216	436	243	241	397	302	161	847	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	150		400	415		0
Storage Lanes	0		0	0		0	1		1	1		0
Taper Length (ft)	90			90			90			90		
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		414			304			1385			2620	
Travel Time (s)		9.4			4.6			17.2			32.5	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	223	263	124	216	436	243	241	397	302	161	847	206
Future Vol, veh/h	223	263	124	216	436	243	241	397	302	161	847	206
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	-	-	-	-	-	-	150	-	400	415	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	293	346	163	284	574	320	317	522	397	212	1114	271

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3476	3227	1250	3084	2965	522	1385	0	0	919	0	0
Stage 1	1674	1674	-	1156	1156	-	-	-	-	-	-	-
Stage 2	1802	1553	-	1928	1809	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 4	~ 10	211	~ 7	~ 14	555	494	-	-	743	-	-
Stage 1	~ 121	~ 152	-	~ 239	~ 271	-	-	-	-	-	-	-
Stage 2	~ 102	~ 174	-	~ 86	~ 130	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	~ 3	211	-	~ 4	555	494	-	-	743	-	-
Mov Cap-2 Maneuver	-	~ 3	-	-	~ 4	-	-	-	-	-	-	-
Stage 1	~ 43	~ 109	-	~ 86	~ 97	-	-	-	-	-	-	-
Stage 2	-	~ 62	-	-	~ 93	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			6.3	1.6
HCM LOS	-	-		

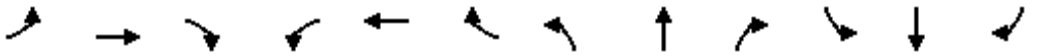
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	494	-	-	-	-	743	-	-
HCM Lane V/C Ratio	0.642	-	-	-	-	0.285	-	-
HCM Control Delay (s)	24.4	-	-	-	-	11.8	-	-
HCM Lane LOS	C	-	-	-	-	B	-	-
HCM 95th %tile Q(veh)	4.5	-	-	-	-	1.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	263	124	216	436	243	241	397	302	161	847	206
Future Volume (vph)	223	263	124	216	436	243	241	397	302	161	847	206
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		400	415		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		30			45			55			55	
Link Distance (ft)		539			304			1385			2620	
Travel Time (s)		12.3			4.6			17.2			32.5	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	18.6	23.8		18.8	24.0		19.7	35.1		22.3	37.7	
Total Split (%)	18.6%	23.8%		18.8%	24.0%		19.7%	35.1%		22.3%	37.7%	
Maximum Green (s)	14.1	19.3		14.3	19.5		15.2	30.6		17.8	33.2	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			5			5	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	

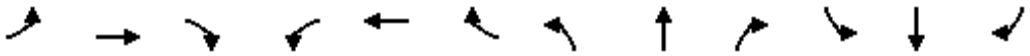
Splits and Phases: 7: Dale Evans Pkwy. & Lafayette St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	263	124	216	436	243	241	397	302	161	847	206
Future Volume (veh/h)	223	263	124	216	436	243	241	397	302	161	847	206
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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	235	277	131	227	459	256	254	418	318	169	892	217
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	238	456	210	241	430	238	257	706	533	199	941	229
Arrive On Green	0.14	0.19	0.19	0.14	0.19	0.19	0.30	0.73	0.73	0.18	0.50	0.50
Sat Flow, veh/h	1688	2363	1088	1688	2205	1222	1688	1929	1456	1688	2834	689
Grp Volume(v), veh/h	235	206	202	227	369	346	254	385	351	169	559	550
Grp Sat Flow(s),veh/h/ln	1688	1777	1675	1688	1777	1650	1688	1777	1608	1688	1777	1746
Q Serve(g_s), s	13.9	10.6	11.0	13.3	19.5	19.5	15.0	10.2	10.4	9.7	29.9	30.0
Cycle Q Clear(g_c), s	13.9	10.6	11.0	13.3	19.5	19.5	15.0	10.2	10.4	9.7	29.9	30.0
Prop In Lane	1.00		0.65	1.00		0.74	1.00		0.91	1.00		0.39
Lane Grp Cap(c), veh/h	238	343	323	241	346	322	257	650	589	199	590	580
V/C Ratio(X)	0.99	0.60	0.62	0.94	1.07	1.07	0.99	0.59	0.60	0.85	0.95	0.95
Avail Cap(c_a), veh/h	238	343	323	241	346	322	257	650	589	300	590	580
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.50	1.50	1.50
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	42.9	36.8	37.0	42.4	40.2	40.3	34.7	9.9	9.9	40.3	24.3	24.3
Incr Delay (d2), s/veh	54.7	2.9	3.7	41.8	66.8	71.4	53.3	3.9	4.4	1.4	4.2	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	4.8	4.8	8.1	14.5	13.9	8.4	3.1	2.9	3.6	9.1	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	97.6	39.8	40.7	84.2	107.0	111.6	88.1	13.8	14.3	41.7	28.5	28.6
LnGrp LOS	F	D	D	F	F	F	F	B	B	D	C	C
Approach Vol, veh/h		643			942			990			1278	
Approach Delay, s/veh		61.2			103.2			33.0			30.3	
Approach LOS		E			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	41.1	18.8	23.8	19.7	37.7	18.6	24.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	17.8	30.6	14.3	19.3	15.2	33.2	14.1	19.5
Max Q Clear Time (g_c+I1), s	11.7	12.4	15.3	13.0	17.0	32.0	15.9	21.5
Green Ext Time (p_c), s	0.2	3.8	0.0	1.3	0.0	0.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.0
HCM 6th LOS	D



