

Ramon Road Corridor Traffic Operations and Circulation Study



Prepared for:

The City of Cathedral City

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1. Executive Summary

1.1 Purpose

The purpose of this study is to evaluate traffic conditions on Ramon Road between Landau Boulevard and Da Vall Drive. This study examines corridor operations and attempts to present findings in conjunction with previous studies and proposed street improvement plans. Analyses details existing conditions and evaluates conditions for terms Year 2010, Year 2020, Year 2030. Phased recommendations are then prepared for each scenario taking into account feasibility and implementation time.

Numerous references were used for data preparation, collection, and background information. These are cited in the references section of this document.

1.2 Study Area

The study area is located within the City of Cathedral City, and borders the City of Rancho Mirage at Da Vall Drive. The study corridor is adjacent to retail and service type land uses, and residences and schools are located within 1 mile north and south of the study segment. Ramon Road is a divided 6-lane arterial between Landau and Date Palm, as well as between Outdoor Resorts and Da Vall. West of Landau, and between San Eljay and Outdoor Resorts, the road is a divided 4-lane highway. A small section between Date Palm and San Eljay is divided with 5 lanes (3 lanes westbound and 2 lanes eastbound). The entire corridor contains 32 intersections, of which 8 are signalized. **Figure 2.1** illustrates the corridor study area.

1.3 Study Findings

Levels of Service (LOS) requirements were referenced from the Agua Caliente Casino Expansion Traffic Impact Analysis (ACCE-TIA) by Urban Crossroads. The County of Riverside seeks LOS C for county roads, but allows LOS D for intersections of secondary highways, major highways, arterials, urban arterials, and expressways. Road classifications and cross sections are detailed in Section 3. Cathedral City generally follows the County of Riverside standard.

1.3.1 Existing Level of Service

All but one intersection were found to operate at a satisfactory level of service. The only intersection operating below LOS D is:

- Ramon Road at Maravilla-Cathedral Canyon

Detailed existing conditions are discussed in **Section 4**.



1.3.2 Short Term Level of Service

For conditions between Year 2007 and Year 2010, most intersections were found to operate at satisfactory level of service. Assuming existing lane configurations, the following intersections were found to operate below LOS D:

- Ramon Road at Landau Bouelvard
- Ramon Road at Maravilla-Cathedral Canyon

The ACCE-TIA short term analyses assumed a cumulative list of projects were to be completed. This report assumes cumulative project completion for medium term conditions, since it is unlikely all thirty projects will be completed and occupied in two years.

1.3.3 Medium Term Level of Service

For conditions between Year 2010 and Year 2020, it is assumed thirty developments and casino expansion phases described in the ACCE-TIA would be completed and most intersections were found to operate at satisfactory level of service. Assuming existing lane configurations, the following intersections were found to operate below LOS D:

- Ramon Road at Landau Bouelvard
- Ramon Road at Maravilla-Cathedral Canyon
- Ramon Road at Date Palm Drive

1.3.4 Long Term Level of Service

For conditions between Year 2020 and Year 2030, many cities approach build-out conditions specified in city general plans. Assuming existing lane configurations, the following intersections were found to operate below LOS D:

- Ramon Road at Landau Bouelvard
- Ramon Road at Maravilla-Cathedral Canyon
- Ramon Road at Date Palm Drive
- Ramon Road at Cathedral Village
- Ramon Road at Da Vall Drive

Existing intersection configurations and phased recommendations are summarized in **Table 1.1**.



Table 1.1 Recommended Lane Configurations

INTERSECTION	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Ramon/Landau*												
-2006	0.0	0.0	0.0	2.0	0.0	1.0	1.0	2.0	0.0	0.0	2.0	1.0
-2010^	0.0	0.0	0.0	2.0	0.0	1.0	1.0	2.0	0.0	0.0	2.0	1.0
-2020	0.0	0.0	0.0	2.0	0.0	1.0	2.0	2.0	0.0	0.0	2.0	1.0
-2030	1.0	0.5	0.5	1.5	0.5	1.0	2.0	2.5	0.5	1.0	3.0	1.0
Ramon/Maravilla-Cathedral Canyon*												
-2006	1.5	0.5	1.0	0.5	0.5	1.0	1.0	2.5	0.5	1.0	2.5	0.5
-2010	1.5	0.5	1.0	0.5	0.5	1.0	1.0	2.5	0.5	1.0	2.5	0.5
-2020^	1.5	0.5	1.0	0.5	0.5	1.0	1.0	2.5	0.5	2.0	2.5	0.5
-2030	1.5	0.5	1.0	0.0	0.0	1.0	1.0	2.5	0.5	2.0	2.5	0.5
Ramon/Ximino												
-2006	0.0	0.0	0.0	1.0	0.0	1.0	1.0	3.0	0.0	0.0	2.5	0.5
-2010	0.0	0.0	0.0	1.0	0.0	1.0	1.0	3.0	0.0	0.0	2.5	0.5
-2020	0.0	0.0	0.0	1.0	0.0	1.0	1.0	3.0	0.0	0.0	2.5	0.5
-2030	0.0	0.0	0.0	0.0	0.0	1.0	0.0	3.0	0.0	0.0	2.5	0.5
Ramon/Alvera-Canyon Vista												
-2006	0.0	0.0	1.0	0.0	0.0	1.0	0.0	2.5	0.5	1.0	2.5	0.5
-2010	0.0	0.0	1.0	0.0	0.0	1.0	0.0	2.5	0.5	1.0	2.5	0.5
-2020	0.0	0.0	1.0	0.0	0.0	1.0	0.0	2.5	0.5	1.0	2.5	0.5
-2030*	1.0	0.5	0.5	1.0	0.5	0.5	1.0	2.5	0.5	1.0	2.5	0.5
Ramon/Date Palm*												
-2006	2.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0	1.0	1.0	2.5	0.5
-2010	2.0	2.0	1.0	1.0	2.0	1.0	1.0	2.5	0.5	1.0	2.5	0.5
-2020	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.5	0.5	2.0	2.5	0.5
-2030	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.5	0.5	2.0	2.5	0.5
Ramon/Cathedral Village*												
-2006	1.5	0.5	1.0	1.0	0.5	0.5	1.0	2.0	1.0	1.0	2.5	0.5
-2010	1.5	0.5	1.0	1.0	0.5	0.5	1.0	3.0	1.0	1.0	2.5	0.5
-2020	1.5	0.5	1.0	1.0	0.5	0.5	1.0	3.0	1.0	1.0	2.5	0.5
-2030	1.5	0.5	1.0	1.0	0.5	0.5	1.0	3.0	1.0	1.0	2.5	0.5
Ramon/Da Vall*												
-2006	1.0	1.0	1.0	1.0	0.5	0.5	1.0	2.5	0.5	1.0	2.5	0.5
-2010	1.0	1.0	1.0	1.0	0.5	0.5	1.0	2.5	0.5	1.0	2.5	0.5
-2020	1.0	2.0	1.0	1.0	1.5	0.5	1.0	2.5	0.5	1.0	2.5	0.5
-2030	1.0	2.0	1.0	1.0	1.5	0.5	1.0	2.5	0.5	1.0	3.0	1.0

*signalized intersection

^ implementation of future term recommendations required for satisfactory level of service

0.5 lane indicates the lane is shared with an adjacent lane

1.3.5 Recommendations Overview

A summary of recommendations is presented in **Table 1.2**.

Table 1.2 Summary of Recommendations

Intersection	2010	2020	2030	Comments
Landau	• Overlap EB left turn with pedestrian phase • Overlap SBR with EBL	• Widen bridge to 6 lanes • 2nd EB left turn lane*	• 3rd WB through lane • 3rd EB through lane	• None
Cathedral Canyon	• Reduce all-red times	• 2nd WB left turn lane	• Remove Maravilla signal • Install Alvera signal	• 2030 planning and design is to occur between 2010 and 2020
Del Yermo/Desert Vista	• Install additional signal poles • Add protected left turns	• None	• None	•
Date Palm	• Lengthen EB left turn lane • Convert EB right turn lane into shared through/right	• 2nd SB left turn lane • 2nd EB left turn lane • 2nd WB left turn lane	• None	• Beyond 2030, consider 3rd NB through lane
Cathedral Village	• 3rd EB through lane	• None	• Possible signal relocation to San Eljay*	• None
Da Vall	• Increase maximum green times on Da Vall	• 2nd NB through lane • 2nd SB through lane	• Add WB right turn lane	• Beyond 2030, consider 2nd NB left turn lane
Corridor	• Upgrade traffic controllers • Synchronize signals • Install interconnect between Date Palm and Da Vall	• Install interconnect between Landau and Date Palm • Implement signal system	• Implement adaptive signal control	• None

* Depending on traffic impact analysis for future development south of San Eljay

1.3.6 Results

The phased improvements recommended for Ramon Road will configure intersections to operate at a satisfactory level of service. **Table 1.3** summarizes results of recommendations for each scenario.

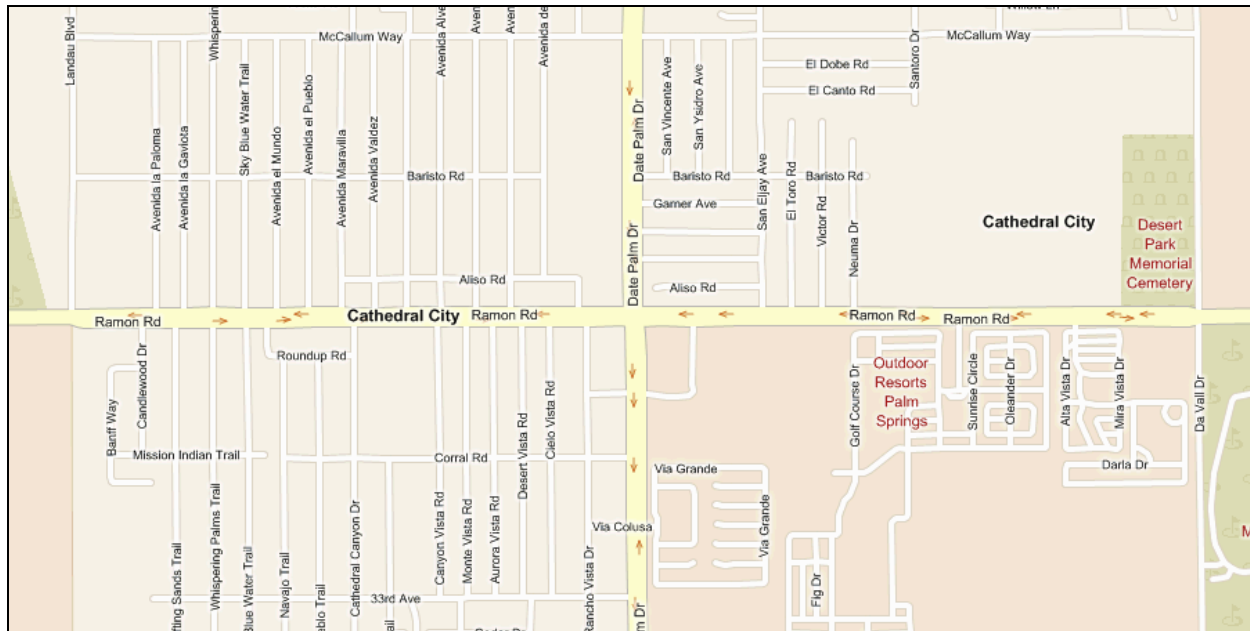
Table 1.3 Summary Network Performance with Recommendations

Corridor Network	Year 2010	Year 2020	Year 2030
Total Delay (veh-hr)	+1.9%	-35.3%	-46.1%
Delay/Veh (s)	+2.2%	-42.0%	-53.8%
Stops/Veh	-0.3%	-13.8%	-16.1%
Avg. Speed (mph)	-4.4%	+25.6%	+45.3%
Fuel Used (gal)	+0.0%	-9.9%	-7.3%
Fuel Eff.(mpg)	-0.3%	+27.2%	+30.5%
HC Emissions (g)	+0.1%	-19.4%	-15.5%
CO Emissions (g)	-1.2%	-3.4%	+14.2%
Nox Emissions (g)	-0.7%	+34.3%	+13.3%
Vehicles served (vph)	-0.3%	+13.9%	+20.4%
Congestion Cost/Veh	+1.7%	-38.4%	-48.7%
Eastbound Ramon Avg. Speed (mph)	+15.1%	+35.1%	+79.7%
Westbound Ramon Avg. Speed (mph)	+7.8%	+21.2%	+32.4%

2. Study Area

The operational and circulation analysis focused Ramon Road between Landau Boulevard and Da Vall Drive. See **Figure 2.1** for proposed project site location.

Figure 2.1 Corridor Study Area



The corridor is approximately 2 miles in length, and is classified as an arterial highway by the Riverside County Transportation Commission. The segment contains 8 signalized intersections, 17 right turn-in, right turn-out T-intersections, 6 full movement un-signalized intersections, and 4 right turn-in, right turn-out intersections with a left-turn in. **Table 2.1** summarizes the 31 intersections within the analysis and types of traffic control.

Ramon Road is a 6-lane bi-directional arterial between Landau Blvd and Date Palm Dr. It reduces in size to a 4-lane road between Date Palm Dr. and Outdoor Resorts, where it increases to 6-lanes in both directions. No curb parking is allowed throughout the corridor through the use of red curb markings and “No Stopping” or “No Parking” signs.

Sun Line Transit currently operates two bus routes which use Ramon Road. Route 31 operates along the entire study length of Ramon Road. Route 30 runs west of Date Palm Drive along Road.

Table 2.1 Study Intersections and Types of Traffic Control

Intersection	Traffic Control	Restricted Movements
Ramon/Landau	Traffic Signal	None
Ramon/Candlewood	Cross Street Stop	Left-turn out
Ramon/La Paloma	Cross Street Stop	Left-turn in/out
Ramon/Shifting Sands	Cross Street Stop	Left-turn in/out
Ramon/La Gaviota	Cross Street Stop	Left-turn in/out
Ramon/Whispering Palms	Traffic Signal	None
Ramon/Sky Blue Water	Cross Street Stop	Left-turn in/out
Ramon/Roundup	Cross Street Stop	Left-turn out
Ramon/El Mundo	Cross Street Stop	Left-turn in/out
Ramon/El Pueblo	Cross Street Stop	Left-turn in/out
Ramon/Maravilla-Cathedral Canyon	Traffic Signal	None
Ramon/Valdez	Cross Street Stop	Left-turn in/out
Ramon/Ximino	Cross Street Stop	None
Ramon/Canyon Vista	Cross Street Stop	Left-turn out
Ramon/Alvera	Cross Street Stop	Left-turn in/out
Ramon/Monte Vista	Cross Street Stop	Left-turn in/out
Ramon/Juarez	Cross Street Stop	Left-turn in/out
Ramon/Aurora Vista	Cross Street Stop	Left-turn in/out
Ramon/Del Yermo	Cross Street Stop	Left-turn out
Ramon/Desert Vista	Traffic Signal	None
Ramon/Cielo Vista	Cross Street Stop	Left-turn in/out
Ramon/Los Ninos	Cross Street Stop	Left-turn in/out
Ramon/Rancho Vista	Cross Street Stop	Left-turn in/out
Ramon/Date Palm	Traffic Signal	None
Ramon/Cathedral Village	Traffic Signal	None
Ramon/San Eljay	Cross Street Stop	None
Ramon/El Toro	Cross Street Stop	None
Ramon/Victor	Cross Street Stop	None
Ramon/Nuema	Cross Street Stop	None
Ramon/Outdoor Resort-Campanile	Traffic Signal	None
Ramon/Desert Shadow	Cross Street Stop	None
Ramon/Da Vall	Traffic Signal	None

3. Operational Analysis

3.1 Methodology

3.1.1 Signalized Intersections

The *Highway Capacity Manual* (HCM) methodology was used to determine the level of service of study intersections. The HCM method estimates the average delay per vehicle, which is considered the superior evaluation tool because it is a better reflection of a driver's perception of traffic conditions. Level of Service (LOS) quantitatively measures roadway traffic conditions and attempts to measure how travelers perceive these conditions. Level of service ranges from LOS A to LOS F, and LOS D is typically recognized as the minimum satisfactory service level in urban areas. **Table 3.1** defines the six level of service for signalized and un-signalized intersections.

The City of Cathedral City in general follows the County of Riverside level of service requirement. The County of Riverside has established LOS "C" as the countywide target on county maintained roads and conventional State Highways. However, LOS "D" may be allowed in Community Development areas, only at intersections of any combination of Secondary Highways, Major Highways, Arterial, Urban Arterials, Expressways, conventional State Highways, or freeway ramp intersections.

Table 3.1 Level of Service Definition for Signalized and Unsignalized Intersections

Level of Service	Control Delay Per Vehicle (sec)		Definition
	Signalized Intersection	Unsignalized Intersection	
A	<10	<10	EXCELLENT: No vehicle wait is longer than one red light, and no approach phase is fully used.
B	>10 and <20	>10 and <15	VERY GOOD: An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles
C	>20 and <35	>15 and <25	GOOD: Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>35 and <55	>25 and <35	FAIR: Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>55 and <80	>35 and <50	POOR: Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>80	>50	FAILURE: Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays

3.1.2 Transportation Planning

Daily traffic volumes of roadway segments are analyzed using the volume to capacity ratio. Daily segment level of service is defined in **Table 3.2**. Daily capacities are dependent on numerous factors, including peaking characteristics, turning volumes, and cross street volumes. Segment volume to capacity ratios are typically used for long range planning purposes.

Table 3.2 Level of Service Definition for Roadway Segments

Level of Service	Volume to Capacity Ratio
A	0.000-0.600
B	0.601-0.700
C	0.701-0.800
D	0.801-0.900
E	0.901-1.000
F	> 1.000

Riverside County Integrated Project

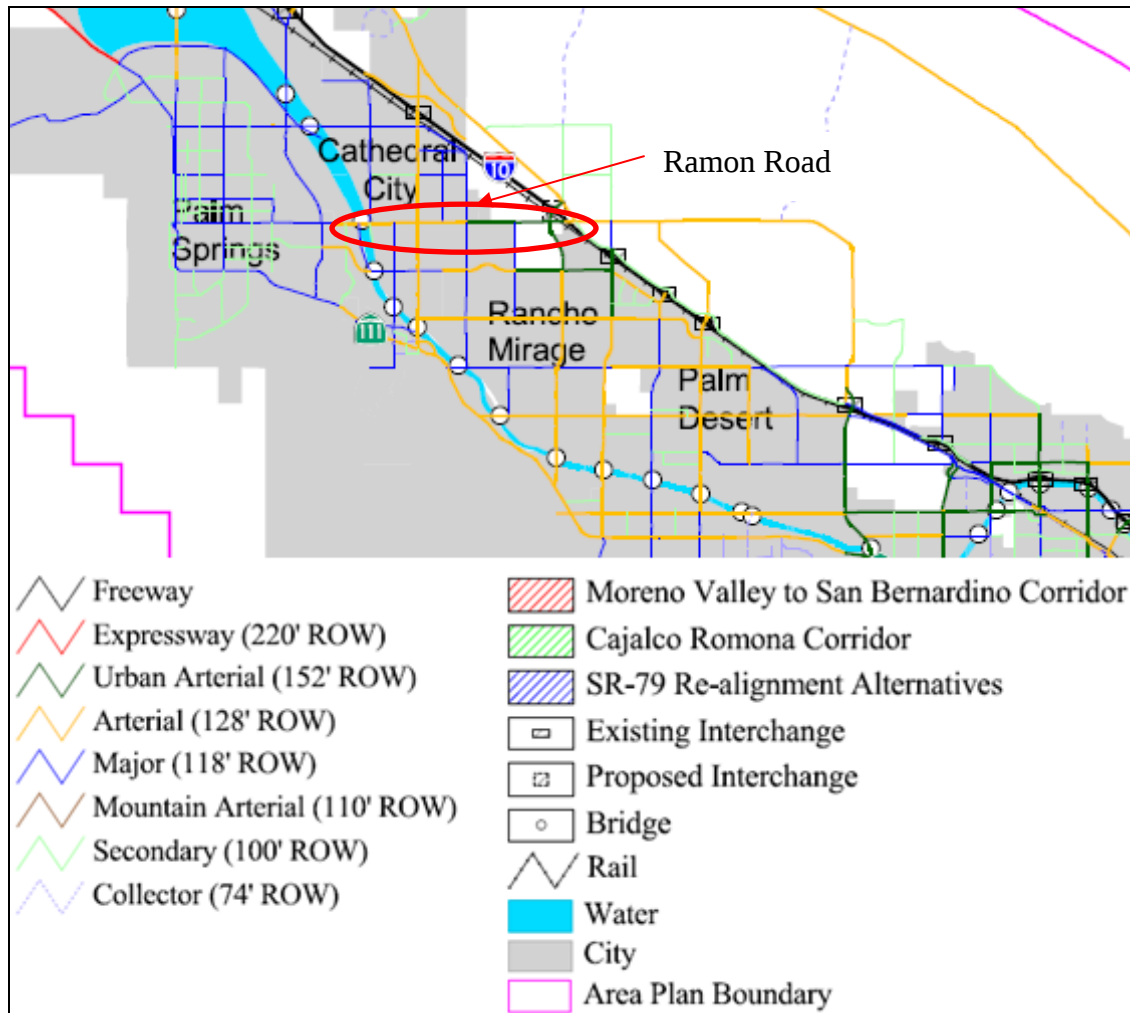
The Riverside County Integrated Project has integrated land use planning and transportation improvements in the latest General Plan that was adopted in October of 2003. This plan designates major roadway classifications throughout the County. A summary of designations is listed in **Table 3.3**. An illustration of roadway designations are shown in **Exhibit 3.1**, and roadway cross sections are illustrated in **Exhibit 3.2**. These designations are applied during segment capacity analysis.

Table 3.3 Riverside County General Plan Roadway Classifications

Street	Circulation	R/W	Street Type	Max Two-Way ADT		
				LOS C	LOS D	LOS E
Ramon Rd	Arterial	128'	Urban Highway	43,100	48,500	53,900
Landau Blvd	Major	118'	Major Highway	27,300	30,700	34,100
Cathedral Canyon	Major	118'	Major Highway	27,300	30,700	34,100
Date Palm Dr	Arterial	128'	Urban Highway	43,100	48,500	53,900
Santoro	Major	118'	Major Highway	27,300	30,700	34,100
Da Vall Dr	Major	118'	Major Highway	27,300	30,700	34,100

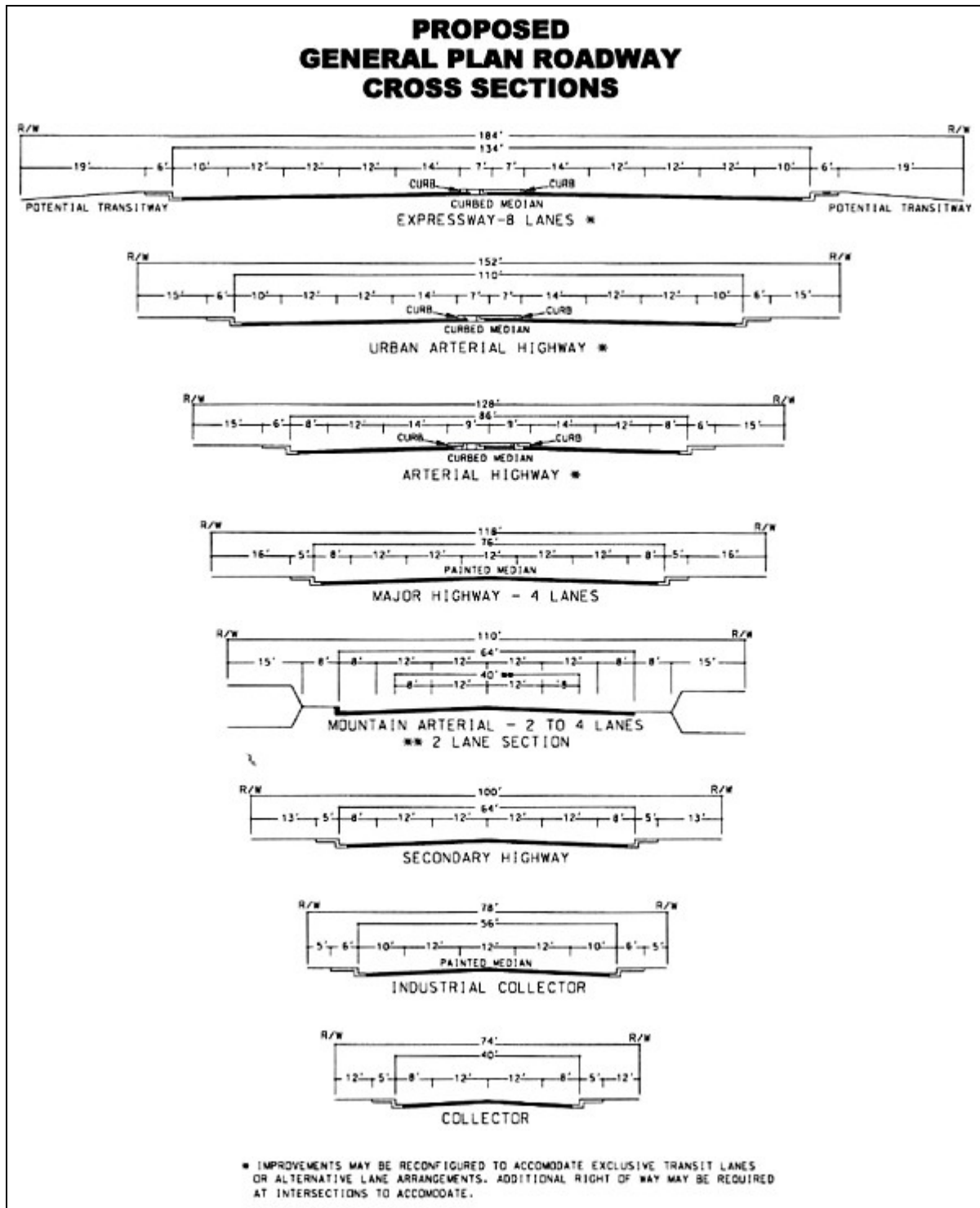
Within this report, Riverside County two-way level of service analysis is not used. Ramon Road contains unique characteristics regarding signal spacing, green time variation, and side street demand. Appendix E details calculations used within this study.