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	18	15	28	30	13	9	556	25	14	743	188
Future Volume (vph)	97	18	15	28	30	13	9	556	25	14	743	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
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
Shared Lane Traffic (%)												
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Intersection Delay, s/veh	173.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	97	18	15	28	30	13	9	556	25	14	743	188
Future Vol, veh/h	97	18	15	28	30	13	9	556	25	14	743	188
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	102	19	16	29	32	14	9	585	26	15	782	198
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

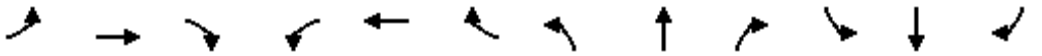
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	14.8	13.5	59.8	277.9
HCM LOS	B	B	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	75%	39%	1%
Vol Thru, %	94%	14%	42%	79%
Vol Right, %	4%	12%	18%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	590	130	71	945
LT Vol	9	97	28	14
Through Vol	556	18	30	743
RT Vol	25	15	13	188
Lane Flow Rate	621	137	75	995
Geometry Grp	1	1	1	1
Degree of Util (X)	0.986	0.284	0.159	1.565
Departure Headway (Hd)	6.423	8.498	8.81	5.663
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	571	426	410	647
Service Time	4.423	6.498	6.81	3.708
HCM Lane V/C Ratio	1.088	0.322	0.183	1.538
HCM Control Delay	59.8	14.8	13.5	277.9
HCM Lane LOS	F	B	B	F
HCM 95th-tile Q	13.9	1.2	0.6	51.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	18	15	28	30	13	9	556	25	14	743	188
Future Volume (vph)	97	18	15	28	30	13	9	556	25	14	743	188
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		55			55			55			55	
Link Distance (ft)		1375			1304			1135			747	
Travel Time (s)		17.0			16.2			14.1			9.3	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	19.0	30.0		12.0	23.0		10.0	48.0		10.0	48.0	
Total Split (%)	19.0%	30.0%		12.0%	23.0%		10.0%	48.0%		10.0%	48.0%	
Maximum Green (s)	14.5	25.5		7.5	18.5		5.5	43.5		5.5	43.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			5			5	

Intersection Summary	
Area Type:	Other
Cycle Length: 100	
Actuated Cycle Length: 100	
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	

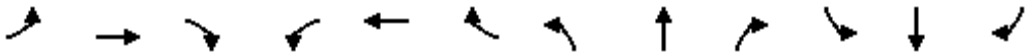
Splits and Phases: 8: Dale Evans Pkwy. & Corwin Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	18	15	28	30	13	9	556	25	14	743	188
Future Volume (veh/h)	97	18	15	28	30	13	9	556	25	14	743	188
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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	102	19	16	29	32	14	9	585	26	15	782	198
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	279	207	47	234	96	19	2190	97	29	1791	454
Arrive On Green	0.08	0.14	0.14	0.03	0.10	0.10	0.01	0.63	0.63	0.02	0.64	0.64
Sat Flow, veh/h	1688	1944	1444	1688	2459	1007	1688	3466	154	1688	2808	711
Grp Volume(v), veh/h	102	17	18	29	23	23	9	300	311	15	495	485
Grp Sat Flow(s),veh/h/ln	1688	1777	1611	1688	1777	1689	1688	1777	1843	1688	1777	1742
Q Serve(g_s), s	5.9	0.8	1.0	1.7	1.2	1.3	0.5	7.5	7.5	0.9	14.0	14.0
Cycle Q Clear(g_c), s	5.9	0.8	1.0	1.7	1.2	1.3	0.5	7.5	7.5	0.9	14.0	14.0
Prop In Lane	1.00		0.90	1.00		0.60	1.00		0.08	1.00		0.41
Lane Grp Cap(c), veh/h	128	255	231	47	169	161	19	1123	1164	29	1133	1112
V/C Ratio(X)	0.80	0.07	0.08	0.62	0.13	0.15	0.48	0.27	0.27	0.52	0.44	0.44
Avail Cap(c_a), veh/h	245	453	411	127	329	312	93	1123	1164	93	1133	1112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	37.0	37.1	48.1	41.5	41.5	49.2	8.1	8.2	48.7	9.1	9.1
Incr Delay (d2), s/veh	10.8	0.1	0.1	12.7	0.4	0.4	18.0	0.6	0.6	13.9	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.3	0.4	0.8	0.5	0.5	0.3	2.4	2.5	0.5	4.5	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.2	37.2	37.2	60.8	41.8	41.9	67.2	8.7	8.7	62.6	10.3	10.3
LnGrp LOS	E	D	D	E	D	D	E	A	A	E	B	B
Approach Vol, veh/h		137			75			620			995	
Approach Delay, s/veh		51.4			49.2			9.6			11.1	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	67.7	7.3	18.8	5.6	68.3	12.1	14.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	43.5	7.5	25.5	5.5	43.5	14.5	18.5
Max Q Clear Time (g_c+I1), s	2.9	9.5	3.7	3.0	2.5	16.0	7.9	3.3
Green Ext Time (p_c), s	0.0	3.3	0.0	0.1	0.0	5.9	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	224	201	81	264	66	162	61	40	53	138	95
Future Volume (vph)	120	224	201	81	264	66	162	61	40	53	138	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		787			1189			2650			316	
Travel Time (s)		11.9			18.0			40.2			4.8	
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
Shared Lane Traffic (%)												
Sign Control		Free			Free			Stop			Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2874.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	120	224	201	81	264	66	162	61	40	53	138	95
Future Vol, veh/h	120	224	201	81	264	66	162	61	40	53	138	95
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	126	236	212	85	278	69	171	64	42	56	145	100

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	347	0	0	448	0	0	1199	1111	342	1130	1183	313
Stage 1	-	-	-	-	-	-	594	594	-	483	483	-
Stage 2	-	-	-	-	-	-	605	517	-	647	700	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1212	-	-	1112	-	-	~ 162	209	701	181	189	727
Stage 1	-	-	-	-	-	-	491	493	-	565	553	-
Stage 2	-	-	-	-	-	-	485	534	-	460	441	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1212	-	-	1112	-	-	~ 5	162	701	99	146	727
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 5	162	-	99	146	-
Stage 1	-	-	-	-	-	-	421	423	-	484	500	-
Stage 2	-	-	-	-	-	-	268	483	-	314	378	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	1.7	$ 16027.4	$ 379.7
HCM LOS			F	F

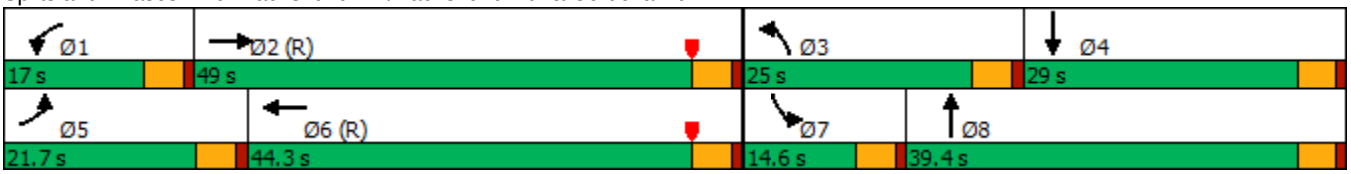
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	8	1212	-	-	1112	-	-	178
HCM Lane V/C Ratio	34.605	0.104	-	-	0.077	-	-	1.691
HCM Control Delay (s)	$ 16027.4	8.3	0	-	8.5	0	-	$ 379.7
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th %tile Q(veh)	36.5	0.3	-	-	0.2	-	-	20.8