Figure 3.1 Riverside County General Plan Roadways



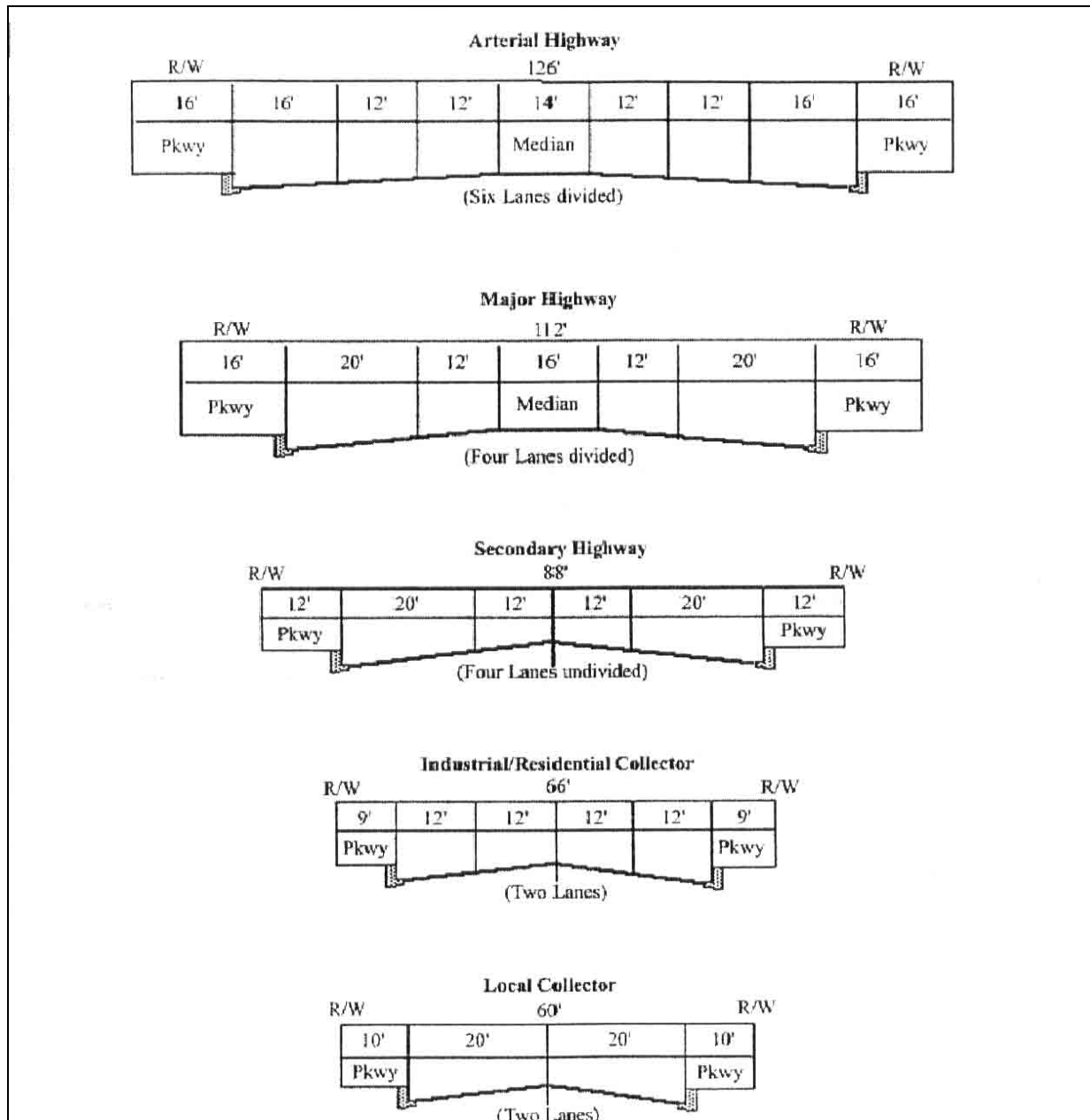
Source: Riverside County

Figure 3.2 Riverside County General Plan Roadway Cross Sections



Source: Riverside County

Figure 3.3 Cathedral City General Plan Roadway Cross Sections



Source: Cathedral City

3.2 Analysis Tools

3.2.1 Synchro

Using the existing intersection geometry, intersection lane configurations, and turning movement count data, a Synchro network was created to model the Ramon Road corridor between Landau Blvd and Da Vall Dr. Pedestrian counts indicate few pedestrian calls during peak hour periods, therefore pedestrian timing was ignored to properly represent peak period conditions. A SimTraffic model was then created using the Synchro network. See **Appendix A** for Synchro settings and parameters.

3.2.2 SimTraffic

Trailers were added as a vehicle type within SimTraffic to represent peak season trailer traffic within Cathedral City. Approximately 10% of traffic was assumed to be trailers. In addition, driver behavior was adjusted to be slightly more aggressive than default parameters. This attempts to accurately model drivers performing optional lane changes when queues exist.

Average delay is reported using SimTraffic simulation output, which takes into account queues on the road network. See **Appendix B** for details regarding parameters, settings, and simulation information.



4. Existing Conditions

4.1 Existing Circulation Network

Figure 4.1 displays the key intersections along the corridor and existing lane configuration of each intersection.

4.1.1 Existing Configuration

Ramon Road is a 6-lane bi-directional arterial between Landau Blvd and Date Palm Dr. It reduces in size to a 4-lane road between Date Palm Dr. and Outdoor Resorts, where it increases to 6-lanes in both directions.

4.1.2 Existing Equipment

Signalized intersections within the corridor contain Type “P” controller cabinets with 390 Traxonex controllers. Loop detectors within the pavement are used for detection.

4.2 Existing Land Uses

Most land uses adjacent to Ramon Road are business and retail. Refer to **Figure 4.2** for designated land uses included in the Cathedral City General Plan. Most land uses are zoned for general commercial, and existing structures typically house retail uses and general services such as automobile repair, insurance, or dentistry.

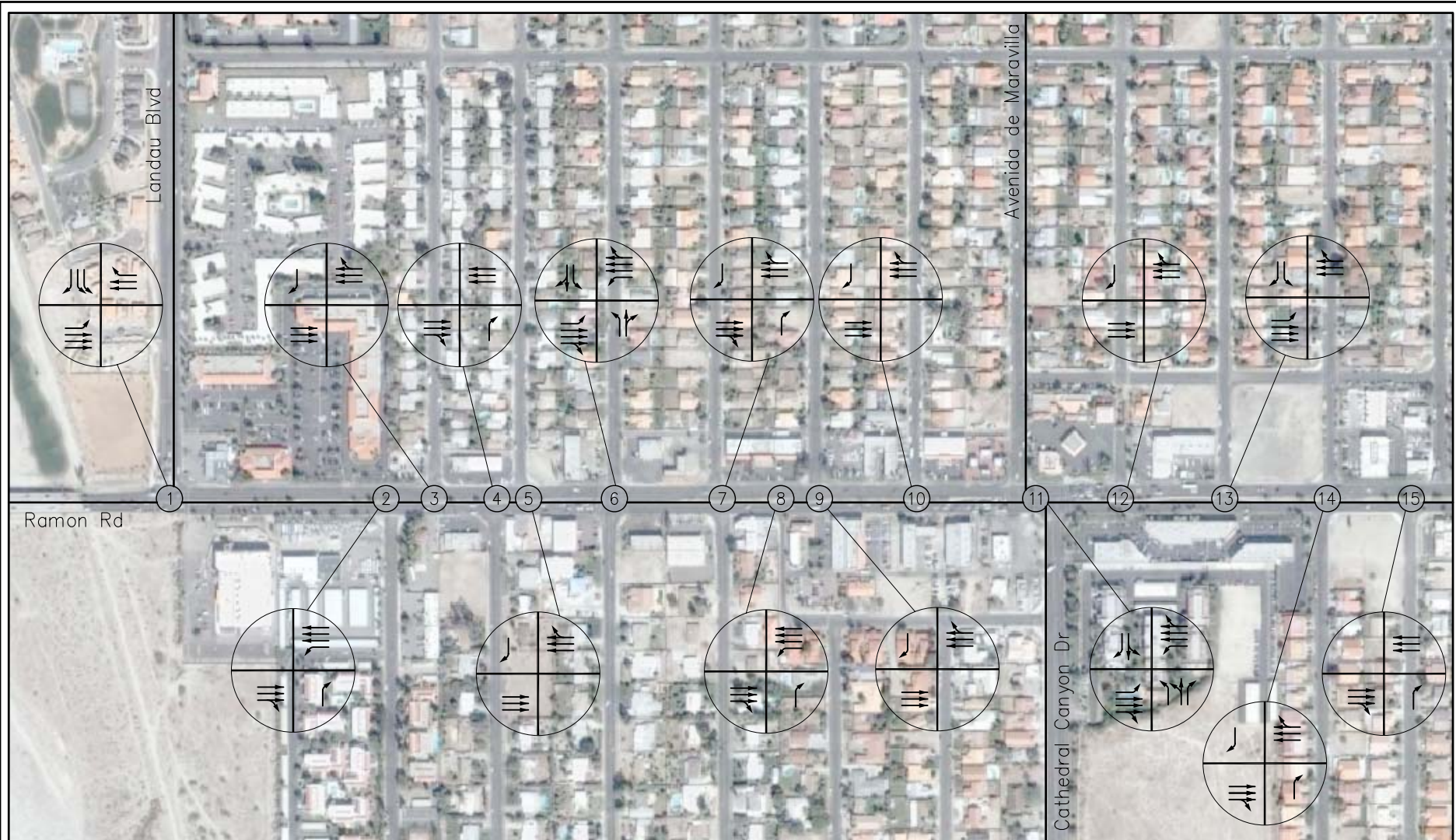
4.2.1 Schools

Five of the city public schools are located within one mile of the Ramon Road study area. Landau Elementary School and Mt. San Jacinto High School are located off Landau Boulevard to the north of Ramon Road. James Workman Middle School and Sunny Sands Elementary School are located off San Eljay Avenue to the north of Ramon Road. In addition, Cathedral City High School is located south of Ramon Road, near Date Palm Drive and Dinah Shore Drive. Refer to **Figure 4.3** for schools in the surround area.

4.2.2 Major Trip Generators

Desert Park Memorial Cemetery is located near Da Vall Drive and Ramon Road, and close by is Charter Hospital. Major shopping centers are located at Date Palm Drive and Ramon Road. A Stater Bros anchors one shopping plaza at the southeast corner, while a Walmart anchors the shopping plaza at the northwest corner.





Legend:

- | | | |
|---------------------------|-------------------------|-----------------------|
| 1. Ramon/Landau | 7. Ramon/Sky Blue Water | 12. Ramon/Valdez |
| 2. Ramon/Candlewood | 8. Ramon/Roundup | 13. Ramon/Ximino |
| 3. Ramon/La Paloma | 9. Ramon/El Mundo | 14. Ramon/Alvera |
| 4. Ramon/Shifting Sands | 10. Ramon/El Pueblo | & Canyon Vista |
| 5. Ramon/La Gaviota | 11. Ramon/Maravilla | 15. Ramon/Monte Vista |
| 6. Ramon/Whispering Palms | & Cathedral Canyon | |



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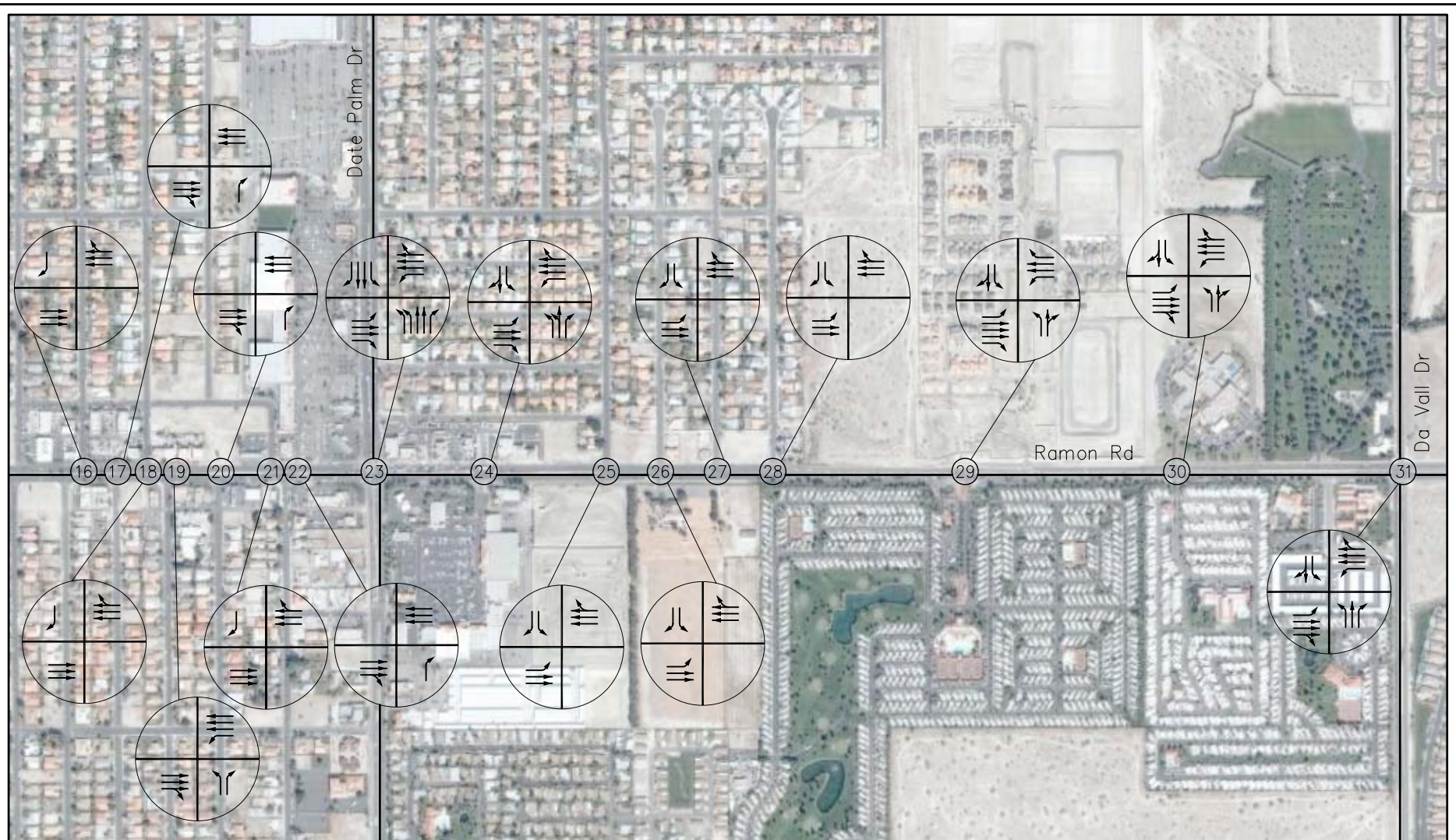
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LKL

Project Name:
Ramon Road Operations Study

Existing Adjacent Road Network and Key Intersections (1 of 2)

Project No.:
98229

Figure 4.1a



Legend:

- | | | | |
|------------------------|-----------------------------|-------------------------------------|-------------------------|
| 16. Ramon/Juarez | 21. Ramon/Los Ninos | 26. Ramon/El Toro | 30. Ramon/Desert Shadow |
| 17. Ramon/Aurora Vista | 22. Ramon/Rancho Vista | 27. Ramon/Victor | 31. Ramon/Da Vall |
| 18. Ramon/Del Yermo | 23. Ramon/Date Palm | 28. Ramon/Nuema | |
| 19. Ramon/Desert Vista | 24. Ramon/Cathedral Village | 29. Ramon/Outdoor Resort & Camanile | |
| 20. Ramon/Cielo Vista | 25. Ramon/San Eljay | | |



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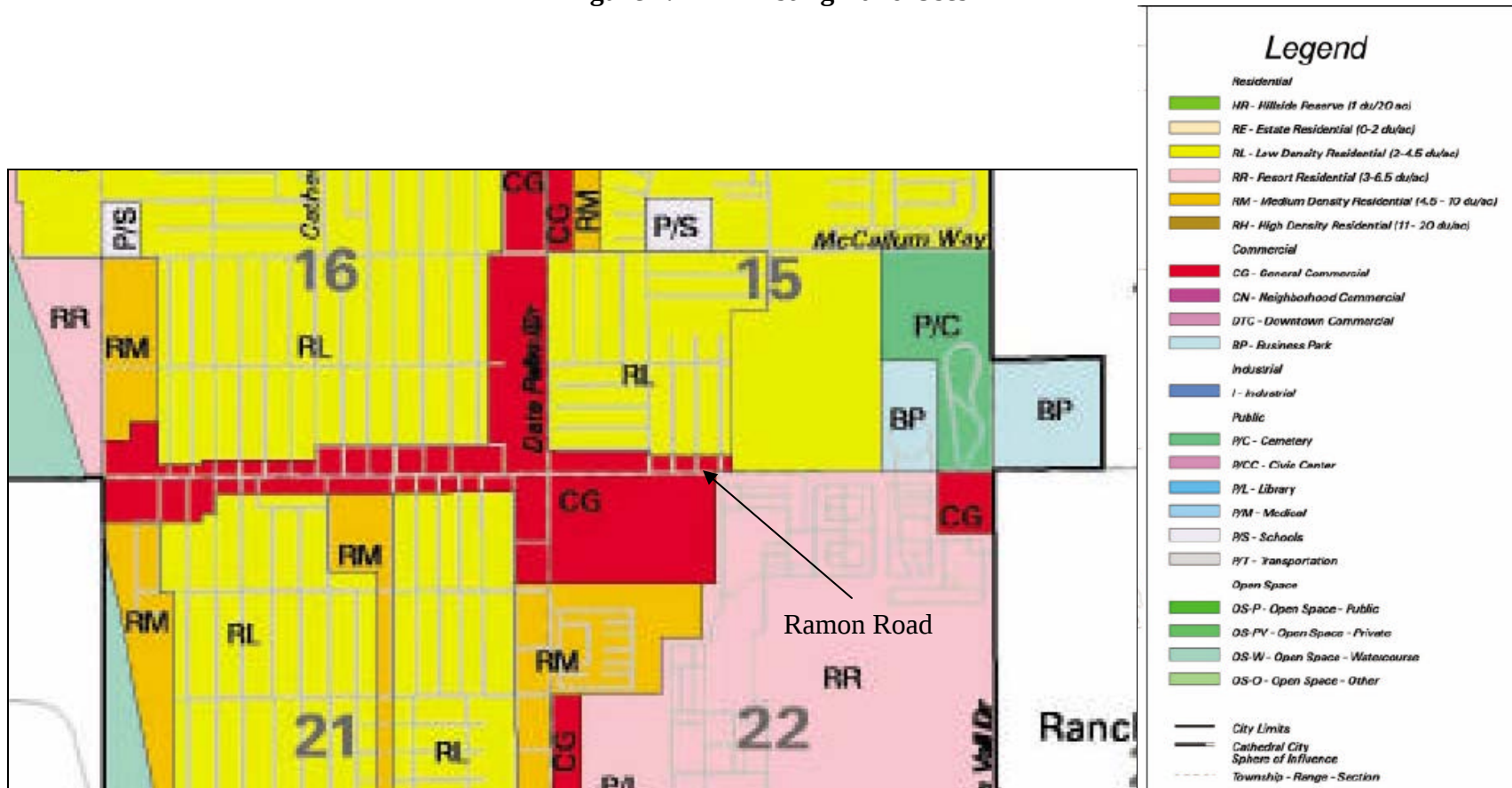
Project Name:
Ramon Road Operations Study

Existing Adjacent Road Network and Key Intersections (2 of 2)

Project No.:
98229

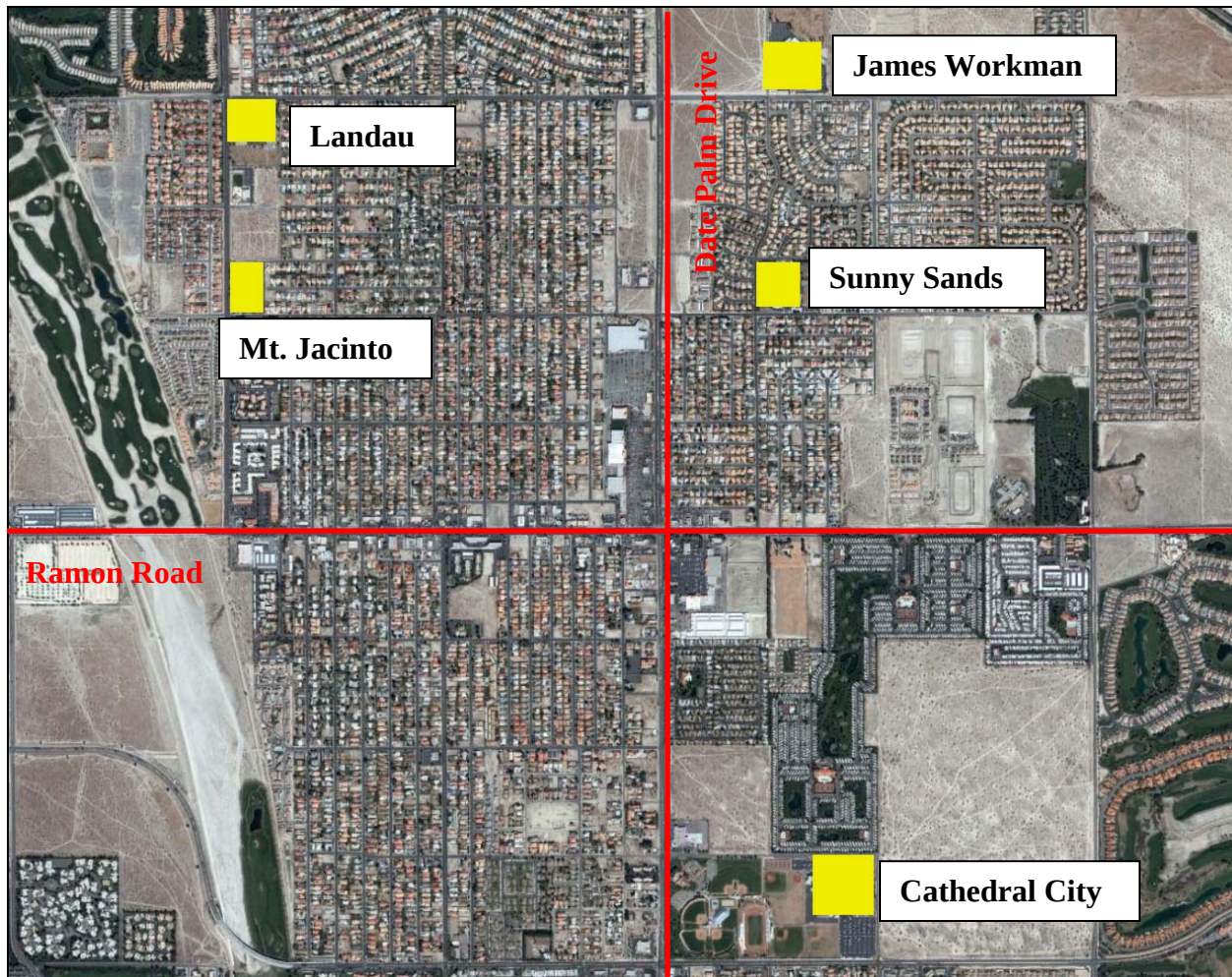
Figure 4.1b

Figure 4.2 Existing Land Uses



Source: Cathedral City General Plan

Figure 4.3 School Locations



4.3 Existing Traffic Conditions

Existing daily traffic counts and peak period turning movements were collected to examine traffic conditions along the 2-mile corridor.

4.3.1 Existing Average Daily Traffic

The Average Daily Traffic (ADT) counts and AM and PM peak period traffic counts at each key intersection were collected in June and August 2006. See **Figure 4.4** for existing 2006 Average Daily Traffic (ADT). **Table 4.7** shows existing segment ADT and level of service.

4.3.2 Existing Intersection Turning Movements

Turning movement counts were conducted during the peak season in March 2006 and December 2006. Weekday count data is taken from Tuesday, Wednesday, or Thursday. Count hours were 7AM-9AM, 11AM-1PM, and 4PM-6PM. **Figure 4.5**, **Figure 4.6**, and **Figure 4.7** shows existing traffic volumes for AM, Midday, and PM peak hour periods. **Table 4.1**, **Table 4.2**, and **Table 4.3** summarizes the results of the level of service analysis for all the intersections for AM, Midday, and PM peak periods.





Legend:

- | | | |
|---------------------------|-------------------------|-----------------------|
| 1. Ramon/Landau | 7. Ramon/Sky Blue Water | 12. Ramon/Valdez |
| 2. Ramon/Candlewood | 8. Ramon/Roundup | 13. Ramon/Ximino |
| 3. Ramon/La Paloma | 9. Ramon/El Mundo | 14. Ramon/Alvera |
| 4. Ramon/Shifting Sands | 10. Ramon/El Pueblo | & Canyon Vista |
| 5. Ramon/La Gaviota | 11. Ramon/Maravilla | 15. Ramon/Monte Vista |
| 6. Ramon/Whispering Palms | & Cathedral Canyon | |



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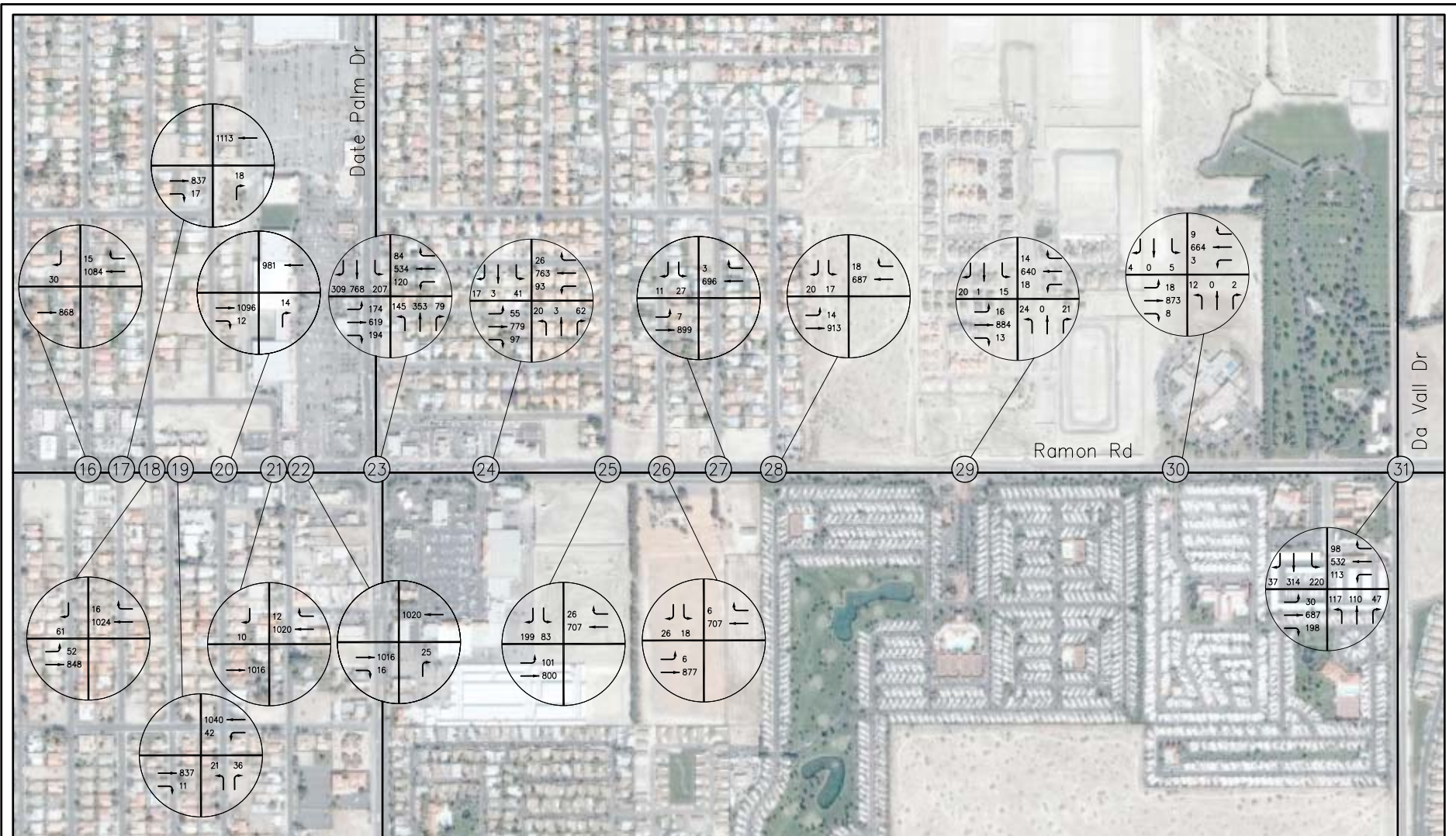
Project Name:
Ramon Road Operations Study

Existing Traffic Volumes – AM Peak (Sheet 1 of 2)

Project No.:
98229

Figure 4.5a





Legend:

- | | | | |
|------------------------|-----------------------------|--------------------------------------|-------------------------|
| 16. Ramon/Juarez | 21. Ramon/Los Ninos | 26. Ramon/El Toro | 30. Ramon/Desert Shadow |
| 17. Ramon/Aurora Vista | 22. Ramon/Rancho Vista | 27. Ramon/Victor | 31. Ramon/Da Vall |
| 18. Ramon/Del Yermo | 23. Ramon/Date Palm | 28. Ramon/Nuema | |
| 19. Ramon/Desert Vista | 24. Ramon/Cathedral Village | 29. Ramon/Outdoor Resort & Campanile | |
| 20. Ramon/Cielo Vista | 25. Ramon/San Eljay | | |



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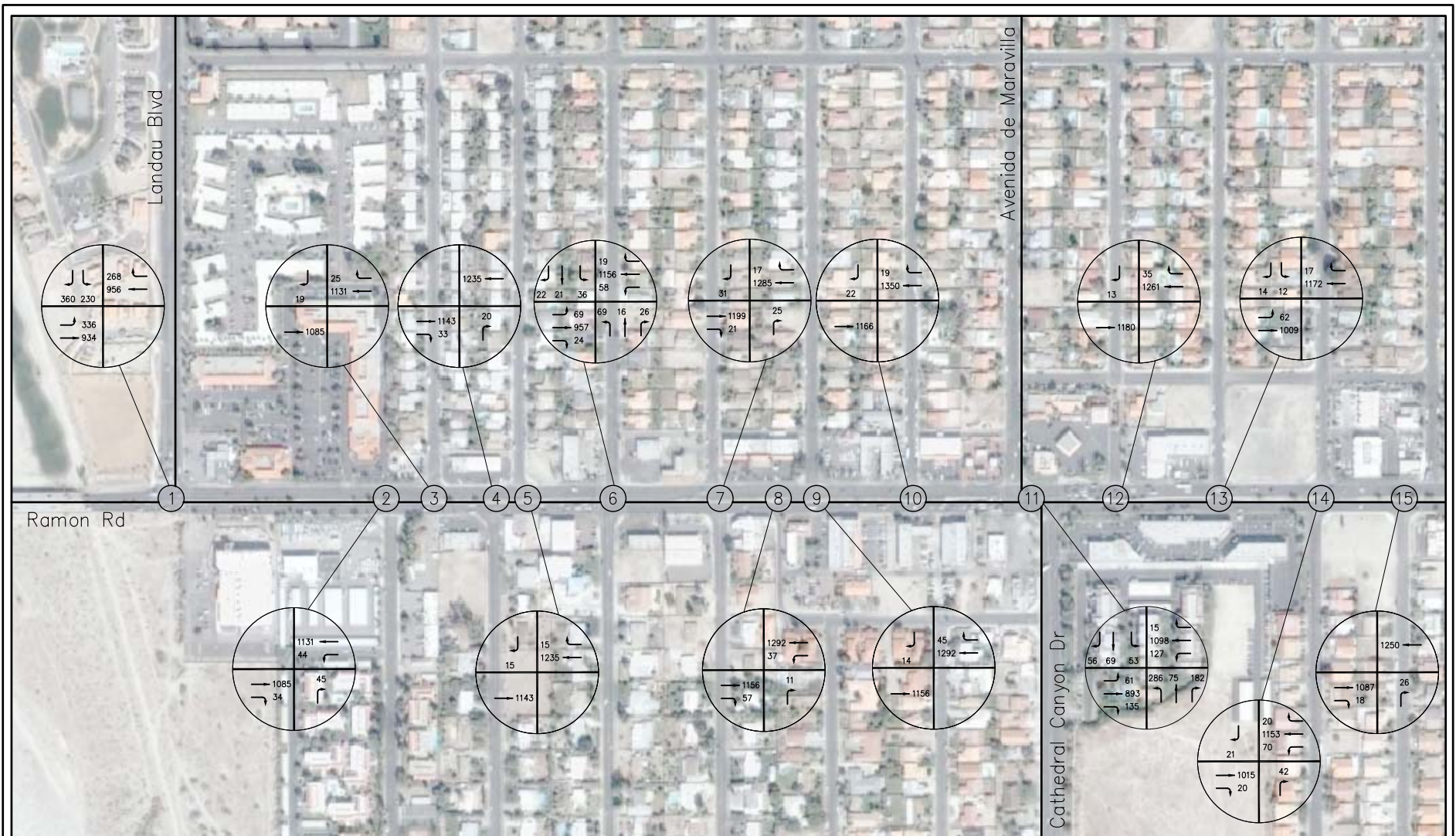
Project Name:
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Existing Traffic Volumes – AM Peak (Sheet 2 of 2)

Project No.:
98229

Figure 4.5b





Legend:

- | | | |
|---------------------------|-------------------------|-----------------------|
| 1. Ramon/Landau | 7. Ramon/Sky Blue Water | 12. Ramon/Valdez |
| 2. Ramon/Candlewood | 8. Ramon/Roundup | 13. Ramon/Ximino |
| 3. Ramon/La Paloma | 9. Ramon/El Mundo | 14. Ramon/Alvera |
| 4. Ramon/Shifting Sands | 10. Ramon/El Pueblo | & Canyon Vista |
| 5. Ramon/La Gaviota | 11. Ramon/Maravilla | 15. Ramon/Monte Vista |
| 6. Ramon/Whispering Palms | & Cathedral Canyon | |



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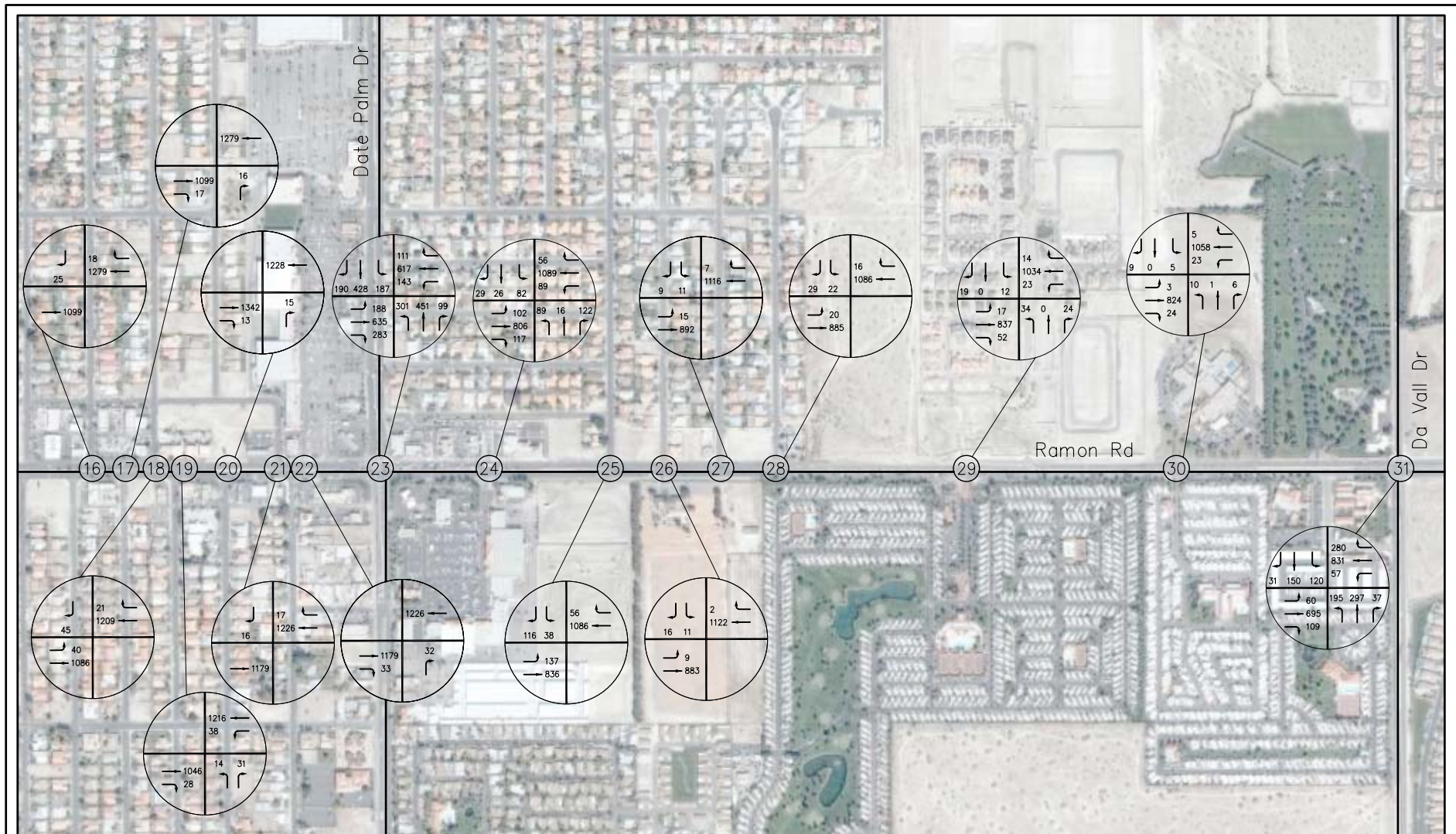
Project Name:
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Existing Traffic Volumes – MD Peak (Sheet 1 of 2)

Project No.:
98229

Figure 4.6a





Legend:

- | | | | |
|------------------------|-----------------------------|--------------------------------------|-------------------------|
| 16. Ramon/Juarez | 21. Ramon/Los Ninos | 26. Ramon/El Toro | 30. Ramon/Desert Shadow |
| 17. Ramon/Aurora Vista | 22. Ramon/Rancho Vista | 27. Ramon/Victor | 31. Ramon/Da Vall |
| 18. Ramon/Del Yermo | 23. Ramon/Date Palm | 28. Ramon/Nuema | |
| 19. Ramon/Desert Vista | 24. Ramon/Cathedral Village | 29. Ramon/Outdoor Resort & Campanile | |
| 20. Ramon/Cielo Vista | 25. Ramon/San Eljay | | |



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Existing Traffic Volumes – MD Peak (Sheet 2 of 2)

Project No.:
98229

Figure 4.6b



Legend:

- | | | |
|---------------------------|-------------------------|-----------------------|
| 1. Ramon/Landau | 7. Ramon/Sky Blue Water | 12. Ramon/Valdez |
| 2. Ramon/Candlewood | 8. Ramon/Roundup | 13. Ramon/Ximino |
| 3. Ramon/La Paloma | 9. Ramon/El Mundo | 14. Ramon/Alvera |
| 4. Ramon/Shifting Sands | 10. Ramon/El Pueblo | & Canyon Vista |
| 5. Ramon/La Gaviota | 11. Ramon/Maravilla | 15. Ramon/Monte Vista |
| 6. Ramon/Whispering Palms | & Cathedral Canyon | |



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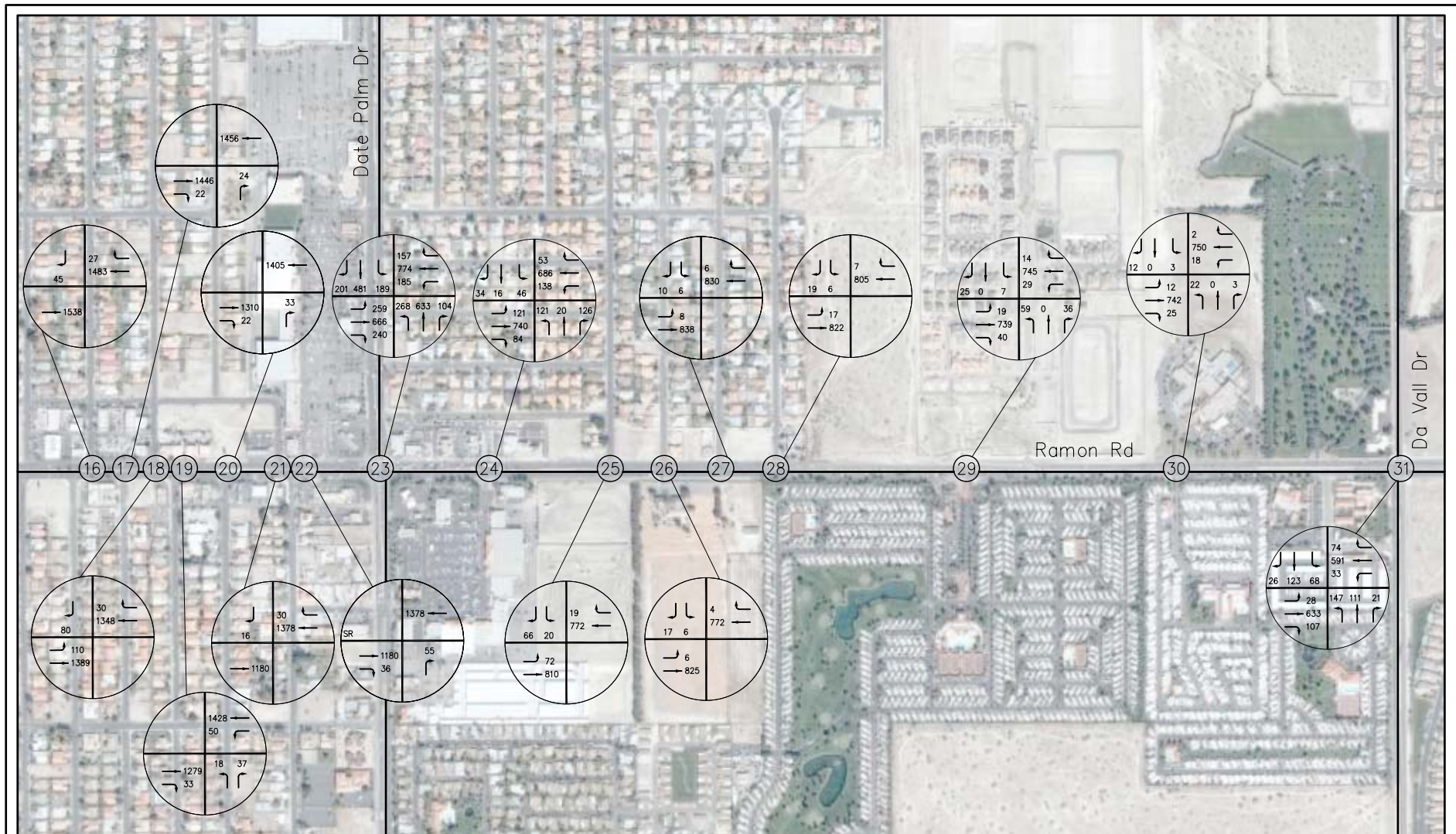
Project Name:
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Existing Traffic Volumes – PM Peak (Sheet 1 of 2)

Project No.:
98229

Figure 4.7a





Legend:

- | | | | |
|------------------------|-----------------------------|--------------------------------------|-------------------------|
| 16. Ramon/Juarez | 21. Ramon/Los Ninos | 26. Ramon/El Toro | 30. Ramon/Desert Shadow |
| 17. Ramon/Aurora Vista | 22. Ramon/Rancho Vista | 27. Ramon/Victor | 31. Ramon/Da Vall |
| 18. Ramon/Del Yermo | 23. Ramon/Date Palm | 28. Ramon/Nuema | |
| 19. Ramon/Desert Vista | 24. Ramon/Cathedral Village | 29. Ramon/Outdoor Resort & Campanile | |
| 20. Ramon/Cielo Vista | 25. Ramon/San Eljay | | |



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Ramon Road Operations Study

Existing Traffic Volumes – PM Peak (Sheet 2 of 2)

Project No.:
98229

Figure 4.7b



4.3.3 Existing Level of Service

Intersection Analysis

Table 4.1, **Table 4.2**, and **Table 4.3** display the average delay and corresponding level of service at each intersection for AM, Midday, and PM peak hour periods.

Queues at each approach are described in **Table 4.4**, **4.5**, and **4.6** for AM, Midday, and PM peak hour periods. A majority of un-signalized intersections did not contain large queues, and therefore they are excluded from summary tables. Storage bay and upstream block times are detailed in the queue tables.

Block time represents the percentage of time a specific lane blocks a storage lane (left or right turn pocket). This can occur if a queue within a lane spills over to prevent entrance into the pocket, or if through traffic backs up to prohibit pocket entrance.



Table 4.1 Existing Traffic Volumes and Level of Service – AM Peak

INTERSECTION	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Delay	LOS
Ramon/Landau*				377		511	260	529			913	224	21.8	C
Ramon/Candlewood			24					906	16	32	1121		1.1	A
Ramon/La Paloma						21		906			1121	9	1.5^	A
Ramon/Shifting Sands			34					934	33		1095		1.7	A
Ramon/La Gaviota						12		934			1095	12	1.5^	A
Ramon/Whispering Palms*	107	44	50	159	55	86	78	778	28	33	1103	22	13.7	B
Ramon/Sky Blue Water			20			19		932	16		1161	16	1.5	A
Ramon/Roundup			11					900	83	31	1173		1.0	A
Ramon/El Mundo						20		900			1173	13	1.5^	A
Ramon/El Pueblo						20		911			1187	8	2.1	A
Ramon/Maravilla-Cathedral Canyon*	343	78	145	66	163	69	61	686	165	222	849	4	46.9	D
Ramon/Valdez						5		853			1038	29	1.5^	A
Ramon/Ximino				22		15	42	858			1008	1	3.0	A
Ramon/Alvera-Canyon Vista			26			17		875	17	85	993	20	1.1	A
Ramon/Monte Vista			23					855	17		1084		1.5^	A
Ramon/Juarez						30		868			1084	15	0.8	A
Ramon/Aurora Vista			18					837	17		1113		1.5^	A
Ramon/Del Yermo						61	52	848			1024	16	1.1	A
Ramon/Desert Vista*	21		36					837	11	42	1040		1.4	A
Ramon/Cielo Vista			14					1096	12		981		1.3	A
Ramon/Los Ninos						10		1016			1020	12	1.5^	A
Ramon/Rancho Vista			25				51^	1016	16		1020		1.6	A
Ramon/Date Palm*	145	353	79	207	768	309	174	619	194	120	534	84	25.9	C
Ramon/Cathedral Village*	20	3	62	41	3	17	55	779	97	93	763	26	9.7	A
Ramon/San Eljay				83		199	101	800			707	26	7.0	A
Ramon/El Toro				18		26	6	877			707	6	0.9	A
Ramon/Victor				27		11	7	899			696	3	1.2	A
Ramon/Neuma				17		20	14	913			687	18	1.3	A
Ramon/Outdoor Resort-Campanile*	24	0	21	15	1	20	16	884	13	18	640	14	5.0	A
Ramon/Desert Shadow	12	0	2	5	0	4	18	873	8	3	664	9	3.2	A
Ramon/Da Vall*	117	110	47	220	314	37	30	687	198	113	532	98	48.4	D

*signalized intersection

^ See Appendix B

^^EBL volume at Rancho Vista is into north plaza driveway



Table 4.2 Existing Traffic Volumes and Level of Service – Midday Peak

INTERSECTION	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Delay	LOS
Ramon/Landau*				230		360	336	934			956	268	18.0	B
Ramon/Candlewood			45					1085	34	44	1131		1.5	A
Ramon/La Paloma						19		1085			1131	25	1.5^	A
Ramon/Shifting Sands			20					1143	33		1235		1.5	A
Ramon/La Gaviota						15		1143			1235	15	1.5^	A
Ramon/Whispering Palms*	69	16	26	36	21	22	69	957	24	58	1156	19	8.6	A
Ramon/Sky Blue Water			25			31		1199	21		1285	17	1.5	A
Ramon/Roundup			11					1156	57	37	1292		1.0	A
Ramon/El Mundo						14		1156			1292	45	1.5^	A
Ramon/El Pueblo						22		1166			1350	19	2.4	A
Ramon/Maravilla-Cathedral Canyon*	286	75	182	53	69	56	61	893	135	127	1098	15	33.3	C
Ramon/Valdez						13		1180			1261	35	1.5^	A
Ramon/Ximino				12		14	62	1009			1172	17	3.1	A
Ramon/Alvera-Canyon Vista			42			21		1015	20	70	1153	20	1.4	A
Ramon/Monte Vista			26					1087	18		1250		1.5^	A
Ramon/Juarez						25		1099			1279	18	1.4	A
Ramon/Aurora Vista			16					1099	17		1279		1.5^	A
Ramon/Del Yermo						45	40	1086			1209	21	1.5	A
Ramon/Desert Vista*	14		31					1046	28	38	1216		1.5	A
Ramon/Cielo Vista			15					1342	13		1228		1.0	A
Ramon/Los Ninos						16		1179			1226	17	1.5^	A
Ramon/Rancho Vista			32				151^	1179	33		1226		2.5	A
Ramon/Date Palm*	301	451	99	187	428	190	188	635	283	143	617	111	24.3	C
Ramon/Cathedral Village*	89	16	122	82	26	29	102	806	117	89	1089	39	18.6	B
Ramon/San Eljay				38		116	137	836			1086	56	4.0	A
Ramon/El Toro				11		16	9	883			1122	2	0.8	A
Ramon/Victor				11		9	15	892			1116	7	0.8	A
Ramon/Neuma				22		29	20	885			1086	16	2.2	A
Ramon/Outdoor Resort-Campanile*	34	0	24	12	0	19	17	837	52	23	1034	14	5.2	A
Ramon/Desert Shadow	10	1	6	5	0	9	3	824	24	23	1058	5	3.8	A
Ramon/Da Vall*	195	297	37	120	150	31	60	695	109	57	831	280	24.6	C