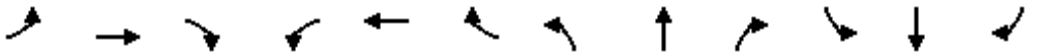
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	224	201	81	264	66	162	61	40	53	138	95
Future Volume (vph)	120	224	201	81	264	66	162	61	40	53	138	95
Ideal Flow (vphpl)	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Storage Length (ft)	150		0	150		0	150		0	150		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	90			90			90			90		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		787			1189			2650			316	
Travel Time (s)		11.9			18.0			40.2			4.8	
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
Shared Lane Traffic (%)												
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	21.7	49.0		17.0	44.3		25.0	39.4		14.6	29.0	
Total Split (%)	18.1%	40.8%		14.2%	36.9%		20.8%	32.8%		12.2%	24.2%	
Maximum Green (s)	17.2	44.5		12.5	39.8		20.5	34.9		10.1	24.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Min		None	Min	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		5			5			0			5	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 9: Dachshund Av./Dachshund Rd. & Cordova Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	224	201	81	264	66	162	61	40	53	138	95
Future Volume (veh/h)	120	224	201	81	264	66	162	61	40	53	138	95
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	1772	1870	1870	1772	1870	1870	1772	1870	1870	1772	1870	1870
Adj Flow Rate, veh/h	126	236	212	85	278	69	171	64	42	56	145	100
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	463	416	106	699	174	198	247	162	71	164	113
Arrive On Green	0.09	0.51	0.51	0.06	0.48	0.48	0.12	0.23	0.23	0.04	0.16	0.16
Sat Flow, veh/h	1688	908	816	1688	1447	359	1688	1054	692	1688	1031	711
Grp Volume(v), veh/h	126	0	448	85	0	347	171	0	106	56	0	245
Grp Sat Flow(s),veh/h/ln	1688	0	1724	1688	0	1806	1688	0	1746	1688	0	1742
Q Serve(g_s), s	8.8	0.0	20.6	6.0	0.0	14.8	11.9	0.0	5.9	3.9	0.0	16.5
Cycle Q Clear(g_c), s	8.8	0.0	20.6	6.0	0.0	14.8	11.9	0.0	5.9	3.9	0.0	16.5
Prop In Lane	1.00		0.47	1.00		0.20	1.00		0.40	1.00		0.41
Lane Grp Cap(c), veh/h	152	0	879	106	0	873	198	0	410	71	0	277
V/C Ratio(X)	0.83	0.00	0.51	0.80	0.00	0.40	0.86	0.00	0.26	0.79	0.00	0.88
Avail Cap(c_a), veh/h	242	0	879	176	0	873	288	0	508	142	0	356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.80	0.00	0.80	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	0.0	19.4	55.5	0.0	19.8	52.0	0.0	37.4	56.9	0.0	49.3
Incr Delay (d2), s/veh	12.5	0.0	2.1	12.9	0.0	1.4	13.5	0.0	0.3	17.3	0.0	18.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	8.2	2.9	0.0	6.2	5.7	0.0	2.5	2.0	0.0	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.2	0.0	21.6	68.3	0.0	21.2	65.4	0.0	37.7	74.2	0.0	67.9
LnGrp LOS	E	A	C	E	A	C	E	A	D	E	A	E
Approach Vol, veh/h		574			432			277			301	
Approach Delay, s/veh		31.3			30.5			54.8			69.1	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	65.7	18.6	23.6	15.3	62.5	9.5	32.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	44.5	20.5	24.5	17.2	39.8	10.1	34.9
Max Q Clear Time (g_c+I1), s	8.0	22.6	13.9	18.5	10.8	16.8	5.9	7.9
Green Ext Time (p_c), s	0.1	2.6	0.2	0.6	0.1	1.9	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	42.4
HCM 6th LOS	D

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	32	1	0	13	1	0
Future Volume (vph)	32	1	0	13	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	335		269			195
Travel Time (s)	7.6		4.1			3.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	6.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	1	0	13	1	0
Future Vol, veh/h	32	1	0	13	1	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	1	0	14	1	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	9	7	0	0	14	0
Stage 1	7	-	-	-	-	-
Stage 2	2	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1011	1075	-	-	1604	-
Stage 1	1016	-	-	-	-	-
Stage 2	1021	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1010	1075	-	-	1604	-
Mov Cap-2 Maneuver	1010	-	-	-	-	-
Stage 1	1016	-	-	-	-	-
Stage 2	1020	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	7.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1012	1604	-
HCM Lane V/C Ratio	-	-	0.035	0.001	-
HCM Control Delay (s)	-	-	8.7	7.2	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	33	1	13	13	1	32
Future Volume (vph)	33	1	13	13	1	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	313		1795			269
Travel Time (s)	7.1		27.2			4.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	1	13	13	1	32
Future Vol, veh/h	33	1	13	13	1	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	1	14	14	1	35

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	58	21	0	0	28	0
Stage 1	21	-	-	-	-	-
Stage 2	37	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	949	1056	-	-	1585	-
Stage 1	1002	-	-	-	-	-
Stage 2	985	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	948	1056	-	-	1585	-
Mov Cap-2 Maneuver	948	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	984	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	951	1585	-
HCM Lane V/C Ratio	-	-	0.039	0.001	-
HCM Control Delay (s)	-	-	8.9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	46	1	206	18	1	213
Future Volume (vph)	46	1	206	18	1	213
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	333		257			1795
Travel Time (s)	7.6		3.9			27.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	1	206	18	1	213
Future Vol, veh/h	46	1	206	18	1	213
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	1	224	20	1	232

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	468	234	0	0	244	0
Stage 1	234	-	-	-	-	-
Stage 2	234	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	553	805	-	-	1322	-
Stage 1	805	-	-	-	-	-
Stage 2	805	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	552	805	-	-	1322	-
Mov Cap-2 Maneuver	552	-	-	-	-	-
Stage 1	805	-	-	-	-	-
Stage 2	804	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	556	1322	-
HCM Lane V/C Ratio	-	-	0.092	0.001	-
HCM Control Delay (s)	-	-	12.1	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	32	1	224	13	1	259
Future Volume (vph)	32	1	224	13	1	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)	30		45			45
Link Distance (ft)	340		316			257
Travel Time (s)	7.7		4.8			3.9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