*signalized intersection

^ See Appendix B

^^EBL volume at Rancho Vista is into north plaza driveway



Table 4.3 Existing Traffic Volumes and Level of Service – PM Peak

INTERSECTION	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Delay	LOS
Ramon/Landau*				314		413	546	1102			990	365	23.4	C
Ramon/Candlewood			41					1396	28	51	1317		2.4	A
Ramon/La Paloma						23		1396			1317	21	1.5^	A
Ramon/Shifting Sands			71					1373	52		1384		2.4	A
Ramon/La Gaviota						22		1373			1384	33	1.5^	A
Ramon/Whispering Palms*	134	84	59	75	57	49	154	1332	65	128	1420	57	17.1	B
Ramon/Sky Blue Water			49			36		1343	33		1589	1	3.2	A
Ramon/Roundup			13					1324	58	67	1487		2.6	A
Ramon/El Mundo						24		1324			1554	58	1.5^	A
Ramon/El Pueblo						14		1342			1597	22	7.0	A
Ramon/Maravilla-Cathedral Canyon*	510	125	350	88	129	104	123	1058	180	327	1033	22	106.0	E
Ramon/Valdez						6		1481			1356	46	1.5^	A
Ramon/Ximino				23		19	99	1394			1315	37	12.4	B
Ramon/Alvera-Canyon Vista			47			20		1400	29	81	1407	21	6.9	A
Ramon/Monte Vista			37					1538	26		1483		1.5^	A
Ramon/Juarez						45		1538			1483	27	2.6	A
Ramon/Aurora Vista			24					1446	22		1456		1.5^	A
Ramon/Del Yermo						80	110	1389			1348	30	2.0	A
Ramon/Desert Vista*	18		37					1279	33	50	1428		2.3	A
Ramon/Cielo Vista			33					1310	22		1405		1.7	A
Ramon/Los Ninos						16		1180			1378	30	1.5^	A
Ramon/Rancho Vista			55				142^	1180	36		1378		4.0	A
Ramon/Date Palm*	268	633	104	189	481	201	259	666	240	185	774	157	35.7	D
Ramon/Cathedral Village*	121	20	126	46	16	34	121	740	84	138	686	53	22.4	C
Ramon/San Eljay	0	0	0	20	0	66	72	810	0	0	772	19	2.5	A
Ramon/El Toro	0	0	0	6	0	17	6	825	0	0	772	4	0.6	A
Ramon/Victor	0	0	0	6	0	10	8	838	0	0	830	6	0.5	A
Ramon/Neuma	0	0	0	6	0	19	17	822	0	0	805	7	1.4	A
Ramon/Outdoor Resort-Campanile*	59	0	36	7	0	25	19	739	40	29	745	14	6.3	A
Ramon/Desert Shadow	22	0	3	3	0	12	12	742	25	18	750	2	3.1	A
Ramon/Da Vall*	147	111	21	68	123	26	28	633	107	33	591	74	16.6	B

*signalized intersection

^ See Appendix B

^^EBL volume at Rancho Vista is into north plaza driveway



Table 4.4 Existing Queues – AM Peak
Estimated Queuing Issues in Feet

INTERSECTION	Notes
Ramon/Landau*	No issues
Ramon/Whispering Palms*	No issues
Ramon/Maravilla-Cathedral Canyon*	NBL has a 36% block time (15% from queue spillover, 21% from NBT backup) SBL has a 53% block time due to backup EBL has a 22% block time due to EBT backup WBL has a 23% block time due to queue spillover
Ramon/Date Palm*	EBL has a 9% block time due to queue spillover
Ramon/Cathedral Village*	No issues
Ramon/San Eljay	Southbound left average queue is 60 feet
Ramon/Da Vall*	No issues

*signalized intersection

Table 4.5 Existing Queues – MD Peak
Estimated Queuing Issues in Feet

INTERSECTION	Notes
Ramon/Landau*	No issues
Ramon/Whispering Palms*	No issues
Ramon/Maravilla-Cathedral Canyon*	EBL has a 29% block time due to EBT backup
Ramon/Date Palm*	No issues
Ramon/Cathedral Village*	SBL has a 16% block time due to queue spillover
Ramon/San Eljay	No Issues
Ramon/Da Vall*	No Issues

*signalized intersection

Table 4.6 Existing Queues– PM Peak
Estimated Queuing Issues in Feet

INTERSECTION	Notes
Ramon/Landau*	EBL has a 27% block time due to queue spillover
Ramon/Whispering Palms*	NBL has a 19% block time due to queue spillover
Ramon/Maravilla-Cathedral Canyon*	NBL has a 100% block time (45% from queue spillover, 55% from NBT backup) SBL has a 71% block time due to backup EBL has a 75% block time (21% from queue spillover, 54% from EBT backup) WBL has a 65% block time (60% from queue spillover, 5% from EBT backup)
Ramon/Date Palm*	EBL has a 22% block time (15% from queue spillover, 7% from EBT backup) NBR has a 26% block time due to NBT backup SBL has a 9% block time due to queue spillover
Ramon/Cathedral Village*	No Issues
Ramon/San Eljay	No Issues
Ramon/Da Vall*	No Issues

*signalized intersection



Arterial Travel Speed

Global Positioning System software was used to determine existing travel times, arterial speeds, and number of stops experienced. **Table 4.7** illustrates the measured travel speeds, as estimated from stop line to stop line.

Utilizing SimTraffic simulation results, average arterial travel speeds were estimated in both directions for each peak period (AM and PM). **Table 4.8** shows the simulation travel speeds for each peak period.

Table 4.8 also shows the difference between micro-simulation travel times and measured travel times. These differences are used to adjust future year simulation travel times, and therefore estimate future conditions with greater accuracy.

Table 4.7 Existing Travel Times (measured)
(time in minutes)

Segment	Existing AM, EB	Existing AM, WB	Existing PM, EB	Existing PM, WB
Landau to Wh Palms	0.60	0.74	0.91	0.68
Wh Palms to Cat Canyon	1.25	0.55	1.51	1.15
Cat Canyon to Desert Vista	0.74	0.99	0.68	0.77
Desert Vista to Date Palm	1.06	0.57	1.51	0.41
Date Palm to Cat Village	0.74	0.83	0.46	1.06
Cat Village to Outdoor Resorts	1.06	0.69	1.02	0.93
Outdoor Resorts to Da Vall	0.81	0.70	1.28	0.70
Average	6.25	5.05	7.37	5.70

Table 4.8 Existing Travel Times (simulated)
(time in minutes)

Segment	Existing AM, EB	Existing AM, WB	Existing PM, EB	Existing PM, WB
Landau to Wh Palms	0.84	1.06	1.65	0.98
Wh Palms to Cat Canyon	1.19	0.76	1.60	0.94
Cat Canyon to Desert Vista	0.64	0.50	0.51	0.80
Desert Vista to Date Palm	0.70	0.39	0.72	0.41
Date Palm to Cat Village	0.35	1.27	0.56	1.48
Cat Village to Outdoor Resorts	0.79	0.71	0.79	0.73
Outdoor Resorts to Da Vall	1.11	0.82	0.79	0.95
Average	5.62	5.52	6.61	6.28
% error from measured	-10.1%	+9.2%	-10.3%	+10.2%

Roadway Segment Analysis

Table 4.9 shows the level of service for roadway segments along the Ramon Road corridor. The volume to capacity ratios are calculated using micro-simulation green times and number of lanes at ends of each link. See **Appendix E** for ADT calculations.

Table 4.9 Existing Capacity Analysis

Ramon Road	ADT	CAPACITY	V/C	LOS
West of Landau	43,473	68,550	0.634	B
West of Cathedral Canyon	38,659	70,272	0.550	A
West of Date Palm	32,538	97,056	0.335	A
East of Date Palm	29,682	59,904	0.495	A
West of Da Vall	27,060	81,216	0.333	A
East of Da Vall	26,773	73,440	0.365	A
Landau Blvd				
North of Ramon	18,495	28,224	0.655	B
Cathedral Canyon/Maravilla				
North of Ramon	4,532	22,464	0.202	A
South of Ramon	16,053	33,264	0.483	A
Date Palm				
North of Ramon	25,532	43,488	0.587	A
South of Ramon	26,413	43,488	0.607	B
Da Vall				
North of Ramon	10,187	21,312	0.478	A
South of Ramon	14,189	26,496	0.536	A

4.3.4 Existing Safety

Vehicle Accidents

Accident data was provided by the Cathedral City Police and Engineering Departments. Police accident data was taken over a 30 month period from January 2004 to July 2006, while engineering data contained detailed accident information for a selected sample. Refer to **Table 4.10** and **Table 4.11** for accident analysis.

Table 4.10 Existing Police Accident Data

Cross Street	Injury	Non-injury	Hit&Run
Landau	4	35	5
Candlewood	1	1	0
La Paloma	0	1	0
Shift Sands	0	0	0
Whisp. Palms	4	12	4
Sky Blue Water	1	11	3
Roundup	0	0	0
El Mundo	0	2	0
Pueblo	0	2	0
Cat Canyon	2	9	5
Valdez	0	1	0
Ximino	1	4	1
Alvera	0	0	0
Juarez	1	1	0
Del Yermo	2	5	1
Desert Vista	0	0	0
Cielo Vista	0	0	0
Rancho Vista	0	0	0
Date Palm	13	82	14
Cat Village	0	0	0
San Eljay	0	0	0
El Toro	0	1	0
Victor	0	0	0
Neuma	0	0	0
Outdoor Resorts	0	0	0
Desert Shadows	0	0	0
Da Vall	5	10	3

Table 4.11 Existing Detailed Accident Analysis

Cross Street	Accident Sample	Rear-end	Sideswipe	Broadside	Head-on	Other
Landau	24	45.8%	20.8%	12.5%	0.0%	20.8%
Whisp. Palms	12	33.3%	8.3%	41.7%	0.0%	16.7%
Cat Canyon	33	60.6%	6.1%	15.2%	0.0%	18.2%
Ximino	5	0.0%	20.0%	60.0%	0.0%	20.0%
Yermo	6	0.0%	50.0%	33.3%	0.0%	16.7%
Date Palm	60	65.0%	18.3%	8.3%	3.3%	5.0%
Da Vall	8	62.5%	0.0%	25.0%	0.0%	12.5%

Most accidents occurred at existing signalized intersections. However, Sky Blue Water, Ximino, and Del Yermo were un-signalized intersections containing 5 or more accidents during the 30 month period. There has not been a rise in accident rates along intersections within the corridor.

Pedestrians

Jay-walking was found to occur at the following intersections:

- Avenida La Paloma and Ramon
- Sky Blue Water Trail and Ramon
- Avenida El Mundo and Ramon
- Avenida El Pueblo and Ramon
- Avenida Valdez and Ramon
- Avenida Alvera and Ramon
- Avenida Juarez and Ramon
- Aurora Vista and Ramon
- Rancho Vista and Ramon

Bus stops are located on the north and side sides of Sky Blue Water. In addition, this un-signalized intersection was also found to be the site of more than 10 accidents in the last 30 months. **Table 4.12** details pedestrian counts for corridor intersections.

Vehicle Maneuvers

Unsafe vehicle maneuvers were found at specific locations. These intersections include:

- Ramon and El Mundo/Roundup
- Ramon and Avenida Alvera
- Ramon and Aenida Del Yermo
- Ramon and Rancho Vista

These maneuvers typically involve vehicles crossing Ramon Road through turn bays, or violating vehicle right of way. Refer to **Figure 4.8**.

Table 4.12 Pedestrian Count Data

Cross Street	AM	MD	PM
Landau	23	8	15
Candlewood	0	0	0
La Paloma	7	8	9
Shift Sands	0	0	0
Whisp. Palms	2	0	0
Sky Blue Water	2	3	5
Roundup	0		0
El Mundo	4	1	3
Pueblo	6	0	0
Cat Canyon	14	7	16
Valdez	3	0	5
Ximino	0	0	0
Alvera	5	2	3
Juarez	5	1	6
Aurora Vista	3	1	6
Del Yermo	0	0	0
Desert Vista	2	3	4
Cielo Vista	0	0	0
Rancho Vista	2	0	2
Date Palm	14	16	17
Cat Village	22	49	21
San Eljay	1	1	1
El Toro	1	1	1
Victor	1	4	3
Neuma	1	4	3
Outdoor Resorts	14	12	10
Desert Shadows	5	5	11
Da Vall	1	0	0

Ramon and Alvera



Ramon and El Mundo / Roundup



Ramon and Rancho Vista



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LKL

Project Name:
Ramon Road Operations Study
Existing Vehicle Maneuvers

Project No.:
98229

Figure 4.8

4.4 Summary of Existing Conditions

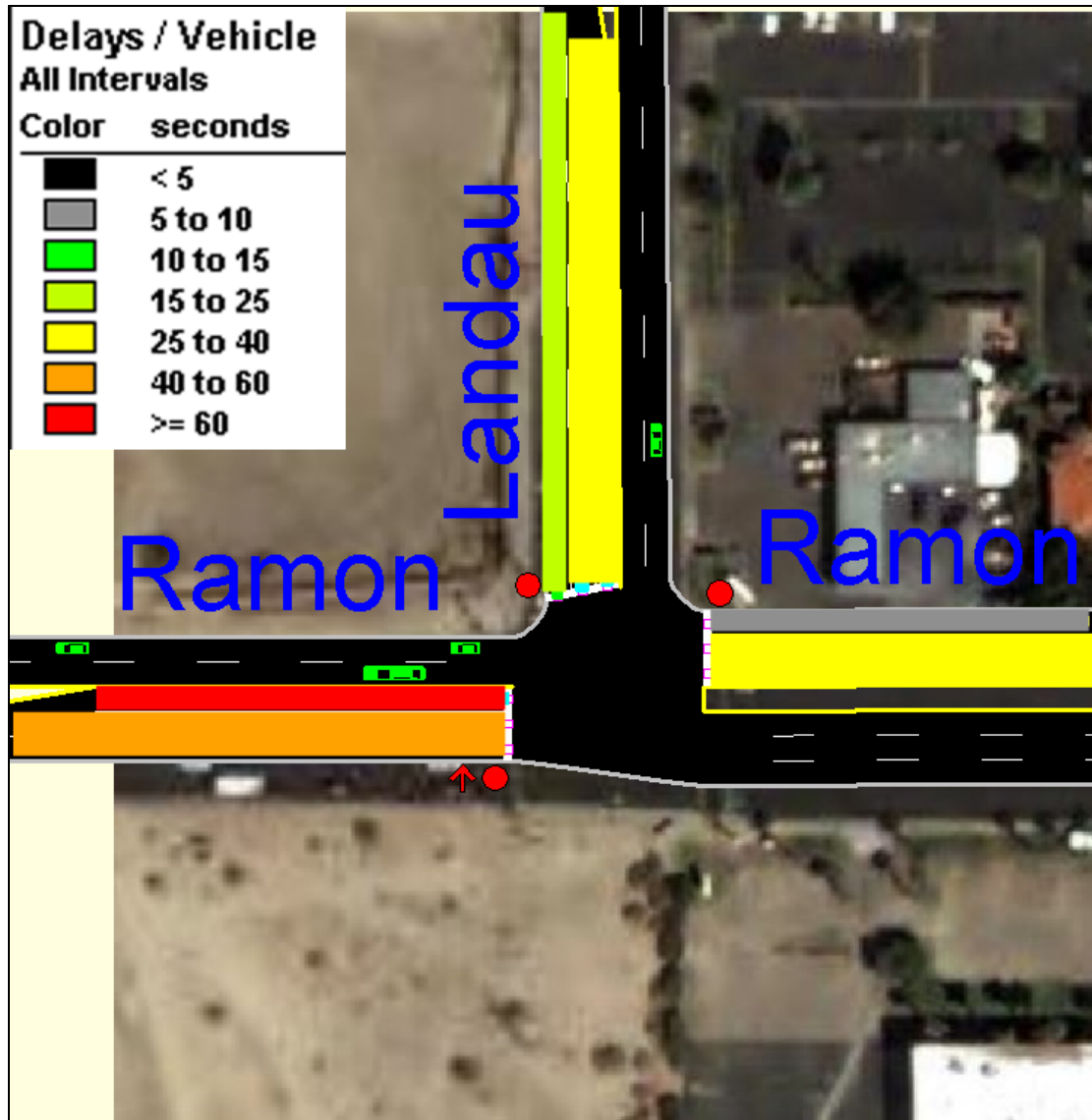
Congestion frequently occurs at intersections of Ramon Road and Landau Blvd, Maravilla-Cathedral Canyon Dr, Date Palm Dr and Da Vall Dr. **Figures 4.9, 4.10, 4.11, and 4.12** illustrate worst case average delays experienced at each approach.

Existing road segments contain widths suitable to meet existing average daily traffic volumes. Although Ramon Road is designated as a six-lane divided arterial highway, the segment west of Landau is a 4-lane divided bridge. Using available green time for Ramon Road, the bridge is found to operate at Level of Service D. All other road segments provide adequate capacity such that vehicles may maintain their desired speed.

The current signal operations at Cathedral Canyon-Maravilla require large yellow and all-red times due to the 110 foot distance between Maravilla and Cathedral Canyon. Depending on cycle length, this results in vehicles being stopped for 20-60% of the cycle.



Figure 4.9 Ramon Road at Landau Boulevard (Existing PM Peak)



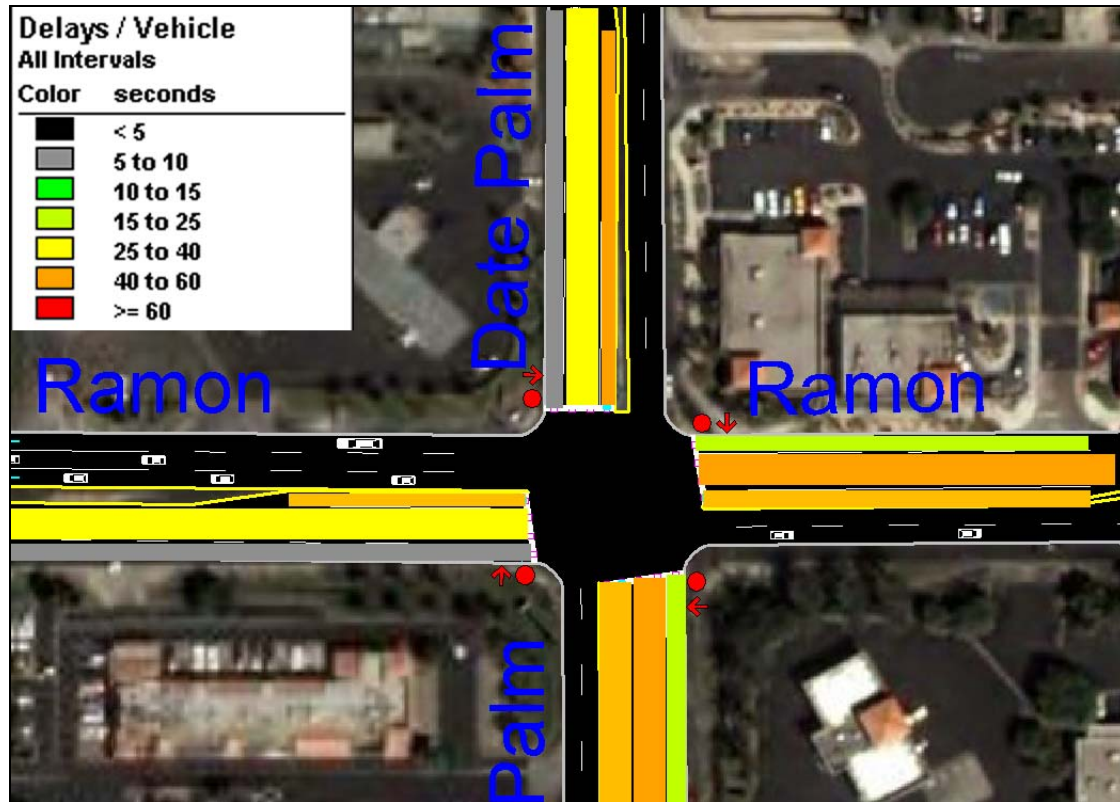
Eastbound left turn bay provides inadequate storage for the PM peak demand. This results in frequent blockage of the second eastbound through lane by left turn vehicles. In addition, the east leg crosswalk is on a stand alone phase. When a pedestrian is crossing on the east leg crosswalk, all vehicle movements are prohibited except yielding eastbound right turns.

Figure 4.10 Ramon Road at Maravilla-Cathedral Canyon Drive (Existing PM Peak)



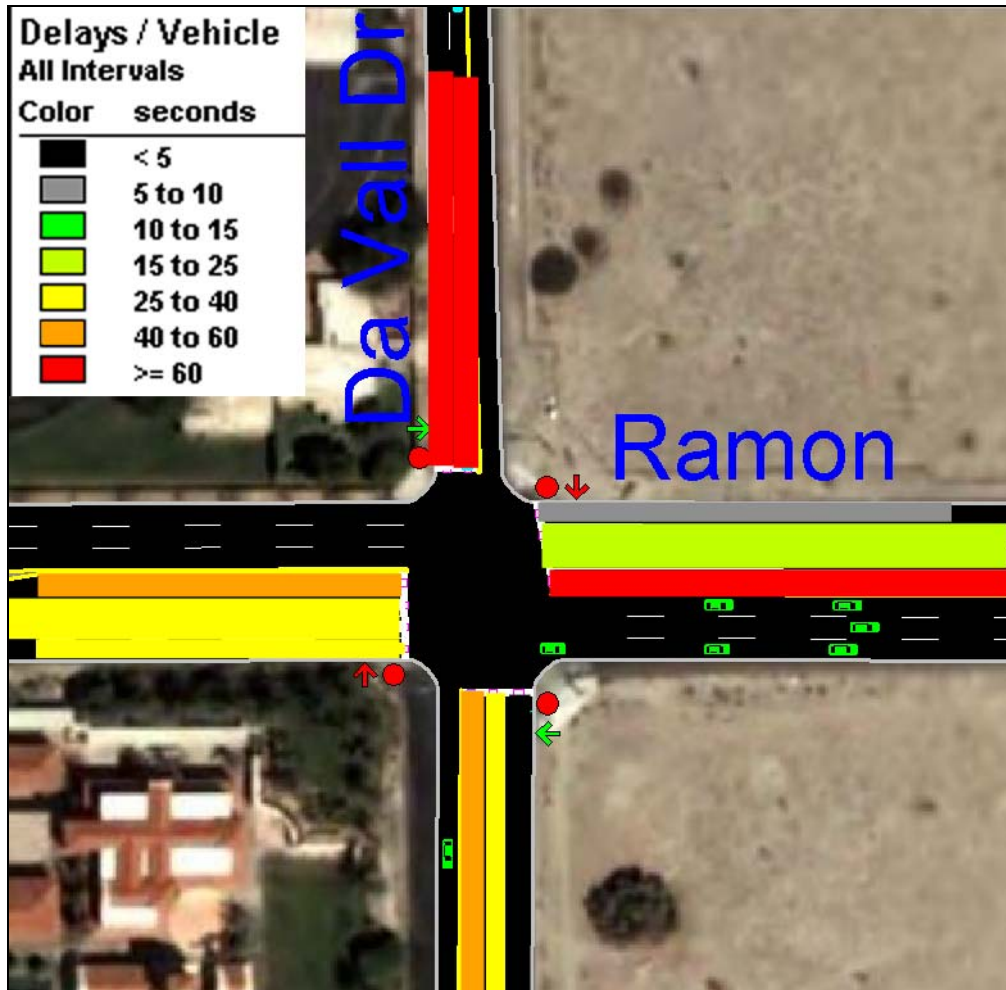
The offset intersection operates using split phasing for the north and south movements. North and south legs are offset by about 110 feet, and this results in large all-red times (8 seconds for east/west phases, and 5 seconds for north/south phases). Greater than 20% of the cycle is loss time containing no vehicle movements due to yellow and red times (it is assumed vehicle reaction/start-up time offset vehicles passing during yellow). In addition, the existing intersection design prohibits east and west right turn on red movements. Westbound left turn demand is very high, and the westbound left turn bay is often blocked.

Figure 4.11 Ramon Road at Date Palm Drive (Existing PM Peak)



The eastbound left turn bay contains inadequate storage space, and is frequently blocked by eastbound through traffic. In addition, the eastbound demand results in large queues blocking left turn traffic into shopping plazas at the northwest and southwest corners of the intersection. The PM peak period also contains large southbound left demand, and frequently leads to spillover blocking of the second southbound through lane.

Figure 4.12 Ramon Road at Da Vall Drive (Existing AM Peak)



The AM peak period has the highest demand for this intersection. Peak southbound demand exceeds the available capacity of a single lane. In addition, westbound left turn traffic experiences high delay.

5. Short Term Conditions

The short term evaluation of the Ramon Road corridor is estimated between Year 2007 and Year 2010. Using results from the existing conditions analysis, the PM peak hour is identified as the worse period during the day. Therefore, short term conditions are evaluated based on average daily travel and the PM peak hour.

5.1 Short Term Traffic Volumes

A 6% growth factor is applied to existing traffic volumes to estimate short term traffic volumes. This estimate should represent conditions expected over the next two to three years. Short term projected traffic volumes are shown in **Figure 5.2** and **Table 5.1**.

5.2 Short Term Traffic Conditions

5.2.1 Short Term Average Daily Traffic

Refer to **Figure 5.1** for a summary of short term average daily traffic.

5.2.2 Short Term Intersection Turning Movements

Refer to **Figure 5.2** for an illustration of short term intersection turning movements.





Legend:

- | | | |
|---------------------------|-------------------------|-----------------------|
| 1. Ramon/Landau | 7. Ramon/Sky Blue Water | 12. Ramon/Valdez |
| 2. Ramon/Candlewood | 8. Ramon/Roundup | 13. Ramon/Ximino |
| 3. Ramon/La Paloma | 9. Ramon/El Mundo | 14. Ramon/Alvera |
| 4. Ramon/Shifting Sands | 10. Ramon/El Pueblo | & Canyon Vista |
| 5. Ramon/La Gaviota | 11. Ramon/Maravilla | 15. Ramon/Monte Vista |
| 6. Ramon/Whispering Palms | & Cathedral Canyon | |



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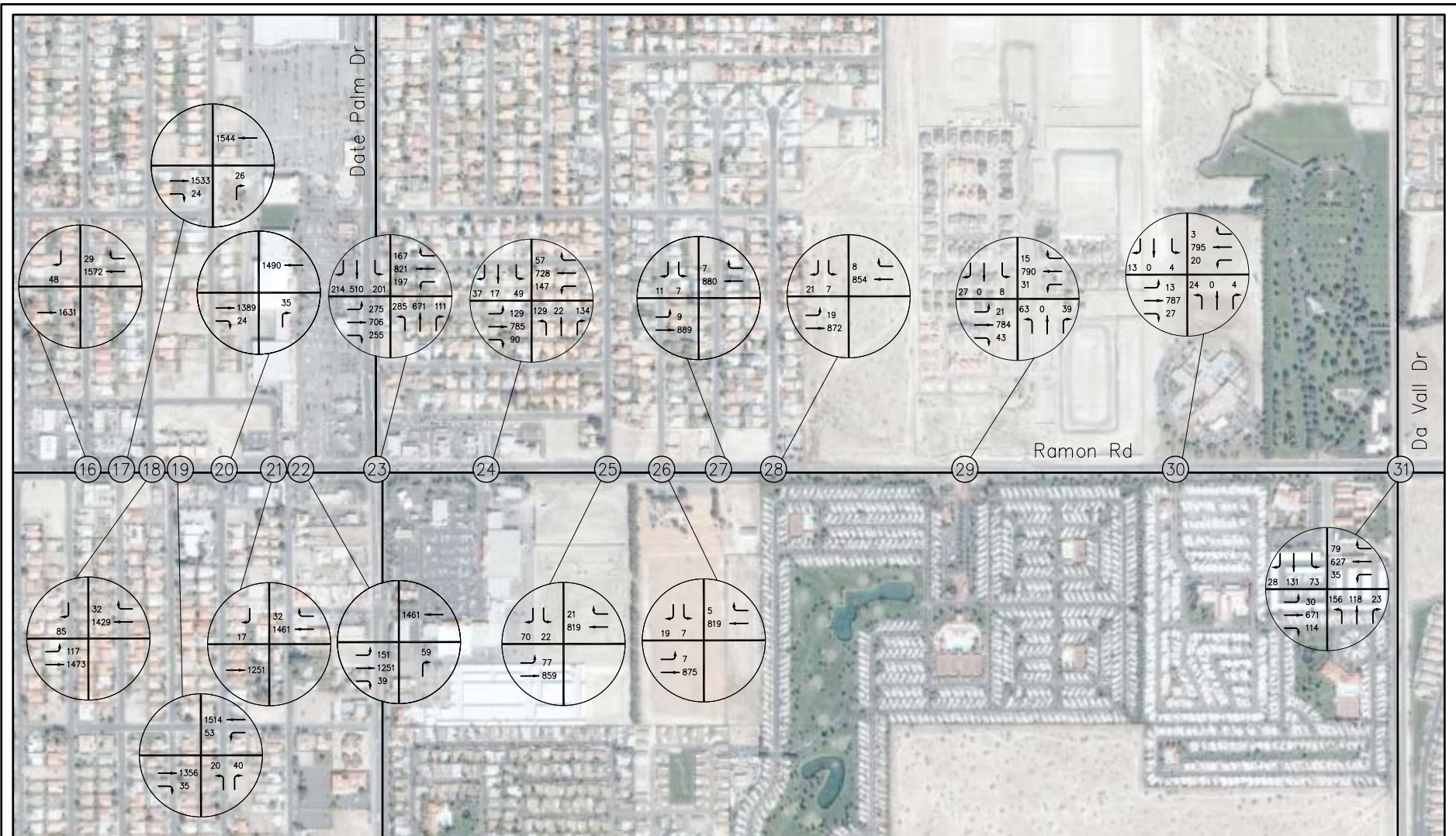
Project Name:
Ramon Road Operations Study

Short Term Traffic Volumes – PM Peak (Sheet 1 of 2)

Project No.:
98229

Figure 5.2a





Legend:

- | | | | |
|------------------------|-----------------------------|--------------------------------------|-------------------------|
| 16. Ramon/Juarez | 21. Ramon/Los Ninos | 26. Ramon/El Toro | 30. Ramon/Desert Shadow |
| 17. Ramon/Aurora Vista | 22. Ramon/Rancho Vista | 27. Ramon/Victor | 31. Ramon/Da Vall |
| 18. Ramon/Del Yermo | 23. Ramon/Date Palm | 28. Ramon/Nuema | |
| 19. Ramon/Desert Vista | 24. Ramon/Cathedral Village | 29. Ramon/Outdoor Resort & Campanile | |
| 20. Ramon/Cielo Vista | 25. Ramon/San Eljay | | |



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Ramon Road Operations Study

Short Term Traffic Volumes – PM Peak (Sheet 2 of 2)

Project No.:
98229

Figure 5.2b

5.2.3 Short Term Level of Service

Intersection Analysis

Table 5.1 displays the average delay and corresponding level of service at each intersection for the medium term PM peak hour. Delay is estimated using SimTraffic, and utilizing a weighted average of conditions with and without pedestrians. The amount of time an intersection contains pedestrian activity is estimated using pedestrian counts detailed in **Table 4.12**. This increases accuracy of real world delay.

Queues at each approach are described in **Table 5.2** for the PM peak hour period. Most non-signalized intersections did not contain large queues, and therefore they are excluded from summary tables. Storage bay and upstream block times are detailed in the queue tables.

Block time represents the percentage of time a specific lane blocks a storage lane (left or right turn pocket). This can occur if a queue within a lane spills over to prevent entrance into the pocket, or if through traffic backs up to prohibit pocket entrance.



Table 5.1 Short Term Traffic Volumes and Level of Service – PM Peak
(Assuming existing road configuration)

INTERSECTION	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Delay	LOS
Ramon/Landau*	0	0	0	333	0	438	579	1169	0	0	1050	387	34.2	C
Ramon/Candlewood	0	0	44	0	0	0	0	1480	30	55	1397	0	1.7	A
Ramon/La Paloma	0	0	0	0	0	25	0	1480	0	0	1397	23	2.5^	A
Ramon/Shifting Sands	0	0	76	0	0	0	0	1456	56	0	1468	0	2.2	A
Ramon/La Gaviota	0	0	0	0	0	24	0	1456	0	0	1468	35	2.5^	A
Ramon/Whispering Palms*	143	90	63	80	61	52	164	1412	69	136	1506	61	19.8	B
Ramon/Sky Blue Water	0	0	52	0	0	39	0	1424	35	0	1685	2	2.5^	A
Ramon/Roundup	0	0	14	0	0	0	0	1404	62	72	1577	0	5.3	A
Ramon/El Mundo	0	0	0	0	0	26	0	1404	0	0	1648	62	2.5^	A
Ramon/El Pueblo	0	0	0	0	0	15	0	1423	0	0	1693	24	2.5^	A
Ramon/Maravilla-Cathedral Canyon*	541	133	371	94	137	111	131	1122	191	347	1095	24	93.9	F
Ramon/Valdez	0	0	0	0	0	7	0	1570	0	0	1438	49	2.5^	A
Ramon/Ximino	0	0	0	25	0	21	105	1478	0	0	1394	40	9.4	A
Ramon/Alvera-Canyon Vista	0	0	50	0	0	22	0	1484	31	86	1492	23	3.8	A
Ramon/Monte Vista	0	0	40	0	0	0	0	1631	28	0	1572	0	2.5^	A
Ramon/Juarez	0	0	0	0	0	48	0	1631	0	0	1572	29	2.5^	A
Ramon/Aurora Vista	0	0	26	0	0	0	0	1533	24	0	1544	0	2.5^	A
Ramon/Del Yermo	0	0	0	0	0	85	117	1473	0	0	1429	32	2.2	A
Ramon/Desert Vista*	20	0	40	0	0	0	0	1356	35	53	1514	0	2.0	A
Ramon/Cielo Vista	0	0	35	0	0	0	0	1389	24	0	1490	0	2.5^	A
Ramon/Los Ninos	0	0	0	0	0	17	0	1251	0	0	1461	32	2.5^	A
Ramon/Rancho Vista	0	0	59	0	0	0	151^^	1251	39	0	1461	0	3.5	A
Ramon/Date Palm*	285	671	111	201	510	214	275	706	255	197	821	167	39.2	D
Ramon/Cathedral Village*	129	22	134	49	17	37	129	785	90	147	728	57	17.8	B
Ramon/San Eljay	0	0	0	22	0	70	77	859	0	0	819	21	2.4	A
Ramon/El Toro	0	0	0	7	0	19	7	875	0	0	819	5	0.5	A
Ramon/Victor	0	0	0	7	0	11	9	889	0	0	880	7	0.5	A
Ramon/Neuma	0	0	0	7	0	21	19	872	0	0	854	8	1.5	A
Ramon/Outdoor Resort-Campanile*	63	0	39	8	0	27	21	784	43	31	790	15	6.0	A
Ramon/Desert Shadow	24	0	4	4	0	13	13	787	27	20	795	3	3.4	A
Ramon/Da Vall*	156	118	23	73	131	28	30	671	114	35	627	79	17.4	B

*signalized intersection

^ See Appendix B

^^EBL volume at Rancho Vista is into north plaza driveway



Table 5.2 Short Term Queues– PM Peak
(Assuming existing road configuration)

INTERSECTION	Notes
Ramon/Landau	EBL has a 59% block time due to queue spillover
Ramon/Whispering Palms	NBL has a 28% block time (18% from queue spillover, 10% from NBT backup)
Ramon/Maravilla-Cathedral Canyon	NBL has a 72% block time (32% from queue spillover, 40% from NBT backup) SBL has a 48% block time due to backup EBL has a 60% block time due to EBT backup WBL has a 80% block time (66% from queue spillover, 14% from WBT backup) WBT backs up to Ximino 14% of the time
Ramon/Date Palm	NBR has a 36% block time due to NBT backup) EBL has a 52% block time (34% from queue spillover, 18% from EBT backup) EBT backs up to Rancho Vista 3% of the time SBL has a 12% block time due to queue spillover
Ramon/Cathedral Village	No issues
Ramon/Da Vall	No issues

Arterial Travel Time

Utilizing SimTraffic simulation results, average arterial travel times were estimated in both directions for the PM peak period. **Table 5.3** shows the simulation travel times for the medium term PM peak period. Arterial travel times are estimated from stop line to stop line.

Adjusted travel times correct micro-simulation travel times by adjusting values using percentage errors presented in **Table 4.8**.

Table 5.3 Short Term Travel Times (simulated)
(time in minutes)

Segment	Short Term, EB	Short Term, WB
Landau to Whispering Palms	1.52	1.21
Whispering Palms to Cat Canyon	2.04	0.82
Cat Canyon to Desert Vista	0.64	1.76
Desert Vista to Date Palm	0.98	0.40
Date Palm to Cat Village	0.52	0.76
Cat Village to Outdoor Resorts	0.79	0.89
Outdoor Resorts to Da Vall	0.85	1.09
Average Travel Time	7.32	6.93
Adjusted Average Travel Time	8.19	6.29

Roadway Segment Analysis

Table 5.4 shows the estimated level of service for roadway segments along the Ramon Road corridor. The volume to capacity ratios are calculated using micro-simulation green times and number of lanes at ends of each link. See **Appendix E** for ADT calculations.

Table 5.4 Short Term Capacity Analysis

Ramon Road	ADT	CAPACITY	V/C	LOS
West of Landau	46,081	70,704	0.652	B
West of Cathedral Canyon	40,979	61,920	0.662	B
West of Date Palm	34,490	95,760	0.360	A
East of Date Palm	31,463	51,552	0.610	B
West of Da Vall	28,684	84,960	0.338	A
East of Da Vall	28,379	48,672	0.583	A
Landau Blvd				
North of Ramon	19,605	27,648	0.709	C
Cathedral Canyon/Maravilla				
North of Ramon	4,804	18,144	0.265	A
South of Ramon	17,016	26,640	0.639	B
Date Palm				
North of Ramon	27,064	45,072	0.600	B
South of Ramon	27,998	45,792	0.611	B
Da Vall				
North of Ramon	10,798	18,720	0.577	A
South of Ramon	15,040	25,344	0.593	A

5.3 Summary of Short Term Conditions

PM peak period congestion frequently occurs at intersections of Ramon Road and Landau Blvd, Maravilla-Cathedral Canyon Dr, and Date Palm Dr. **Table 5.5** details conditions experienced at these intersections between Year 2007 and Year 2010.

Using existing road segment widths, short term average daily traffic volumes are found to be properly supported. The Ramon Road segment west of Landau operates at a Level of Service B, and is approaching a level of service C. Although the segment is two lanes, the short term green times allow satisfactory vehicle flows through Ramon and Landau. However, all other road segments provide adequate capacity such that vehicles may maintain their desired speed.

Table 5.5 Short Term Intersection Summary

Intersection	Issues
Ramon and Landau	Increased eastbound queuing due to eastbound left queue spillover.
Ramon and Cathedral Canyon	Significant queuing on Maravilla and Cathedral Canyon due to increased Ramon traffic. Westbound left queue spillover increases in frequency.
Ramon and Date Palm	Increased eastbound left bay blockage. Southbound left queues spillover to block through lanes.
Ramon and Cathedral Village	Eastbound back up reduces capacity of Date Palm.

6. Medium Term Conditions

The medium term evaluation of the Ramon Road corridor is estimated between Year 2010 and Year 2020. The medium term traffic volumes account for the cumulative sum of trips added from new projects. Using results from the existing conditions analysis, the PM peak hour is identified as the worse period during the day. Therefore, short term conditions are evaluated based on average daily travel and the PM peak hour.

6.1 Medium Term Traffic Volumes

Cumulative projects have been identified in previous traffic studies conducted by others. There are approximately 30 projects considered for cumulative trips. Detailed trip generation and trip assignment are explained in the previous traffic studies. The cumulative total trips resulting from the 30 projects are outlined in **Table 6.1**.

An estimated total of 96,137 daily trips will be added onto the existing road network serving the development area. More than 13,375 additional daily trips are estimated to travel through the Ramon Road Study corridor. Furthermore, more than 1,400 additional vehicles are estimated to travel through the study corridor during the PM peak period.

In addition to cumulative project trips, a 10% growth factor is applied to existing traffic volumes to account for new projects outside of the study area. Medium term projected traffic volumes are shown in **Figure 6.2** and presented in **Table 6.2**.

Table 6.1 Medium Term Cumulative Projects

Project	Description	AM PEAK PERIOD			PM PEAK PERIOD			DAILY TOTAL
		IN	OUT	TOTAL	IN	OUT	TOTAL	
1	Starwood Mission Hill	7	36	43	34	16	50	563
2	Mission Hills North	225	662	887	756	437	1,193	11,312
3	Mission Shores	40	116	156	133	77	210	1,991
4	San Jacinto Dr Condo	16	84	100	79	39	118	1,330
5	Tamarisk Neighborhood	118	348	466	398	230	628	5,953
6	Via Vail/Via Josefina	102	302	404	345	199	544	5,158
7	Tuscany	21	62	83	70	41	111	1,053
8	Santo Tomas	25	75	100	86	50	136	1,282
9	Versailles	36	105	141	120	69	189	1,790
10	TR 28569	25	74	99	85	49	134	1,273
11	TR 28570	18	54	72	62	36	98	928
12	TR 29150	18	54	72	62	36	98	928
13	TR 29151	20	59	79	67	39	106	1,005
14	PP 15473	8	1	9	14	68	82	76
15	PP 16071	30	19	49	85	92	177	1,947
16	CUP 03257	92	84	176	86	95	181	986
17	CUP 03326/R1	50	50	100	40	39	79	1,107
18	Creekside Apartments	19	76	95	74	41	115	1,243
19	Campanile Development	77	171	248	224	158	382	4,257
20	TTM 29742	33	97	130	111	64	175	1,656
21	DR 03-385	7	1	8	14	67	81	68
22	DR 03-381	16	2	18	14	71	85	145
23	DR 02-375	20	3	23	15	72	87	177
24	DR 02-374	11	1	12	14	68	82	96
25	DR 01-369	17	2	19	15	71	86	147
26	Santoro Homes	19	56	75	64	37	101	957
27	160-acre Residential	106	314	420	358	207	565	5,359
28	40-acre Development	73	99	172	238	226	464	5,047
29	Bela Sera Residential	32	167	199	158	77	235	2,637
30	Desert Gateway	969	846	1,815	1,543	1,558	3,101	35,666
Cumulative Trips		2,250	4,020	6,270	5,364	4,329	9,693	96,137

6.2 Medium Term Traffic Conditions

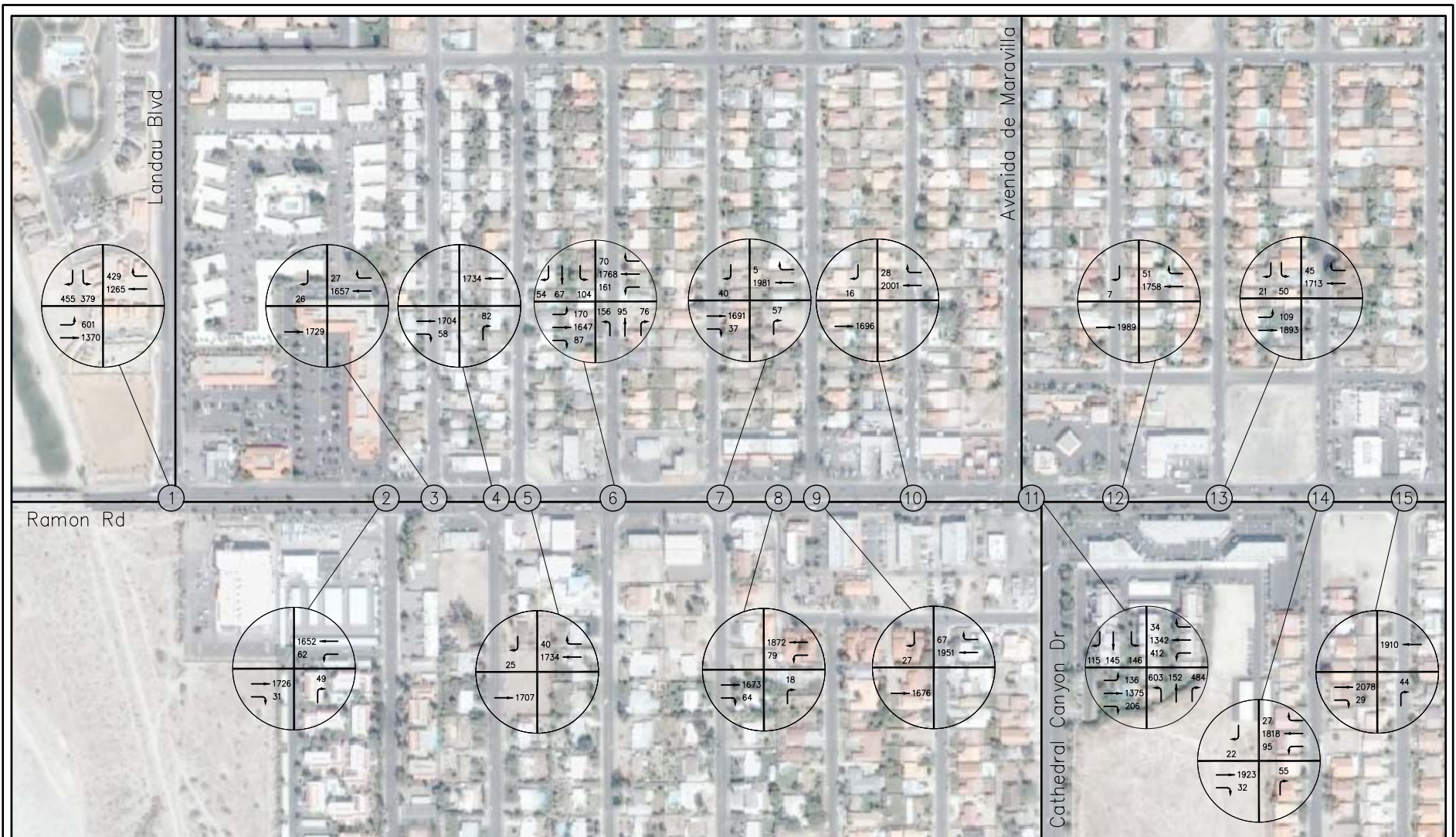
6.2.1 Medium Term Average Daily Traffic

Refer to **Figure 6.1** for a summary of medium term average daily traffic.

6.2.2 Medium Term Intersection Turning Movements

Refer to **Figure 6.2** for an illustration of medium term intersection turning movements.





Legend:

- | | | |
|---------------------------|-------------------------|-----------------------|
| 1. Ramon/Landau | 7. Ramon/Sky Blue Water | 12. Ramon/Valdez |
| 2. Ramon/Candlewood | 8. Ramon/Roundup | 13. Ramon/Ximino |
| 3. Ramon/La Paloma | 9. Ramon/El Mundo | 14. Ramon/Alvera |
| 4. Ramon/Shifting Sands | 10. Ramon/El Pueblo | & Canyon Vista |
| 5. Ramon/La Gaviota | 11. Ramon/Maravilla | 15. Ramon/Monte Vista |
| 6. Ramon/Whispering Palms | & Cathedral Canyon | |



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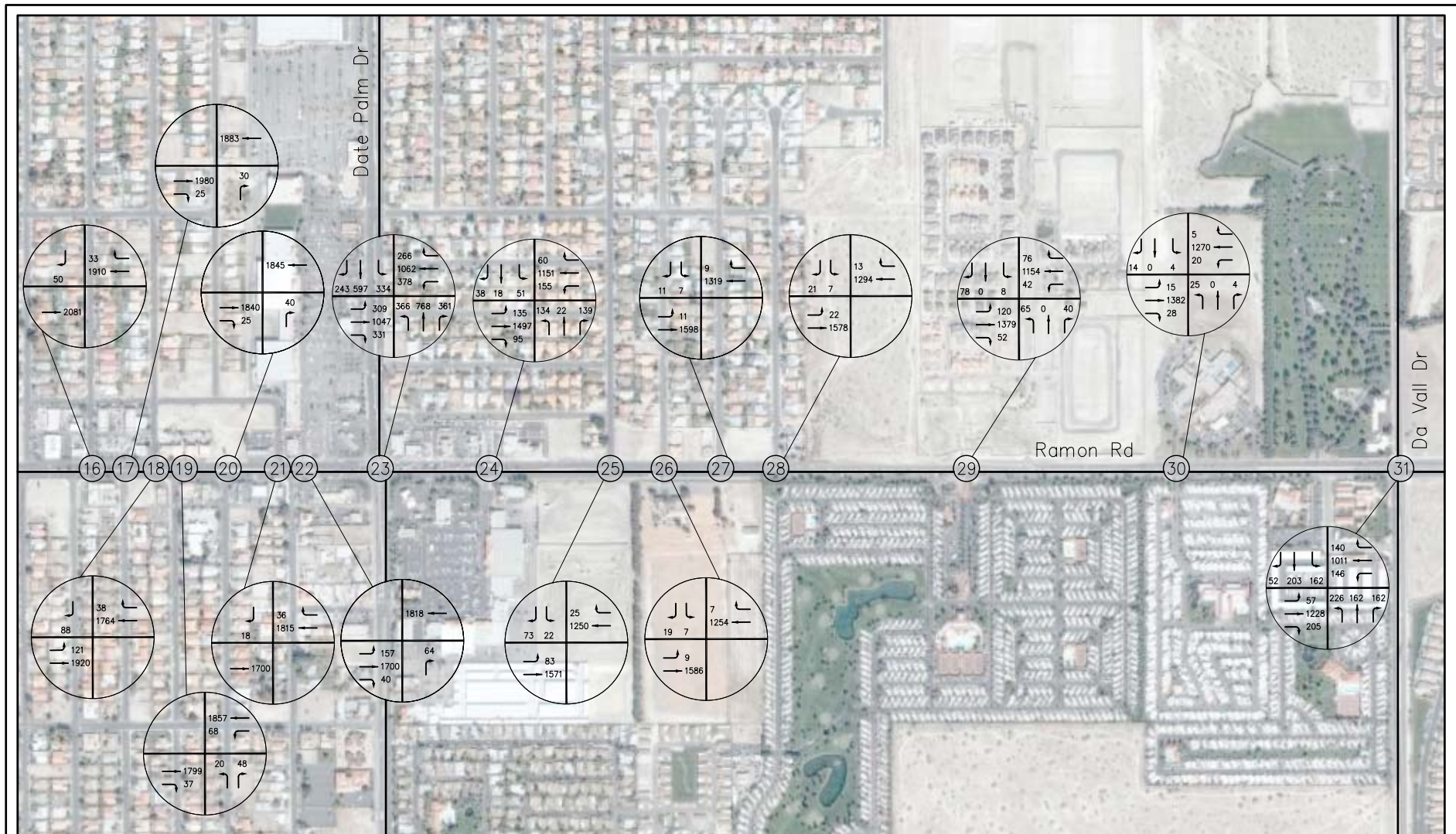
Project Name:
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Medium Term Traffic Volumes – PM Peak (Sheet 1 of 2)

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Figure 6.2a





Legend:

- | | | | |
|------------------------|-----------------------------|---|-------------------------|
| 16. Ramon/Juarez | 21. Ramon/Los Ninos | 26. Ramon/El Toro | 30. Ramon/Desert Shadow |
| 17. Ramon/Aurora Vista | 22. Ramon/Rancho Vista | 27. Ramon/Victor | 31. Ramon/Da Vall |
| 18. Ramon/Del Yermo | 23. Ramon/Date Palm | 28. Ramon/Nuema | |
| 19. Ramon/Desert Vista | 24. Ramon/Cathedral Village | 29. Ramon/Outdoor Resort
& Campanile | |
| 20. Ramon/Cielo Vista | 25. Ramon/San Eljay | | |



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Medium Term Traffic Volumes – PM Peak (Sheet 2 of 2)

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Figure 6.2b

6.2.3 Medium Term Level of Service

Intersection Analysis

Table 6.2 displays the average delay and corresponding level of service at each intersection for the medium term PM peak hour. Delay is estimated using SimTraffic, and utilizing a weighted average of conditions with and without pedestrians. The amount of time an intersection contains pedestrian activity is estimated using pedestrian counts detailed in **Table 4.12**. This increases accuracy of real world delay.