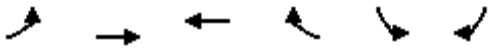
Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	1	224	13	1	259
Future Vol, veh/h	32	1	224	13	1	259
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	1	243	14	1	282

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	534	250	0	0	257	0
Stage 1	250	-	-	-	-	-
Stage 2	284	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	507	789	-	-	1308	-
Stage 1	792	-	-	-	-	-
Stage 2	764	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	506	789	-	-	1308	-
Mov Cap-2 Maneuver	506	-	-	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	763	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	512	1308	-
HCM Lane V/C Ratio	-	-	0.07	0.001	-
HCM Control Delay (s)	-	-	12.6	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	20	115	149	1	1	53
Future Volume (vph)	20	115	149	1	1	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45	45		30	
Link Distance (ft)		1189	461		387	
Travel Time (s)		18.0	7.0		8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

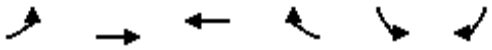
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	115	149	1	1	53
Future Vol, veh/h	20	115	149	1	1	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	125	162	1	1	58

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	163	0	-	0	332	163
Stage 1	-	-	-	-	163	-
Stage 2	-	-	-	-	169	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1416	-	-	-	663	882
Stage 1	-	-	-	-	866	-
Stage 2	-	-	-	-	861	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1416	-	-	-	652	882
Mov Cap-2 Maneuver	-	-	-	-	652	-
Stage 1	-	-	-	-	851	-
Stage 2	-	-	-	-	861	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1416	-	-	-	876
HCM Lane V/C Ratio	0.015	-	-	-	0.067
HCM Control Delay (s)	7.6	0	-	-	9.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	99	107	1	1	43
Future Volume (vph)	17	99	107	1	1	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Link Speed (mph)		45	45		30	
Link Distance (ft)		461	686		374	
Travel Time (s)		7.0	10.4		8.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	17	99	107	1	1	43
Future Vol, veh/h	17	99	107	1	1	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	108	116	1	1	47

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	117	0	-	0	261	117
Stage 1	-	-	-	-	117	-
Stage 2	-	-	-	-	144	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1471	-	-	-	728	935
Stage 1	-	-	-	-	908	-
Stage 2	-	-	-	-	883	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1471	-	-	-	719	935
Mov Cap-2 Maneuver	-	-	-	-	719	-
Stage 1	-	-	-	-	896	-
Stage 2	-	-	-	-	883	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1471	-	-	-	929
HCM Lane V/C Ratio	0.013	-	-	-	0.051
HCM Control Delay (s)	7.5	0	-	-	9.1
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

APPENDIX 6.3: HORIZON YEAR (2040) TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

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

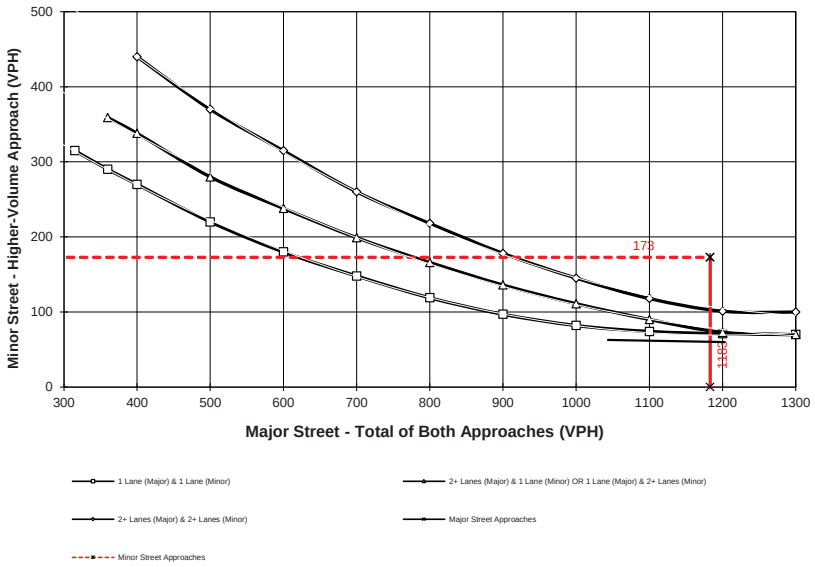
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **2040NP AM PEAK HOUR WARRANTS**

Major Street Name = **Dale Evans Pkwy.** Total of Both Approaches (VPH) = **1,183**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Corwin Rd.** High Volume Approach (VPH) = **173**
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