Queues at each approach are described in **Table 6.3** for the PM peak hour period. Most non-signalized intersections did not contain large queues, and therefore they are excluded from summary tables. Storage bay and upstream block times are detailed in the queue tables.

Block time represents the percentage of time a specific lane blocks a storage lane (left or right turn pocket). This can occur if a queue within a lane spills over to prevent entrance into the pocket, or if through traffic backs up to prohibit pocket entrance.



Table 6.2 Medium Term Traffic Volumes and Level of Service – PM Peak
(Assuming existing road configuration)

INTERSECTION	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Delay	LOS
Ramon/Landau*	0	0	0	379	0	455	601	1370	0	0	1265	429	36.4	D
Ramon/Candlewood	0	0	49	0	0	0	0	1726	31	62	1652	0	2.1	A
Ramon/La Paloma	0	0	0	0	0	26	0	1729	0	0	1657	27	3.0^	A
Ramon/Shifting Sands	0	0	82	0	0	0	0	1704	58	0	1734	0	2.9	A
Ramon/La Gaviota	0	0	0	0	0	25	0	1707	0	0	1734	40	3.0^	A
Ramon/Whispering Palms*	156	95	76	104	67	54	170	1647	87	161	1768	70	25.3	C
Ramon/Sky Blue Water	0	0	57	0	0	40	0	1691	37	0	1981	5	3.0^	A
Ramon/Roundup	0	0	18	0	0	0	0	1673	64	79	1872	0	14.3	B
Ramon/El Mundo	0	0	0	0	0	27	0	1676	0	0	1951	67	3.0^	A
Ramon/El Pueblo	0	0	0	0	0	16	0	1696	0	0	2001	28	3.0^	A
Ramon/Maravilla-Cathedral Canyon*	603	152	484	146	145	115	136	1375	206	412	1342	34	134.2	F
Ramon/Valdez	0	0	0	0	0	7	0	1989	0	0	1758	51	3.0^	A
Ramon/Ximino	0	0	0	50	0	21	109	1893	0	0	1713	45	18.9	C
Ramon/Alvera-Canyon Vista	0	0	55	0	0	22	0	1923	32	95	1818	27	10.3	B
Ramon/Monte Vista	0	0	44	0	0	0	0	2078	29	0	1910	0	3.0^	A
Ramon/Juarez	0	0	0	0	0	50	0	2081	0	0	1910	33	3.0^	A
Ramon/Aurora Vista	0	0	30	0	0	0	0	1980	25	0	1883	0	3.0^	A
Ramon/Del Yermo	0	0	0	0	0	88	121	1920	0	0	1764	38	5.0	A
Ramon/Desert Vista*	20	0	48	0	0	0	0	1799	37	68	1857	0	4.4	A
Ramon/Cielo Vista	0	0	40	0	0	0	0	1840	25	0	1845	0	3.0^	A
Ramon/Los Ninos	0	0	0	0	0	18	0	1700	0	0	1815	36	3.0^	A
Ramon/Rancho Vista	0	0	64	0	0	0	157^^	1700	40	0	1818	0	22.8	C
Ramon/Date Palm*	366	768	361	334	597	243	309	1047	331	378	1062	266	110.8	F
Ramon/Cathedral Village*	134	22	139	51	18	38	135	1497	95	155	1151	60	30.4	C
Ramon/San Eljay	0	0	0	22	0	73	83	1571	0	0	1250	25	4.0	A
Ramon/El Toro	0	0	0	7	0	19	9	1586	0	0	1254	7	1.1	A
Ramon/Victor	0	0	0	7	0	11	11	1598	0	0	1319	9	0.9	A
Ramon/Neuma	0	0	0	7	0	21	22	1578	0	0	1294	13	2.4	A
Ramon/Outdoor Resort-Campanile*	65	0	40	8	0	78	120	1379	52	42	1154	76	10.3	B
Ramon/Desert Shadow	25	0	4	4	0	14	15	1382	28	20	1270	5	4.5	A
Ramon/Da Vall*	226	162	162	162	203	52	57	1228	205	146	1011	140	32.2	C

*signalized intersection

^ See Appendix B

^^EBL volume at Rancho Vista is into north plaza driveway



Table 6.3 Medium Term Queues– PM Peak
(Assuming existing road configuration)

INTERSECTION	Notes
Ramon/Landau	EBL has a 63% block time due to queue spillover
Ramon/Whispering Palms	NBL has a 47% block time (38% from queue spillover, 19% from NBT backup) SBL has a 15% block time due to queue spillover
Ramon/Maravilla-Cathedral Canyon	NBL has a 100% block time (45% from queue spillover, 55% from NBT backup) SBL has a 72% block time due to backup EBL has a 64% block time due to EBT backup WBL has a 86% block time (72% from queue spillover, 14% from WBT backup) WBT backs up to Ximino 23% of the time
Ramon/Date Palm	NBR has a 90% block time (26% from queue spillover, 64% from NBT backup) SBL has a 78% block time (63% from queue spillover, 15% from SBT backup) EBL has a 100% block time (56% from queue spillover, 44% from EBT backup) EBT backs up to Rancho Vista 44% of the time WBL has a 74% block time (50% from queue spillover, 23% from WBT backup) WBT backs up to Cathedral Canyon 10% of the time
Ramon/Cathedral Village	NBL has a 27% block time (12% from queue spillover, 15% from NBT backup) EBL has a 16% block time due to EBT backup WBL has a 19% block time due to WBT backup
Ramon/Da Vall	No issues

Arterial Travel Time

Utilizing SimTraffic simulation results, average arterial travel times were estimated in both directions for the PM peak period. **Table 6.4** shows the simulation travel times for the medium term PM peak period. Arterial travel times are estimated from stop line to stop line.

Adjusted travel times correct micro-simulation travel times by adjusting values using percentage errors presented in **Table 4.8**.

Table 6.4 Medium Term Travel Times (simulated)
(time in minutes)

Segment	Medium Term, EB	Medium Term, WB
Landau to Whispering Palms	1.85	1.22
Whispering Palms to Cat Canyon	3.03	0.85
Cat Canyon to Desert Vista	0.81	2.09
Desert Vista to Date Palm	2.19	0.44
Date Palm to Cat Village	0.61	1.23
Cat Village to Outdoor Resorts	0.86	1.21
Outdoor Resorts to Da Vall	0.96	1.21
Average Travel Time	10.30	8.26
Adjusted Average Travel Time	11.49	7.49

Roadway Segment Analysis

Table 6.5 shows the estimated level of service for roadway segments along the Ramon Road corridor. The volume to capacity ratios are to be used for long range planning, and not for segment design purposes.

Table 6.5 Medium Term Capacity Analysis

Ramon Road	ADT	CAPACITY	V/C	LOS
West of Landau	54,591	68,164	0.801	D
West of Cathedral Canyon	48,140	70,560	0.682	B
West of Date Palm	44,471	92,304	0.482	A
East of Date Palm	45,295	63,072	0.718	C
West of Da Vall	41,347	84,672	0.488	A
East of Da Vall	42,707	69,120	0.618	B
Landau Blvd				
North of Ramon	22,740	28,224	0.806	D
Cathedral Canyon/Maravilla				
North of Ramon	5,584	22,752	0.245	A
South of Ramon	19,596	32,976	0.594	A
Date Palm				
North of Ramon	31,627	45,216	0.699	B
South of Ramon	34,754	45,216	0.769	C
Da Vall				
North of Ramon	14,950	21,744	0.688	B
South of Ramon	21,711	27,072	0.802	C

6.3 Summary of Medium Term Conditions

PM peak period congestion frequently occurs at intersections of Ramon Road and Landau Blvd, Maravilla-Cathedral Canyon Dr, and Date Palm Dr. **Table 6.6** details conditions experienced at these intersections.

Using existing road segment widths, medium term average daily traffic volumes are found to be properly supported. The Ramon Road segment west of Landau operates at a Level of Service E. Throughout the day, vehicle densities on the bridge do not allow vehicles to travel at their desired speed. All other road segments provide adequate capacity such that vehicles may maintain their desired speed.

Table 6.6 Medium Term Intersection Summary

Intersection	Issues
Ramon and Landau	Eastbound left turn bay cannot store demand. Even more frequent blockage of second eastbound through lane.
Ramon and Cathedral Canyon	Frequent westbound backup to Ximino.
Ramon and Date Palm	Eastbound left turn bay spillover causes backup to Rancho Vista. Northbound Date Palm experiences increased delays.
Ramon and Cathedral Village	Eastbound queues backs up to Date Palm more frequently.

7. Long Term Conditions

Long term conditions are estimated between Year 2020 and Year 2030. Using results from the existing conditions analysis, the PM peak hour is identified as the worse period during the day. Therefore, short term conditions are evaluated based on average daily travel and the PM peak hour.

The Coachella Valley Region is estimated to contain about 700,000 people in Year 2030. CVAG estimates the region build-out population to be 1.1 million people. A majority of cities will have reached or exceeded General Plan build-out populations (including Cathedral City). Therefore, the application of County and City build-out models are estimated to accurately represent long term conditions for the Ramon Road corridor.

Assuming Cathedral City grows at levels similar to historical rates, the population is estimated to reach 90,000 people by Year 2030. This estimate assumes development continues at current rates.

Table 7.1 Long Term Population Overview

City	2000	2005	2010	2020	2030
Cathedral City	42,647	51,713	61,946	77,790	90,797
Coachella Valley	332,485	410,974	478,939	607,826	720,926

7.1 Long Term Traffic Volumes

Although the Coachella Valley Association of Governments (CVAG) had not completed their long term model, the long term conditions were projected using the best available data. Sources include the City of Cathedral City General Plan, the Riverside County Build-out model, and the ACCE TIA. ADT and peak hour projections were used to estimate turning movement counts. See **Appendix D** for traffic volume worksheets for long term projections.

Projections indicate low traffic volume increases for north-south streets between Landau and Date Palm. A growth factor of 15% was applied to this area.

Major volume changes are expected around Da Vall Drive. The Cathedral City General Plan proposes extending Da Vall and creating an interchange with Interstate 10. This is expected to increase traffic volumes on Da Vall north of Ramon, as well as on Ramon east of Da Vall. In addition, Santoro Drive is expected to be extended south to connect with Via Campanile. A growth factor of 35% was applied to existing counts (assuming side street traffic increases linearly with population growth).

7.2 Long Term Traffic Conditions

7.2.1 Long Term Average Daily Traffic

Refer to **Figure 7.1** for a summary of long term average daily traffic.

7.2.2 Long Term Intersection Turning Movements

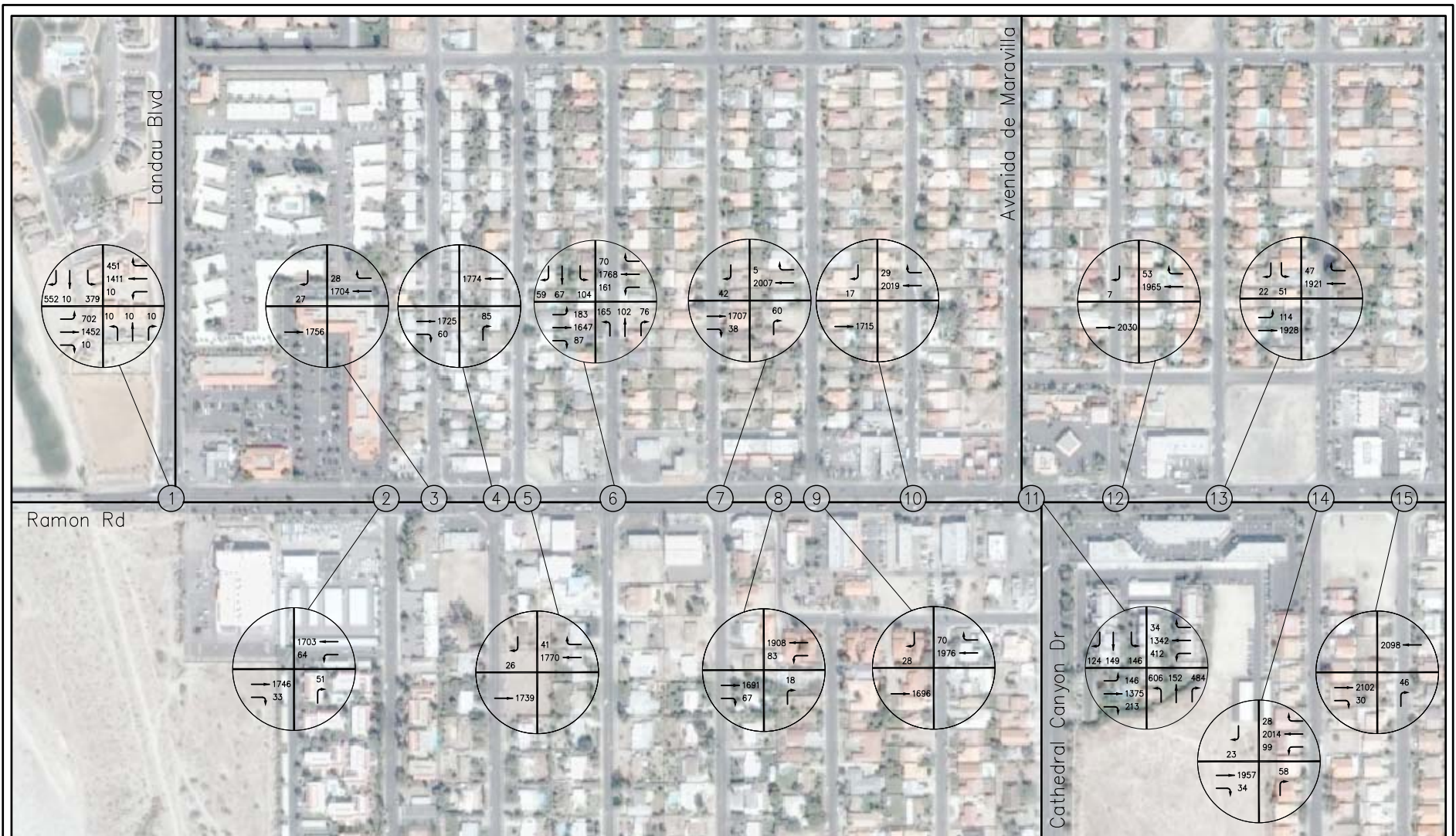
Refer to **Figure 7.2** for an illustration of long term intersection turning movements.



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	Checked by: LKL		

Long Term Average Daily Two-Way Traffic Volumes

Figure 7.1



Legend:

- | | | |
|---------------------------|-------------------------|-----------------------|
| 1. Ramon/Landau | 7. Ramon/Sky Blue Water | 12. Ramon/Valdez |
| 2. Ramon/Candlewood | 8. Ramon/Roundup | 13. Ramon/Ximino |
| 3. Ramon/La Paloma | 9. Ramon/El Mundo | 14. Ramon/Alvera |
| 4. Ramon/Shifting Sands | 10. Ramon/El Pueblo | & Canyon Vista |
| 5. Ramon/La Gaviota | 11. Ramon/Maravilla | 15. Ramon/Monte Vista |
| 6. Ramon/Whispering Palms | & Cathedral Canyon | |



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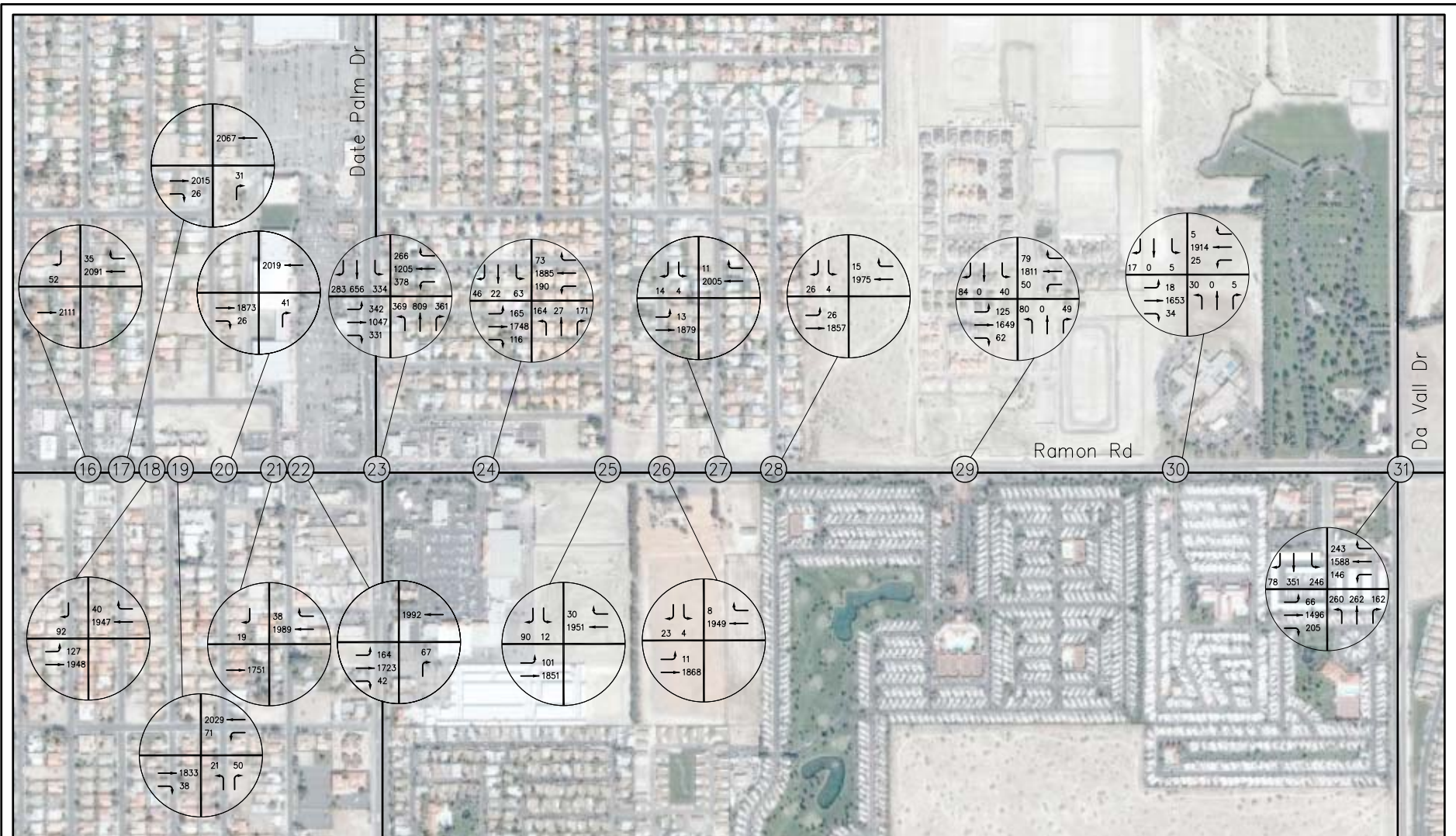
Project Name:
Ramon Road Operations Study

Long Term Traffic Volumes – PM Peak (Sheet 1 of 2)

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98229

Figure 7.2a





Legend:

- | | | | |
|------------------------|-----------------------------|--------------------------------------|-------------------------|
| 16. Ramon/Juarez | 21. Ramon/Los Ninos | 26. Ramon/El Toro | 30. Ramon/Desert Shadow |
| 17. Ramon/Aurora Vista | 22. Ramon/Rancho Vista | 27. Ramon/Victor | 31. Ramon/Da Vall |
| 18. Ramon/Del Yermo | 23. Ramon/Date Palm | 28. Ramon/Nuema | |
| 19. Ramon/Desert Vista | 24. Ramon/Cathedral Village | 29. Ramon/Outdoor Resort & Campanile | |
| 20. Ramon/Cielo Vista | 25. Ramon/San Eljay | | |



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Long Term Traffic Volumes – PM Peak (Sheet 2 of 2)

Project No.:
98229

Figure 7.2b

7.2.3 Long Term Level of Service

Intersection Analysis

Table 7.2 displays the average delay and corresponding level of service at each intersection for the long term PM peak hour. Delay is estimated using SimTraffic, and utilizing a weighted average of conditions with and without pedestrians. The amount of time an intersection contains pedestrian activity is estimated using pedestrian counts detailed in **Table 4.12**. Future conditions are assumed by increasing pedestrian time by 5% to account for future pedestrian growth. This increases accuracy of real world delay.

Queues at each approach are described in **Table 7.3** for the PM peak hour period. Most non-signalized intersections did not contain large queues, and therefore they are excluded from summary tables. Storage bay and upstream block times are detailed in the queue tables.

Block time represents the percentage of time a specific lane blocks a storage lane (left or right turn pocket). This can occur if a queue within a lane spills over to prevent entrance into the pocket, or if through traffic backs up to prohibit pocket entrance.



Table 7.2 Long Term Traffic Volumes and Level of Service – PM Peak (Assuming existing road configuration)

INTERSECTION	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Delay	LOS
Ramon/Landau*	10	10	10	379	10	552	702	1452	10	10	1411	451	50.2	D
Ramon/Candlewood	0	0	51	0	0	0	0	1746	33	64	1703	0	1.9	A
Ramon/La Paloma	0	0	0	0	0	27	0	1756	0	0	1704	28	3.0^	A
Ramon/Shifting Sands	0	0	85	0	0	0	0	1725	60	0	1774	0	2.4	A
Ramon/La Gaviota	0	0	0	0	0	26	0	1739	0	0	1770	41	3.0^	A
Ramon/Whispering Palms*	165	102	76	104	67	59	183	1647	87	161	1768	70	22.9	C
Ramon/Sky Blue Water	0	0	60	0	0	42	0	1707	38	0	2007	5	3.0^	A
Ramon/Roundup	0	0	18	0	0	0	0	1691	67	83	1908	0	6.1	A
Ramon/El Mundo	0	0	0	0	0	28	0	1696	0	0	1976	70	3.0^	A
Ramon/El Pueblo	0	0	0	0	0	17	0	1715	0	0	2019	29	3.0^	A
Ramon/Maravilla-Cathedral Canyon*	606	152	484	146	149	124	146	1375	213	412	1342	34	116.2	F
Ramon/Valdez	0	0	0	0	0	7	0	2030	0	0	1965	53	3.0^	A
Ramon/Ximino	0	0	0	51	0	22	114	1928	0	0	1921	47	18.8	C
Ramon/Alvera-Canyon Vista	0	0	58	0	0	23	0	1957	34	99	2014	28	9.7	A
Ramon/Monte Vista	0	0	46	0	0	0	0	2102	30	0	2098	0	3.0^	A
Ramon/Juarez	0	0	0	0	0	52	0	2111	0	0	2091	35	3.0^	A
Ramon/Aurora Vista	0	0	31	0	0	0	0	2015	26	0	2067	0	3.0^	A
Ramon/Del Yermo	0	0	0	0	0	92	127	1948	0	0	1947	40	5.3	A
Ramon/Desert Vista*	21	0	50	0	0	0	0	1833	38	71	2029	0	4.5	A
Ramon/Cielo Vista	0	0	41	0	0	0	0	1873	26	0	2019	0	3.0^	A
Ramon/Los Ninos	0	0	0	0	0	19	0	1751	0	0	1989	38	3.0^	A
Ramon/Rancho Vista	0	0	67	0	0	0	164^^	1723	42	0	1992	0	27.9	D
Ramon/Date Palm*	369	809	361	334	656	283	342	1047	331	378	1205	266	108.2	F
Ramon/Cathedral Village*	164	27	171	63	22	46	165	1748	116	190	1885	73	46.5	D
Ramon/San Eljay	0	0	0	12	0	90	101	1851	0	0	1951	30	7.0	A
Ramon/El Toro	0	0	0	4	0	23	11	1868	0	0	1949	8	1.4	A
Ramon/Victor	0	0	0	4	0	14	13	1879	0	0	2005	11	1.1	A
Ramon/Neuma	0	0	0	4	0	26	26	1857	0	0	1975	15	2.2	A
Ramon/Santoro	0	0	0	0	0	72	55	1802	0	0	1903	65	4.5	A
Ramon/Outdoor Resort-Campanile*	80	0	49	10	0	84	125	1649	62	50	1811	5	15.8	B
Ramon/Desert Shadow	30	0	5	5	0	17	18	1653	34	25	1914	6	6.9	A
Ramon/Da Vall*	260	262	162	246	351	78	66	1496	205	146	1588	243	69.6	E

*signalized intersection

^ See Appendix B

^^EBL volume at Rancho Vista is into north plaza driveway



Table 7.3 Long Term Queues– PM Peak
(Assuming existing road configuration)

INTERSECTION	Notes
Ramon/Landau	NBL has a 19% block time (8% from queue spillover, 11% from NBT backup) EBL has a 65% block time due to queue spillover WBL has a 51% block time due to WBT backup
Ramon/Whispering Palms	NBL has a 51% block time (32% from queue spillover, 19% from NBT backup) SBL has a 15% block time due to queue spillover
Ramon/Maravilla-Cathedral Canyon	NBL has a 100% block time (48% from queue spillover, 52% from NBT backup) SBL has a 72% block time due to backup EBL has a 62% block time due to EBT backup EBT backs up to Roundup 5% of the time WBL has a 84% block time (69% from queue spillover, 15% from WBT backup) WBT backs up to Ximino 24% of the time
Ramon/Date Palm	NBR has a 90% block time (26% from queue spillover, 64% from NBT backup) SBL has a 81% block time (64% from queue spillover, 17% from SBT backup) EBL has a 100% block time (55% from queue spillover, 45% from EBT backup) EBT backs up to Rancho Vista 48% of the time WBL has a 53% block time (31% from queue spillover, 22% from WBT backup) WBT backs up to Cathedral Canyon 12% of the time
Ramon/Cathedral Village	NBL has a 64% block time (11% from queue spillover, 53% from NBT backup) SBL has a 17% block time due to queue spillover EBL has a 24% block time due to EBT backup WBL has a 31% block time due to WBT backup
Ramon/Da Vall	NBL has a 31% block time due to queue spillover EBL has a 15% block time due to EBT backup WBL has a 39% block time (10% from queue spillover, 29% from WBT backup)

Arterial Travel Time

Utilizing SimTraffic simulation results, average arterial travel times were estimated in both directions for the PM peak period. **Table 7.4** shows the simulation travel times for the long term PM peak period. Arterial travel times are estimated from stop line to stop line.

Adjusted travel times correct micro-simulation travel times by adjusting values using percentage errors presented in **Table 4.8**.

Table 7.4 Long Term Travel Times (simulated)
(time in minutes)

Segment	Long Term, EB	Long Term, WB
Landau to Whispering Palms	2.53	1.62
Whispering Palms to Cat Canyon	2.18	0.86
Cat Canyon to Desert Vista	0.80	1.84
Desert Vista to Date Palm	2.54	0.49
Date Palm to Cat Village	0.69	1.04
Cat Village to Outdoor Resorts	1.20	1.48
Outdoor Resorts to Da Vall	1.14	1.87
Average Travel Time	11.08	9.20
Adjusted Average Travel Time	12.36	8.35



Roadway Segment Analysis

Table 7.5 shows the estimated level of service for roadway segments along the Ramon Road corridor. The volume to capacity ratios are calculated using micro-simulation green times and number of lanes at ends of each link. See **Appendix E** for ADT calculations.

Table 7.5 Long Term Capacity Analysis

Ramon Road	ADT	CAPACITY	V/C	LOS
West of Landau	63,700	69,211	0.920	E
West of Cathedral Canyon	49,700	70,560	0.704	C
West of Date Palm	53,300	96,624	0.552	A
East of Date Palm	49,267	61,632	0.799	C
West of Da Vall	52,033	88,416	0.589	A
East of Da Vall	66,600	70,272	0.948	E
Landau Blvd				
North of Ramon	21,269	27,792	0.765	C
Cathedral Canyon/Maravilla				
North of Ramon	5,212	23,616	0.221	A
South of Ramon	18,461	33,264	0.555	A
Date Palm				
North of Ramon	33,933	44,208	0.768	C
South of Ramon	32,533	43,488	0.748	C
Da Vall				
North of Ramon	29,433	24,912	1.181	F
South of Ramon	21,000	30,240	0.694	C

7.3 Summary of Long Term Conditions

Using existing lane configurations, the PM peak period experiences frequent congestion. Existing road segment widths do not adequately support future volumes along Ramon Road west of Landau and east of Da Vall. All other road segments provide adequate capacity such that vehicles may maintain their desired speed. **Table 7.6** summarizes intersection conditions.

Table 7.6 Long Term Intersection Summary

Intersection	Issues
Ramon and Landau	Significant eastbound queuing on the bridge.
Ramon and Cathedral Canyon	Significant queuing in all approaches. West and eastbound queuing blocks cross streets such as Alvera or Roundup.
Ramon and Date Palm	All single lane left turn bays spillover to frequently block through lanes.
Ramon and Cathedral Village	Eastbound frequently backs up to block Date Palm.
Ramon and Da Vall	Capacity of single north and south through lanes is exceeded. Major queuing occurs if green is extended to serve these vehicles.



8. Recommendations

8.1 Short Term Recommendations

These suggestions are for immediate implementation. They intend to improve operations and safety with a low cost. These improvements are intended to be completed by year 2010. See **Section 9** for expected results from immediate recommendations.

8.1.1 Infrastructure Improvements

Street lighting efficiently illuminates the corridor west of Date Palm Drive. However, the intersections of Ramon at Desert Shadows and Ramon at Memorial Drive do not have street lighting. In addition, a Sun Line Transit bus stop is located between Desert Shadows and Memorial Drive. It is recommended to install street lighting at these intersections to the west of Da Vall Drive.

Street signs at signalized intersections contained cracks and small stripping of material. This is likely a result of extreme weather conditions and sun exposure within the area. It is recommended to replace the street signs at Whispering Palms, since these showed the greatest amount of sign degrading.

8.1.2 Transit Stop Improvements

All transit related improvements shall be coordinated with Sun Line Transit. Bus stop improvements are subject to the Sun line Transit Inventory Study, and stop relocations and turnout construction must be discussed with Sun Line Transit prior to implementation.

Ramon and Sky Blue Water Trail

Sun Line Transit bus stops are located at the north and south ends of Ramon and Sky Blue Water. This intersection is right-turn in, right-turn out, and un-signalized without pedestrian crosswalks. Jay-walking was found to currently occur at this intersection.

According to the Sun Line Transit Comprehensive Operational Analysis (COA), “bus stops should be put at the corners of streets, rather than mid-block, to reduce both the walking distances required reaching the stop and the potential of jay-walking.” It is recommended to relocate the Sky Blue Water bus stops approximately 300 feet west to Ramon and Whispering Palms. This is an existing signalized intersection with pedestrian crosswalks.

Ramon and Date Palm

A bus stop currently exists at the northwest corner of Date Palm and Ramon, adjacent to an existing gas station, immediately to the east of a driveway. It is recommended to convert this driveway into a bus turnout. Currently, when a bus stops for the boarding and de-boarding of passengers, the third westbound lane on Ramon Road is blocked. The creation of a bus turnout at this existing bus turnout should eliminate queuing and maneuvering of westbound traffic. The proposed turnout is located on the north side of Ramon, west of Date Palm. See **Figure 8.1** for a rendition of this recommendation.



8.1.3 Roadway Improvements

Ramon and Landau

It is recommended to alter the controller output to allow concurrent operation of the eastbound left turn and east leg pedestrian phases. This permits eastbound left turning traffic when pedestrians use the east leg crosswalk. Currently, the east leg crosswalk operates on a stand alone phase, prohibiting all vehicle movements when pedestrians cross Ramon.

Ramon and Whispering Palms

The north and south approaches of the intersection are offset by about 20 feet. It is recommended to improve striping along the north and south legs to improve alignment for motorists. See **Figure 8.2** for striping example.

Ramon and Maravilla-Cathedral Canyon

The all-red times for through movements should be reduced to improve signal operations. The east/west all-red time should be decreased to 6 seconds (from 8 seconds), and the north/south all-red times should be decreased to 3 seconds (from 5 seconds). In addition, it is recommended to lengthen the westbound left turn lane by modifying the median east of the intersection.

Ramon and Desert Vista/Del Yermo

It is recommended to install additional signal poles to control the eastbound left turn movement from Ramon into Del Yermo. See **Figure 8.3**. With the long term growth in Ramon Road traffic volumes, safety could be compromised if left turns are yielding. The protected left turn phase can be incorporated with Desert Vista signal operations to allow concurrent left turns along Ramon Road. Intersection delay and corridor travel times will not be greatly impacted by this recommendation (see **Section 9**).

Ramon and Date Palm/Rancho Vista

The left-turn bays located west of the intersection at Date Palm and Ramon allow retail access to the north and south of Ramon Road. It is recommended to shift these bays west to serve the side streets of Los Ninos and Canyon Vista. Driveway improvements may be needed on Los Ninos to accommodate diverted driveway traffic. This shall also lengthen the eastbound Ramon left turn bay by approximately 100 feet.

In addition, some vehicles heading north on Rancho Vista enter the eastbound Ramon left turn bay and continue north into a shopping driveway, or make a u-turn maneuver to head westbound on Ramon. The shift of left turn bays shall address unsafe maneuvers at Rancho Vista. Refer to **Figure 8.1** for an illustration of the recommended median shift.

It is also recommended to convert the exclusive eastbound right turn lane into a shared through/right lane. This recommendation shall only be implemented if re-striping occurs east of Date Palm.



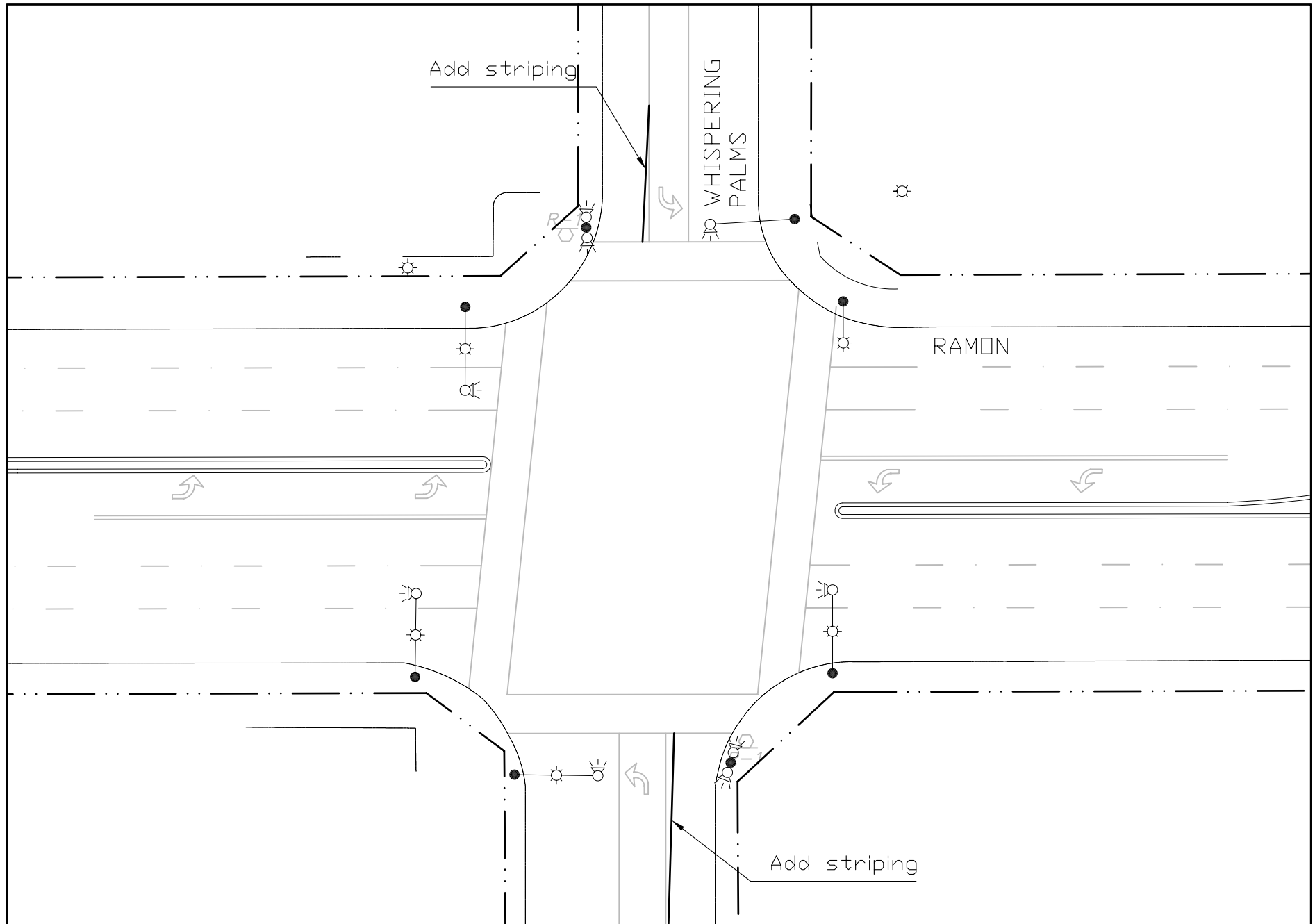
Figure 8.1 West of Date Palm Median and Bus Stop Modification



Existing Condition

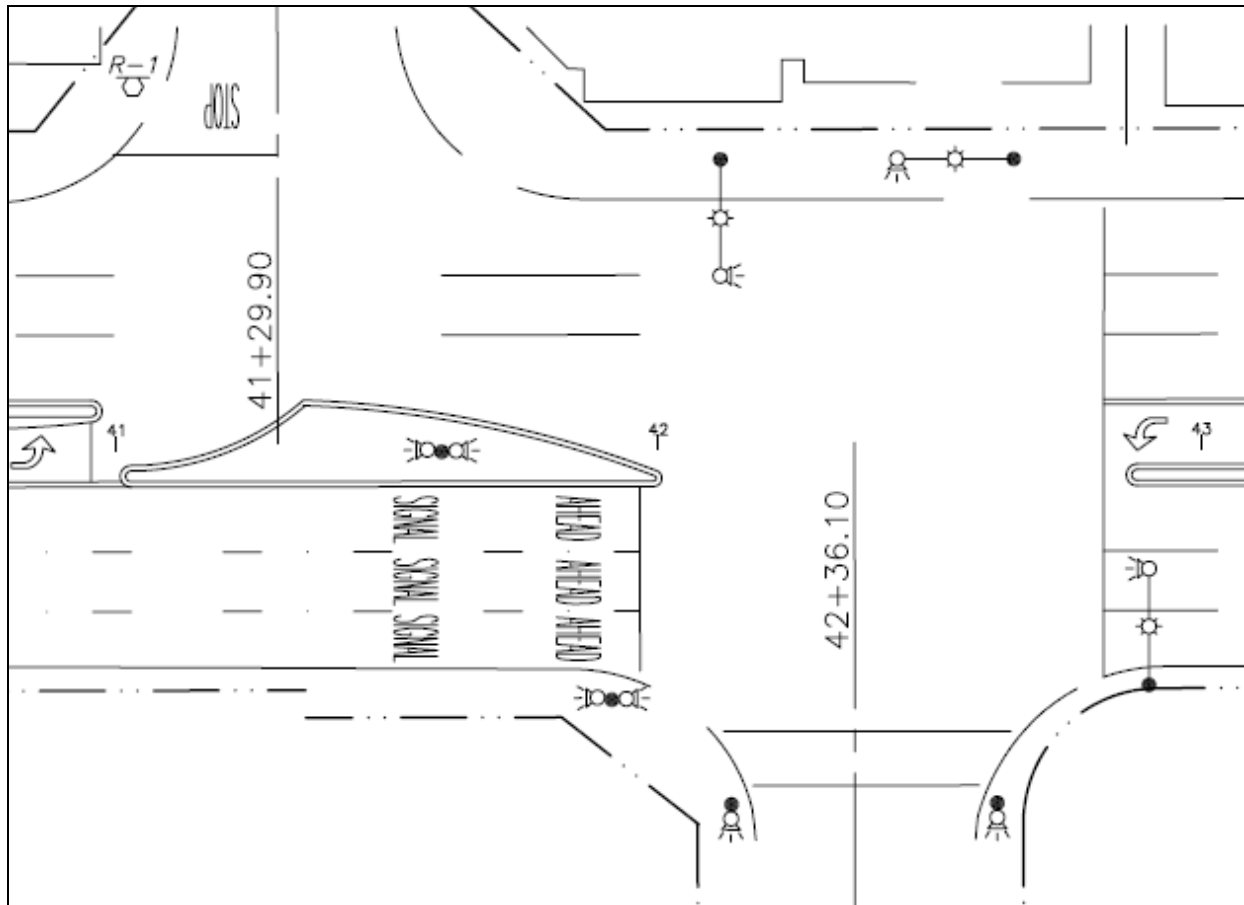


Proposed Improvement



 ADVANTEC Consulting Engineers Traffic • ITS • Civil • Electrical	Drawn by: JMY Checked by: LKL	Project Name: Ramon Road Operations Study Whispering Palms Striping Improvement Example	Project No.: 98229 Figure 8.2
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Figure 8.3 Proposed Ramon and Desert Vista/Del Yermo Improvement



Ramon between Date Palm and Outdoor Resorts

Eastbound Ramon Road decreases from 3 lanes to 2 lanes on this stretch of road. According to the street plans provided by the city, existing right-of-way and curb dimensions allow the addition of a third through lane by re-striping the eastbound direction. It is recommended to re-stripe the eastbound direction between Date Palm and Outdoor Resorts to 3 lanes. In addition, it is recommended to widen the north side of Ramon between Neuma and Outdoor Resorts per city street improvement plans. Westbound Ramon Road is currently 2 lanes within this section.

Ramon and Da Vall

Adjust signal timing by increasing maximum green time for southbound and northbound Da Vall phases. This shall accommodate peak period queues not served by existing splits.

Other Locations

Intersections designated with unsafe maneuvering shall improve signing and striping. The city shall decide on specific equipment to use, but possible improvements include Texas dots, delineators, or raised median extensions.

- *Ramon and Roundup/El Mundo and Avenida Alvera*
Improvements are recommended for Ramon left turn bays at these intersections. Some vehicles heading south on El Mundo enter the westbound Ramon left turn bay and continue south on Roundup, or make a u-turn maneuver to head eastbound on Ramon.

Similar to Roundup/El Mundo, vehicles heading south on Alvera enter the westbound Ramon left turn bay and continue south or make a u-turn to head eastbound on Ramon.

8.1.4 Equipment Improvements

Signal controllers and cabinets shall be upgraded to allow time of day signal timing plans and proper synchronization. According to city budget passes, Cathedral City has approved upgrades to Type 170 controllers. It is recommended to apply these upgrades to signals on Ramon Road.

In conjunction with the recommended widening of Ramon Road between Date Palm and Outdoor Resorts, it is recommended to install interconnect at the following signals:

- Ramon Road and Date Palm
- Ramon Road and Cathedral Village
- Ramon Road and Outdoor Resorts-Via Campanile
- Ramon Road and Da Vall Drive

All eight signalized intersections are to be synchronized to allow efficient platoon progression. Although the segment between Landau and Date Palm does not contain signal interconnect, city staff shall monitor controller clocks to maintain effective corridor synchronization.



8.2 Medium Term Recommendations

These recommendations are suggested between Year 2010 and Year 2020. These ideas build upon immediate improvements, and intended for completion by Year 2020. Some road widening is also proposed for the medium term. See **Section 9** for expected results from immediate recommendations.

8.2.1 Infrastructure Improvements

Ramon and Maravilla-Cathedral Canyon

In addition, a pothole is located at the north leg of Ramon Road and Avenida de Maravilla/Cathedral Canyon Drive. It is recommended to repave the approach when adding a second left turn lane on Ramon.

Ramon and Date Palm

During rain and water runoff conditions, the northeast corner of the intersection contains flooding and water buildup. It is recommended to improve drainage when widening the intersection.

Ramon and Da Vall

Pavement conditions and markings at most intersection approaches were suitable for smooth traffic flows. The north leg of the intersection at Ramon Road and Da Vall Drive contains an irregular pavement surface, with bumps and dips along the southbound approach. It is recommended to smooth this surface when widening Da Vall.

8.2.2 Transit Stop Improvements

It is recommended to construct bus turnouts for existing stops along Ramon Road, west of Date Palm Drive. The bus stop attributes along Ramon Road meet TRB criteria described within the Sun Line Transit Comprehensive Operational Analysis Report. Subject to the results of the Sun Line Transit Bus Stop Inventory project, medium term bus turnouts are recommended for the following locations:

- South side of Ramon/ East of Landau
- North side of Ramon / West of Whispering Palms
- South side of Ramon / East of Whispering Palms
- South side of Ramon / East of Cathedral Canyon
- North side of Ramon / East of Desert Vista
- South side of Ramon / East of Desert Vista



Typical characteristics of the existing bus stops along Ramon Road include:

- Traffic in the curb lane exceeds 250 vehicles during the peak hour
- Traffic speed is greater than 40 mph
- Potential for auto/bus conflicts warrants separation of transit and passenger vehicles
- Improvements, such as widening, are planned for a major roadway
- Traffic volumes do not exceed 1,000 vehicles per hour per lane

Recommended medium term road widening at Ramon / Landau, Ramon / Cathedral Canyon, and Ramon / Date Palm may reduce construction costs encountered when implementing bus turnouts.

Following the Sun Line Transit Comprehensive Operational Analysis Report, city coordination with Sun Line Transit is required prior to bus turnout approval and design. Cathedral City must reach a consensus with Sun Line for long term plans regarding bus stop locations prior to turnout design.

8.2.3 Roadway Improvements

Ramon and Landau

It is recommended to widen the Ramon Road bridge between San Luis Rey and Landau. The 4-lane configuration will not handle the projected future volumes. Bridge widening shall allow the lengthening of eastbound left turn bays to prevent blocking of eastbound through lanes. This configuration allows the #1 eastbound lane to become a left turn lane (similar to northbound Date Palm at Ramon). Refer to **Figure 8.3** for a proposed medium term lane configuration.

It is recommended to widen the bridge to the west of Landau according to Riverside County road classifications. This specification designates 110 feet curb to curb width for travel lanes and street median. In addition, the bridge section adjacent to the intersection of Landau and Ramon shall be designed to long term recommendations. The long term recommendations specify 8 total lanes (three through lanes in each direction and two eastbound left turn lanes).



Ramon and Maravilla-Cathedral Canyon

It is recommended to widen the east and west leg of the intersection to allow dual westbound left turn lanes. By Year 2020, the westbound left turn demand will exceed the available capacity allowed with a single lane. Widening to add a westbound left turn lane shall prevent left turn vehicles from blocking the westbound through lanes. Furthermore, this shall reduce westbound queuing to Ximino.

Ramon and Date Palm

Dual left turn lanes shall be implemented at all approaches. The growth in turning traffic along Ramon Road will exceed the capacity of a single lane. To properly store left turning queues, and prevent lane blockage due to queue spillover, dual left turn lanes are recommended.

Ramon and Da Vall

It is recommended to add one south and one north through lane. This follows the Cathedral City General Plan roadway classification of 4 total lanes on Da Vall Drive. The increase in capacity will also serve the peak morning demand.

8.2.4 Equipment Improvements

In combination with recommended widening, signal interconnect shall be installed west of Landau. This includes the following signals:

- Ramon Road and Landau Boulevard
- Ramon Road and Whispering Palms
- Ramon Road and Cathedral Canyon-Maravilla
- Ramon Road and Desert Vista

The combination of interconnect and controller/cabinet upgrades can then permit synchronization of the entire corridor between Landau Boulevard and Da Vall Drive without city staff monitoring controller clocks. Additionally, signal monitoring is possible through interconnect, and it is recommended to implement a signal system for city staff monitoring of signal timing. A traffic signal system also allows fast uploading and downloading of new timing plans from the traffic engineer's office at City Hall to traffic controllers along Ramon Road.



8.3 Long Term Recommendations

These recommendations are suggested between Year 2020 and Year 2030. These ideas build upon short and medium term improvements, and include road widening and possible detouring of vehicles from the Panorama area. These recommendations are intended for completion by Year 2030.

8.3.1 Roadway Improvements

Ramon and Landau

A third eastbound and westbound through lane is recommended. This enables all through lanes to continue through the intersection (for both directions), eliminating merging upstream of the intersection. In addition, these recommendations are expected to further combat reduced efficiency due to the southern extension of Landau.

Ramon and Maravilla-Cathedral Canyon

By Year 2030, large volumes along Ramon Road will exceed the available capacity at this intersection. Assuming re-alignment of Maravilla and Cathedral Canyon is not feasible due to costly right of way acquisition, it is recommended to relocate the signal from Maravilla to Alvera. Southbound through and left turn movements from Maravilla can then be prohibited by a raised median. Traffic heading south from the Panorama area would be detoured to Ximino, Alvera, or Whispering Palms. To control diverted traffic from the Panorama area, an additional signal must be installed at Alvera. With proper synchronization using equipment recommended for medium term solutions, travel times along Ramon Road will be greatly reduced.