Intersection ID: #8

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

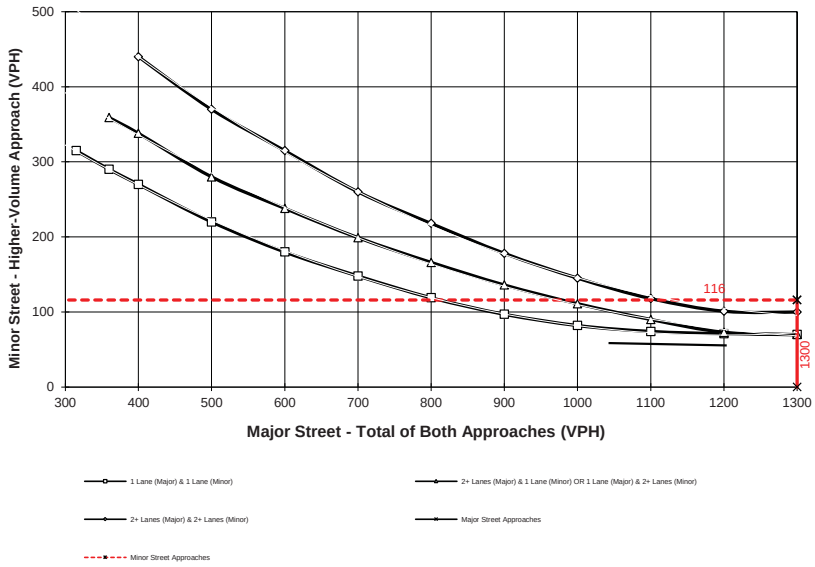
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **2040NP PM PEAK HOUR WARRANTS**

Major Street Name = **Dale Evans Pkwy.** Total of Both Approaches (VPH) = **1,451**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Corwin Rd.** High Volume Approach (VPH) = **116**
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

Intersection ID: #8

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

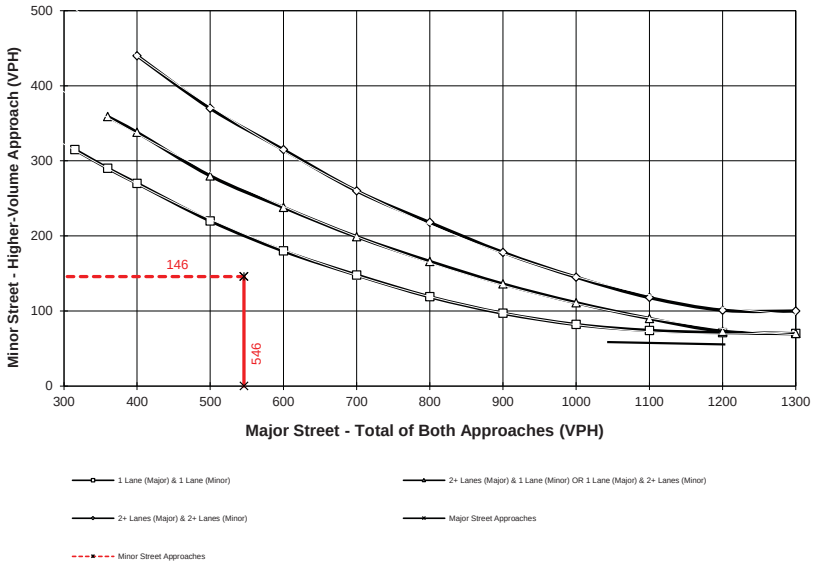
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **2040NP AM PEAK HOUR WARRANTS**

Major Street Name = **Cordova Rd.** Total of Both Approaches (VPH) = **546**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dachshund Av.** High Volume Approach (VPH) = **146**
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

Intersection ID: #9

California MUTCD 2016 Edition
(FHWA's MUTCD 2009, as amended for use in California)

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

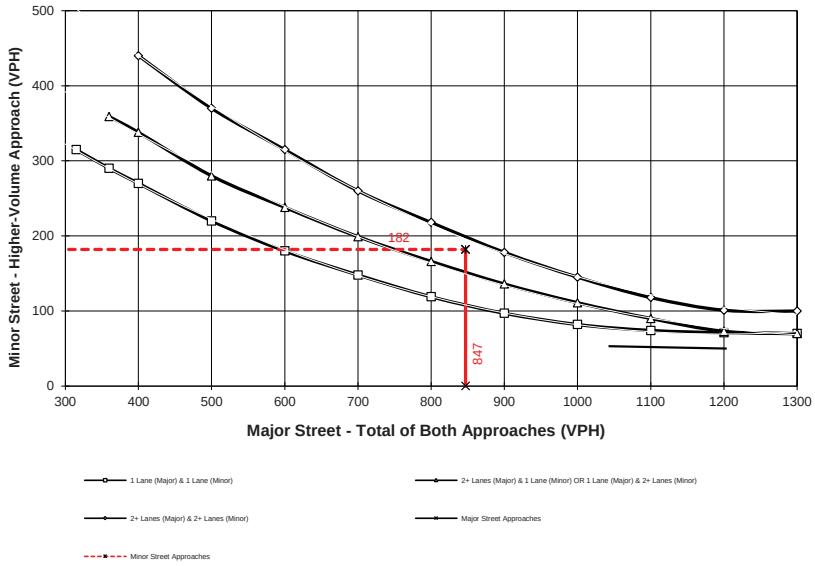
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **2040NP PM PEAK HOUR WARRANTS**

Major Street Name = **Cordova Rd.** Total of Both Approaches (VPH) = **847**
Number of Approach Lanes Major Street = **1**

Minor Street Name = **Dachshund Av.** High Volume Approach (VPH) = **182**
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

Intersection ID: #9

F:\UXRjobs_15100-15500_15500\15504\02_LOS\Warrants\04 - 2040NP\009R_PM.xls\Fig 4C-4 (Rural Peak)

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

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	2040NP
				CALC JC	DATE 11/10/22
Jurisdiction: **Town of Apple Valley**				CHK	DATE
Major Street: **Cordova Rd.**				Critical Approach Speed (Major)	45 mph
Minor Street: **Dachshund Av.**				Critical Approach Speed (Minor)	35 mph

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

Major Street Future ADT = **9,702** vpd Minor Street Future ADT = **2,346** 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 …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied: XX Not Satisfied:

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements ADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **9,702**	1 **2,346**	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

Satisfied: XX Not Satisfied:

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **9,702**	1 **2,346**	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:

No one condition satisfied, but following conditions fulfilled 80% of more …..

A	B	2 CONDITIONS 80%	2 CONDITIONS 80%
100%	100%		

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	2040WP
				CALC JC	DATE 11/10/22
Jurisdiction: **Town of Apple Valley**				CHK	DATE
Major Street: **Cordova Rd.**				Critical Approach Speed (Major)	45 mph
Minor Street: **Dachshund Av.**				Critical Approach Speed (Minor)	35 mph

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

Major Street Future ADT = **10,896** vpd Minor Street Future ADT = **4,316** 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 …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied: XX Not Satisfied

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements ADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **10,896**	*1* **4,316**	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

Satisfied: XX Not Satisfied

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **10,896**	*1* **4,316**	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

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 100% **B** 100%

2 CONDITIONS 80%

2 CONDITIONS 80%

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	**2040WP**
				CALC JC	DATE 11/10/22
Jurisdiction: **Town of Apple Valley**				CHK	DATE
Major Street: **Dachshund Av.**				Critical Approach Speed (Major)	45 mph
Minor Street: **Dwy. 1**				Critical Approach Speed (Minor)	35 mph

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

Major Street Future ADT = **299** vpd Minor Street Future ADT = **299** 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 …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements ADT			
	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
Satisfied / Not Satisfied: XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 **299** / *1* **299**	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 **299** / *1* **299**	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** 5% **B** 4%				

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		2040WP
				CALC	JC	DATE	11/10/22
Jurisdiction:	Town of Apple Valley			CHK		DATE	
Major Street:	Dachshund Av.				Critical Approach Speed (Major)		45 mph
Minor Street:	Dwy. 2				Critical Approach Speed (Minor)		35 mph

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

Major Street Future ADT = **914** vpd Minor Street Future ADT = **316** 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 …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements ADT			
	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 **914**	*1* **316**	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 **914**	*1* **316**	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** 16% **B** 11%				

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	2040WP
				CALC JC	DATE 11/10/22
Jurisdiction: **Town of Apple Valley**				CHK	DATE
Major Street: **Dachshund Av.**				Critical Approach Speed (Major)	45 mph
Minor Street: **Dwy. 3**				Critical Approach Speed (Minor)	35 mph

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

Major Street Future ADT = **5,607** vpd Minor Street Future ADT = **441** 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 …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach		Minimum Requirements ADT			
Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
		Urban	Rural	Urban	Rural
1 **5,607**	*1* **441**	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

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Major Street	Minor Street	Urban	Rural	Urban	Rural
1 **5,607**	*1* **441**	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

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 26% **B** 52%

2 CONDITIONS 80%

2 CONDITIONS 80%

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		**2040WP**	
				CALC	JC	DATE	11/10/22
Jurisdiction:	**Town of Apple Valley**			CHK		DATE	
Major Street:	**Dachshund Av.**			Critical Approach Speed (Major)		45	mph
Minor Street:	**Dwy. 4**			Critical Approach Speed (Minor)		35	mph

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

Major Street Future ADT = **6,347** vpd Minor Street Future ADT = **299** 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 ……..

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements ADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **6,347**	1 **299**	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

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1 **6,347**	1 **299**	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

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 18% **B** 35%

2 CONDITIONS 80%

2 CONDITIONS 80%

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		2040WP
				CALC	JC	DATE	11/10/22
Jurisdiction:	Town of Apple Valley			CHK		DATE	
Major Street:	Cordova Rd.				Critical Approach Speed (Major)		45 mph
Minor Street:	Dwy. 5				Critical Approach Speed (Minor)		35 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **3,751** vpd Minor Street Future ADT = **505** 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 …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements ADT			
	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	1	8,000	5,600	2,400	1,680
2 + **3,751**	1 **505**	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	1	12,000	8,400	1,200	850
2 + **3,751**	1 **505**	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 30% B 37%				

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		**2040WP**	
				CALC	JC	DATE	11/10/22
Jurisdiction:	**Town of Apple Valley**			CHK		DATE	
Major Street:	**Cordova Rd.**			Critical Approach Speed (Major)		45	mph
Minor Street:	**Dwy. 6**			Critical Approach Speed (Minor)		35	mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes **1** lane

Major Street Future ADT = **2,871** vpd Minor Street Future ADT = **399** 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 …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements ADT			
	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	*1*	8,000	5,600	2,400	1,680
2 + **2,871**	*1* **399**	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	*1*	12,000	8,400	1,200	850
2 + **2,871**	*1* **399**	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 24% B 28%				

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.

APPENDIX 6.4: HORIZON YEAR (2040) WITH PROJECT CONDITIONS QUEUING ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Intersection: 9: Dachshund Av./Dachshund Rd. & Cordova Rd.

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	56	102	51	70	137	101	51	49
Average Queue (ft)	36	67	30	49	83	61	26	35
95th Queue (ft)	62	118	71	84	170	127	60	56
Link Distance (ft)		753		1131		2570		248
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	150		150		150		150	
Storage Blk Time (%)		0			1	0		
Queuing Penalty (veh)		0			2	1		

Intersection: 10: Dachshund Rd. & Dwy. 1

Movement	WB
Directions Served	LR
Maximum Queue (ft)	25
Average Queue (ft)	8
95th Queue (ft)	31
Link Distance (ft)	307
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: Dachshund Rd. & Dwy. 2

Movement	WB
Directions Served	LR
Maximum Queue (ft)	24
Average Queue (ft)	6
95th Queue (ft)	26
Link Distance (ft)	285
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: Dachshund Rd. & Dwy. 3

Movement	WB
Directions Served	LR
Maximum Queue (ft)	25
Average Queue (ft)	10
95th Queue (ft)	34
Link Distance (ft)	305
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Dachshund Rd. & Dwy. 4

Movement	WB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	11
95th Queue (ft)	35
Link Distance (ft)	306
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 14: Cordova Rd. & Dwy. 5

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	29	24
Average Queue (ft)	7	10
95th Queue (ft)	31	33
Link Distance (ft)	1131	352
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Cordova Rd. & Dwy. 6

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	24	24
Average Queue (ft)	5	10
95th Queue (ft)	23	34
Link Distance (ft)	405	345
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 1076

Intersection: 8: Dale Evans Pkwy. & Corwin Rd.

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	97	17	22	10	45	19	6	65	14	12	106	97
Average Queue (ft)	54	7	8	2	16	10	1	27	4	2	56	35
95th Queue (ft)	114	22	25	11	46	24	9	70	18	15	130	103
Link Distance (ft)		1284	1284		1212	1212		1044	1044		656	656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	150			150			150			150		
Storage Blk Time (%)											0	
Queuing Penalty (veh)											0	

Intersection: 9: Dachshund Av./Dachshund Rd. & Cordova Rd.

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	157	283	166	234	159	108	127	247
Average Queue (ft)	92	171	90	131	130	54	76	175
95th Queue (ft)	167	307	188	260	183	115	155	265
Link Distance (ft)		753		1131		2570		248
Upstream Blk Time (%)							0	2
Queuing Penalty (veh)							0	8
Storage Bay Dist (ft)	150		150		150		150	
Storage Blk Time (%)	0	11	0	8	10	0		14
Queuing Penalty (veh)	1	14	0	7	10	0		8

Intersection: 10: Dachshund Rd. & Dwy. 1

Movement	WB
Directions Served	LR
Maximum Queue (ft)	37
Average Queue (ft)	21
95th Queue (ft)	48
Link Distance (ft)	307
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: Dachshund Rd. & Dwy. 2

Movement	WB
Directions Served	LR
Maximum Queue (ft)	53
Average Queue (ft)	29
95th Queue (ft)	61
Link Distance (ft)	285
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: Dachshund Rd. & Dwy. 3

Movement	WB
Directions Served	LR
Maximum Queue (ft)	48
Average Queue (ft)	29
95th Queue (ft)	57
Link Distance (ft)	305
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 13: Dachshund Rd. & Dwy. 4

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	47	62
Average Queue (ft)	27	12
95th Queue (ft)	61	67
Link Distance (ft)	306	201
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Cordova Rd. & Dwy. 5

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	15	35
Average Queue (ft)	3	28
95th Queue (ft)	18	45
Link Distance (ft)	1131	352
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Cordova Rd. & Dwy. 6

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	14	37
Average Queue (ft)	3	27
95th Queue (ft)	17	48
Link Distance (ft)	405	345
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 1436