Ramon and Cathedral Village, Ramon and San Eljay

Signal removal analysis was performed at Ramon and Cathedral Village. No time savings were found from signal removal, and delay was shifted to the intersection of Ramon and Date Palm. San Eljay contains heavy morning traffic due to two schools located north of Ramon Road. The large growth of Ramon Road traffic may increase the delay experienced by these drivers.

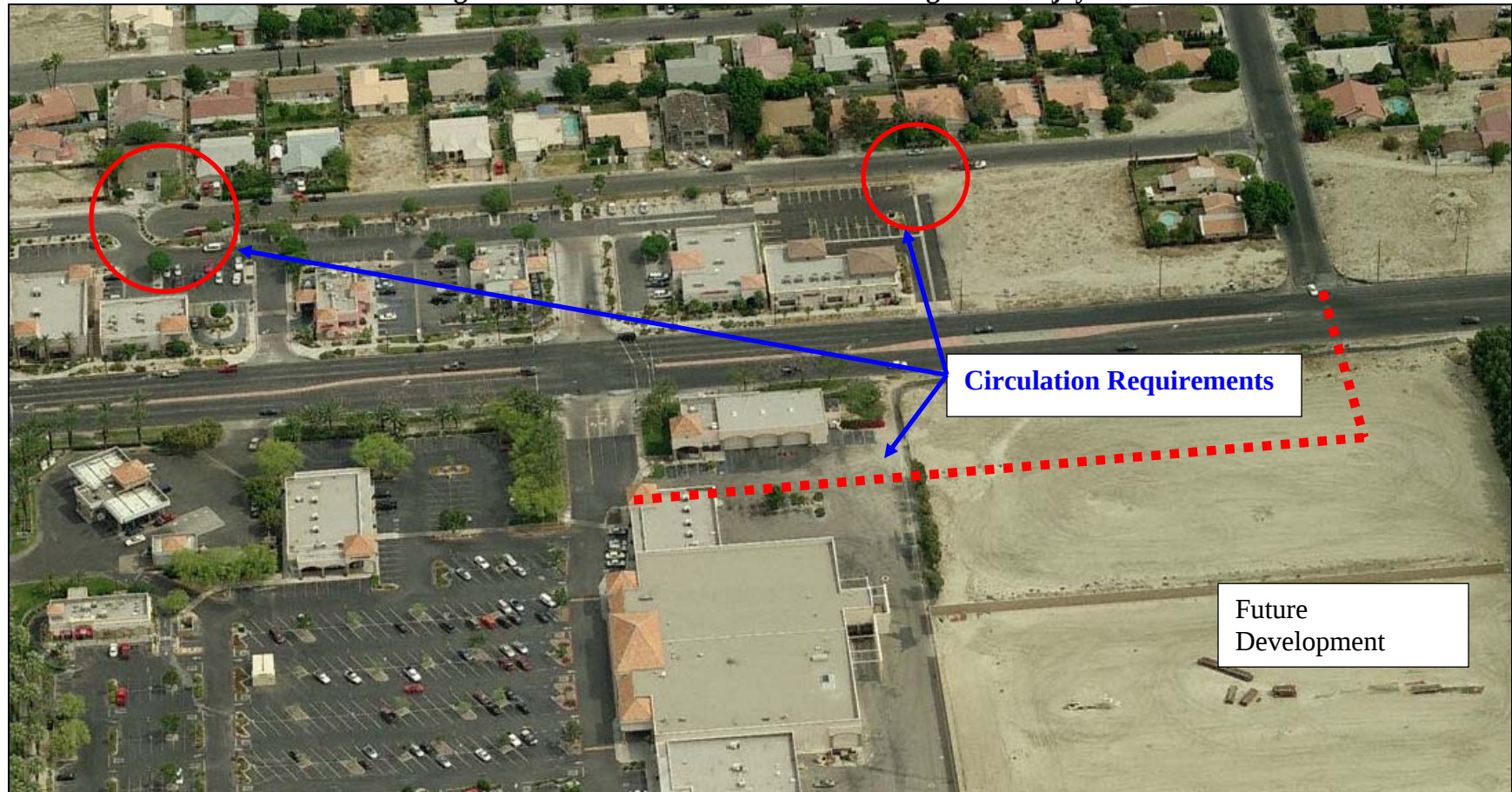
Cathedral City planning staff has indicated a future development on a parcel south of Ramon and San Eljay. If the following conditions are met, it is recommended the traffic impact study by the future development evaluate possible signal relocation from Cathedral Village to San Eljay.

Refer to **Figure 8.4**.

1. North plaza patrons are allowed to use Aliso Road
2. An internal circulation road connects the existing Stater Brothers plaza to the future development south of Ramon and San Eljay
3. An access road or driveway is built to create a fourth leg at Ramon and San Eljay



Figure 8.4 Ramon and Cathedral Village / San Eljay



Ramon between El Toro and Desert Shadows/Charter Hospital

It is recommended to prevent south to east left turn movements on El Toro Road, Victor Road, and Nuema Road. Assuming Baristo is extended east and intersects with the proposed Santoro extension, vehicles from these side streets may use Santoro and Via Campanile to travel east on Ramon Road.

Ramon and Da Vall

The rise in traffic from the Da Vall north extension to Interstate 10 will require road widening on Da Vall. It is recommended to add an exclusive westbound right turn lane is recommended to serve vehicles turning from Ramon to continue north on Da Vall.

8.3.2 Transit Stop Improvements

Bus stop turnouts are recommended for stops located near Ramon and Desert Shadows. However, Cathedral City must confirm long term bus stop locations with Sun Line Transit as well as bus turn out designs prior to implementation of bus stop turnouts between Cathedral Village and Da Vall Drive.

8.3.3 Equipment Improvements

Complementing equipment upgrades from immediate and medium term recommendations, adaptive signal control is recommended to dynamically manage signal timing throughout Ramon Road and the City. Adaptive signal control uses detectors and advanced algorithms to calculate approach delay, progression, and speed in real time. Using results from data analysis, the adaptive system can automatically adjust signal timing through the traffic signal system to combat congestion.

In addition, intelligent transportation system elements such as closed circuit television cameras and changeable message signs may be considered to further enhance corridor operations.



8.4 Beyond Long Term Recommendations

The Coachella Valley region will not be at build-out during Year 2030. The population is projected to continue growing, thus prolonging the growth of vehicle traffic along Ramon Road. Some key ideas are presented for scenarios beyond Year 2030.

8.4.1 Roadway Classification

Medium term recommendations specify Ramon Road bridge widening to the west of Landau Boulevard. Most of Ramon Road is projected to be operating at LOS D or worse by year 2030. The City of Cathedral City should consider the addition of an eight lane road designation in the General Plan. This specification can be the foundation for Ramon Road designs beyond Year 2030. The additional road space assigned to Ramon Road can be used for additional travel lanes, exclusive bus lanes, or rail transit.

8.4.2 Ramon and Date Palm

Year 2030 conditions with long term recommendations showed this intersection to have an average delay of 57 seconds. This results in a level of service on the lower portion of designation “E”. Beyond Year 2030, the south leg of the intersection may be widened to allow a third northbound through lane to decrease average intersection delay. This recommendation supports long mitigation measures presented in the ACCE TIA.

8.4.3 Ramon and Da Vall

Year 2030 conditions with long term recommendations resulted in adequate traffic conditions. However, the northbound left turn bay contained queue spillovers into the northbound through lanes. Beyond Year 2030, the south leg of the intersection may be widened to allow a second northbound left turn lane. This recommendation also supports long mitigation measures presented in the ACCE TIA.



9. Impacts of Recommendations

The recommendations described in **Section 8** were modeled using SimTraffic to compare various scenarios for each time period. Queuing, delay, travel speed, and congestion costs are outlined and compared to quantify expected improvements. Each section details results for each time period: short term, medium term, and long term.

Costs of congestion were quantified for scenario comparisons. Monetary values used the following values:

- 3.5% annual inflation since 1989
- \$1.28/kg of HC
- \$0.0063/kg of CO
- \$1.28/kg of NO_x
- \$2.50/gallon of gas
- \$13.8/vehicle hour

Travel speeds on Ramon Road may be increased up to 17% within the next 2 to 3 years without severely impacting delays on side streets. Medium term conditions can see a reduction in delay and congestion cost per vehicle by about 30%. In addition, fuel efficiency, travel speeds and the number vehicles served can be increased by 20-30%. For long term conditions, delay and congestion cost per vehicle may be reduced by 40%-50%, while travel speeds and fuel efficiency can be increased by 30-70%.



9.1 Short Term Conditions

Table 9.1 Short Term Intersection Performance with Recommendations

Intersection	Avg. Delay (s)	EB Avg. Speed (mph)	WB Avg. Speed (mph)	Comments
-Landau				
2010	34.2	9.1	12.7	• Allows vehicle movement during east leg pedestrian phase
2010 w/ recommendation	32.8	9.3	14.4	
-Cathedral Canyon				
2010	94.0	6.0	10.8	• Reduces EBL block time by 17% • Reduces WBL block time by 24%
2010 w/ recommendation	90.3	7.7	12.4	
-Desert Vista				
2010	2.0	26.7	30.8	• None
2010 w/ short term rec.	12.0	25.7	23.3	
-Date Palm				
2010	39.2	11.3	9.1	• Reduces EBL block time by 90%
2010 w/ recommendation	42.0	13.7	8.9	
-Cathedral Village				
2010	17.8	10.9	35.9	• No comments
2010 w/ recommendation	14.8	15.3	38.1	
-Da Vall				
2010	17.4	27.3	26.0	• No comments
2010 w/ recommendation	16.5	31.2	30.1	

Table 9.2 Short Term Network Performance with Recommendations

Network	Year 2010	Year 2010 w/ recommendations	Change
Total Delay (veh-hr)	80.8	82.3	+1.9%
Delay/Veh (s)	118.1	120.7	+2.2%
Stops/Veh	2.1	2.1	-0.3%
Avg. Speed (mph)	14.6	14.0	-4.4%
Fuel Used (gal)	165.7	165.8	+0.0%
Fuel Eff.(mpg)	10.2	10.2	-0.3%
HC Emissions (g)	2,413	2,416	+0.1%
CO Emissions (g)	101,715	100,533	-1.2%
Nox Emissions (g)	7,305	7,252	-0.7%
Vehicles served (vph)	9,657	9,625	-0.3%
Congestion Cost/Veh	\$0.1597	\$0.1624	+1.7%
Eastbound Ramon Avg. Speed (mph)	15.4	17.8	+15.1%
Westbound Ramon Avg. Speed (mph)	20.0	21.6	+7.8%



9.2 Medium Term Conditions

Table 9.3 Medium Term Intersection Performance with Recommendations
(Hourly estimate during peak period)

Intersection	Avg. Delay (s)	EB Avg. Speed (mph)	WB Avg. Speed (mph)	Comments
-Landau 2020 2020 w/ short term rec. 2020 w/ med. term rec.	36.4 37.4 27.1	7.4 6.8 12.6	13.8 15.7 16.1	• Reduces EBL block time by 87%
-Cathedral Canyon 2020 2020 w/ short term rec. 2020 w/ med. term rec.	134.2 118.7 107.3	4.0 5.6 5.3	10.0 11.6 15.0	• Reduces EBL block time by 11% • Reduces WBL block time by 59% • Reduces WBT back up by 61%
-Desert Vista 2020 2020 w/ short term rec. 2020 w/ med. term rec.	4.5 7.9 11.1	21.1 23.9 21.2	30.7 28.4 30.0	• None
-Date Palm 2020 2020 w/ short term rec. 2020 w/ med. term rec.	110.8 116.6 53.0	5.0 9.4 11.2	5.6 5.5 9.4	• Eliminates SBT, EBT back ups • Eliminates SBL blockage • Eliminates EBL blockage • Eliminates WBL blockage
-Cathedral Village 2020 2020 w/ short term rec. 2020 w/ med. term rec.	30.4 41.6 24.8	9.2 9.6 17.7	26.3 24.4 28.8	• Reduces EBL block time by 25%
-Da Vall 2020 2020 w/ short term rec. 2020 w/ med. term rec.	32.2 34.5 31.9	23.9 22.8 19.2	23.3 25.0 21.1	• No comments

Table 9.4 Medium Term Network Performance with Recommendations

(Hourly estimate during peak period)

Network	Year 2020	Year 2020 w/ short term rec.	Year 2020 w/ med. term rec.	Change
Total Delay (veh-hr)	168.1	164.5	108.8	-35.3%
Delay/Veh (s)	213.6	207.3	124.0	-42.0%
Stops/Veh	2.6	2.3	2.2	-13.8%
Avg. Speed (mph)	11.0	12.0	13.8	+25.6%
Fuel Used (gal)	237.0	235.3	213.5	-9.9%
Fuel Eff.(mpg)	8.4	8.6	10.7	+27.2%
HC Emissions (g)	3,521	3,575	2,838	-19.4%
CO Emissions (g)	118,515	124,238	114,511	-3.4%
Nox Emissions (g)	9,120	9,015	12,247	+34.3%
Vehicles served	10,739	11,075	12,232	+13.9%
Congestion Cost/Veh	\$0.2727	\$0.2596	\$0.1680	-38.4%
Eastbound Ramon Avg. Speed (mph)	11.0	13.8	14.8	+35.1%
Westbound Ramon Avg. Speed (mph)	16.8	17.8	20.4	+21.2%



9.3 Long Term Conditions

Table 9.5 Long Term Intersection Performance with Recommendations

Intersection	Avg. Delay (s)	EB Avg. Speed (mph)	WB Avg. Speed (mph)	Comments
-Landau 2030 2030 w/ short term rec. 2030 w/ med. term rec. 2030 w/ long term rec.	50.2 45.5 43.4 31.0	5.4 5.5 7.9 10.6	10.4 13.3 15.0 15.9	• Reduces EBL block time by 25% • Eliminates SBL blockage • Reduces WBL block time by 37%
-Cathedral Canyon 2030 2030 w/ short term rec. 2030 w/ med. term rec. 2030 w/ long term rec.	116.2 129.3 101.4 27.4	5.6 7.3 6.4 14.3	11.4 11.6 14.8 19.7	• Eliminates SBT, EBT back ups • Eliminates NBL blockage • Eliminates SBL blockage • Eliminates WBL blockage • Reduces EBL block time by 44%
-Alvera 2030 2030 w/ long term rec.	9.7 17.5	37.1 19.6	15.9 12.9	• None
-Desert Vista 2030 2030 w/ short term rec. 2030 w/ med. term rec. 2030 w/ long term rec.	4.5 10.2 15.9 15.9	21.3 23.2 19.4 34.0	27.7 26.1 25.2 20.3	• None
-Date Palm 2030 2030 w/ short term rec. 2030 w/ med. term rec. 2030 w/ long term rec.	108.2 116.7 60.1 57.6	4.4 9.0 11.5 12.0	6.6 7.0 10.4 11.6	• Eliminates SBT, NBT back ups • Eliminates EBT, WBT back ups • Reduces SBL block time by 68% • Reduces EBL block time by 97% • Reduces WBL block time by 94%
-Cathedral Village 2030 2030 w/ short term rec. 2030 w/ med. term rec. 2030 w/ long term rec.	46.5 52.9 37.9 27.7	8.1 6.4 13.1 16.4	21.5 17.7 19.9 24.6	• Eliminates EBL blockage • Eliminates WBL blockage
-Da Vall 2030 2030 w/ short term rec. 2030 w/ med. term rec. 2030 w/ long term rec.	69.6 82.2 40.9 40.6	20.1 15.7 18.0 18.3	15.1 16.6 16.8 19.6	• Reduces NBL block time by 35% • Eliminates WBL blockage

Table 9.6 Long Term Network Performance with Recommendations

Corridor Network	Year 2030	Year 2030 w/ short term rec.	Year 2030 w/ med. term rec.	Year 2030 w/ long term rec.	Change
Total Delay (veh-hr)	201.9	215.5	148.2	108.9	-46.1%
Delay/Veh (s)	224.9	243.3	150.0	103.9	-53.8%
Stops/Veh	2.6	2.4	2.3	2.2	-16.1%
Avg. Speed (mph)	10.7	11.0	12.8	15.6	+45.3%
Fuel Used (gal)	274.0	283.3	256.3	253.9	-7.3%
Fuel Eff.(mpg)	8.3	8.2	10.0	10.8	+30.5%
HC Emissions (g)	4,071	4,352	3,447	3,439	-15.5%
CO Emissions (g)	129,216	130,326	126,539	147,584	+14.2%
Nox Emissions (g)	10,262	10,292	10,297	11,628	+13.3%
Vehicles served (vph)	12,230	12,188	13,812	14,729	+20.4%
Congestion Cost/Veh	\$0.2853	\$0.3037	\$0.1958	\$0.1465	-48.7%
Eastbound Ramon Avg. Speed (mph)	10.2	12.2	13.5	18.3	+79.7%
Westbound Ramon Avg. Speed (mph)	15.1	15.8	17.9	21.4	+41.9%



10. Conclusion

The study corridor contains a 2.1 mile length of Ramon Road within Cathedral City. The PM peak period serves the largest vehicle demand throughout the day. A variety of operational components were reviewed including: driveway, left turn bays, bus stops, signal timing, land use, and safety.

A variety of recommendations were created to contend with issues. Some of these include bus stop relocations, the installation of delineators to prevent unsafe maneuvering, as well as infrastructure improvements. In addition, phased recommendations were formulated to improve the level of service along the corridor.

Short Term Year 2010

- Install delineators or Texas dots to prevent unsafe vehicle maneuvering
- Landau: Overlap east leg pedestrian phase and southbound right turn phases with eastbound left turn phase
- Whispering Palms: Add striping along Whispering Palms
- Relocate bus stops from Sky Blue Water to Whispering Palms
- Cathedral Canyon: Reduce all-red times and lengthen westbound left turn lane
- Desert Vista: Add signal poles, implement protected left turns on Ramon Road
- West of Date Palm: Shift left turn bays west and construct north side bus turnout
- Date Palm: Convert eastbound right turn lane into shared through/right lane
- Cathedral Village to Outdoor Resorts: Widen road and stripe Ramon to 6 lanes
- Upgrade traffic controllers and install interconnect between Date Palm and Da Vall
- Synchronize signals

Medium Term Year 2020

- Landau: Widen bridge to 6 lanes and add a second eastbound left turn lane
- Whispering Palms: Construct bus turnouts for bus stops
- Cathedral Canyon: Add a second westbound left turn lane and repave Maravilla approach
- Date Palm: Dual left turns for all approaches and repave northeast side of intersection
- Da Vall: Repave and add a second through lane for north and south approaches
- Install interconnect between Landau and Date Palm
- Implement a traffic signal system

Long Term Year 2030

- Landau: Add a third eastbound and westbound lane
- Maravilla and Alvera: Remove signal at Maravilla and install and synchronize signal at Alvera
- Da Vall: Add westbound right turn lane

Table 10.1 outlines the recommended lane configurations for specific intersections. Impacts of phased recommendations for each scenario were detailed in **Section 9**.

Table 10.1 Recommended Lane Configurations

INTERSECTION	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Ramon/Landau*												
-2006	0.0	0.0	0.0	2.0	0.0	1.0	1.0	2.0	0.0	0.0	2.0	1.0
-2010^	0.0	0.0	0.0	2.0	0.0	1.0	1.0	2.0	0.0	0.0	2.0	1.0
-2020	0.0	0.0	0.0	2.0	0.0	1.0	2.0	2.0	0.0	0.0	2.0	1.0
-2030	1.0	0.5	0.5	1.5	0.5	1.0	2.0	2.5	0.5	1.0	3.0	1.0
Ramon/Maravilla-Cathedral Canyon*												
-2006	1.5	0.5	1.0	0.5	0.5	1.0	1.0	2.5	0.5	1.0	2.5	0.5
-2010	1.5	0.5	1.0	0.5	0.5	1.0	1.0	2.5	0.5	1.0	2.5	0.5
-2020^	1.5	0.5	1.0	0.5	0.5	1.0	1.0	2.5	0.5	2.0	2.5	0.5
-2030	1.5	0.5	1.0	0.0	0.0	1.0	1.0	2.5	0.5	2.0	2.5	0.5
Ramon/Ximino												
-2006	0.0	0.0	0.0	1.0	0.0	1.0	1.0	3.0	0.0	0.0	2.5	0.5
-2010	0.0	0.0	0.0	1.0	0.0	1.0	1.0	3.0	0.0	0.0	2.5	0.5
-2020	0.0	0.0	0.0	1.0	0.0	1.0	1.0	3.0	0.0	0.0	2.5	0.5
-2030	0.0	0.0	0.0	0.0	0.0	1.0	0.0	3.0	0.0	0.0	2.5	0.5
Ramon/Alvera-Canyon Vista												
-2006	0.0	0.0	1.0	0.0	0.0	1.0	0.0	2.5	0.5	1.0	2.5	0.5
-2010	0.0	0.0	1.0	0.0	0.0	1.0	0.0	2.5	0.5	1.0	2.5	0.5
-2020	0.0	0.0	1.0	0.0	0.0	1.0	0.0	2.5	0.5	1.0	2.5	0.5
-2030*	1.0	0.5	0.5	1.0	0.5	0.5	1.0	2.5	0.5	1.0	2.5	0.5
Ramon/Date Palm*												
-2006	2.0	2.0	1.0	1.0	2.0	1.0	1.0	2.0	1.0	1.0	2.5	0.5
-2010	2.0	2.0	1.0	1.0	2.0	1.0	1.0	2.5	0.5	1.0	2.5	0.5
-2020	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.5	0.5	2.0	2.5	0.5
-2030	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.5	0.5	2.0	2.5	0.5
Ramon/Cathedral Village*												
-2006	1.5	0.5	1.0	1.0	0.5	0.5	1.0	2.0	1.0	1.0	2.5	0.5
-2010	1.5	0.5	1.0	1.0	0.5	0.5	1.0	3.0	1.0	1.0	2.5	0.5
-2020	1.5	0.5	1.0	1.0	0.5	0.5	1.0	3.0	1.0	1.0	2.5	0.5
-2030	1.5	0.5	1.0	1.0	0.5	0.5	1.0	3.0	1.0	1.0	2.5	0.5
Ramon/Da Vall*												
-2006	1.0	1.0	1.0	1.0	0.5	0.5	1.0	2.5	0.5	1.0	2.5	0.5
-2010	1.0	1.0	1.0	1.0	0.5	0.5	1.0	2.5	0.5	1.0	2.5	0.5
-2020	1.0	2.0	1.0	1.0	1.5	0.5	1.0	2.5	0.5	1.0	2.5	0.5
-2030	1.0	2.0	1.0	1.0	1.5	0.5	1.0	2.5	0.5	1.0	3.0	1.0

*signalized intersection

0.5 lane indicates the lane is shared with an adjacent lane



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APPENDIX A: SYNCHRO

Existing lane geometry, turning bay lengths, signal phasing, signal timing, and turning movement counts were used to create a Synchro network. An aerial photograph was used as a reference background for accurate link lengths.

Ramon and Maravilla-Cathedral Canyon

This intersection is a dog-leg offset intersection, with the Maravilla centerline approximately 110 feet west of the Cathedral Canyon centerline. To properly model this intersection within Synchro, an angled 4 leg intersection was used. Dog-leg type geometry could have been used, but there was no method to control destinations of north or south left-turn traffic. An angled 4 leg intersection permits the simulation of north and south through traffic.

Figure A-1 Ramon and Maravilla-Cathedral Canyon Synchro Model



Intersection Configuration

Default lane widths (12 feet) and saturation flow rates (1900vph) were used for modeling purposes. Using default Highway Capacity Manual calculations, lane saturation flow was adjusted based on utilization, speed, and various factors described in the 2000 HCM. Turning bay lengths were input from intersection CAD plans or aerial photo estimates.

Peak Hour Factor (PHF)

The default PHF within Synchro is 0.92, indicating the peak hour volume rate is 92% of the peak 15-minute volume rate (adjusted to an hourly rate). For increased accuracy, PHF is adjusted for each turning movement to represent the peak 15-minute intersection volumes for existing conditions. The peaking factor for future years is unknown, therefore a PHF of 0.95 was assumed for future scenarios.



APPENDIX B: SIM TRAFFIC

B.1 NETWORK MODELING

Once intersection lane configuration, geometry, and turning counts were entered into Synchro, specific intersections were removed from the network prior to Sim Traffic micro-simulation. This eliminated extremely short links from being modeled, and increases the accuracy of queue and delay results. In addition, all removed intersections were right-turn in / right-turn out and had less than 100 vehicles entering or exiting the side streets. The following intersections were removed:

- Ramon and La Paloma
- Ramon and La Gaviota
- Ramon and Sky Blue Water
- Ramon and Mundo
- Ramon and Pueblo
- Ramon and Valdez
- Ramon and Monte Vista
- Ramon and Juarez
- Ramon and Aurora Vista
- Ramon and Cielo Vista
- Ramon and Los Ninos
- Ramon and Memorial

These intersections not included in SimTraffic modeling were analyzed using Synchro HCM un-signalized analysis. Although this analysis type does not account for initial queue delay, the low side street volumes signify intersection level of service will not typically differ between Synchro and micro simulation analyses.

In volume and level of service tables, a conservative delay of 2.5 seconds to 3.0 seconds was assumed for intersections not modeled using micro simulation. Although this is higher than Synchro HCM un-signalized analyses, delays are not expected to exceed 10 seconds per vehicle, thus keeping intersection level of service at Level A.



B.2 NETWORK PARAMETERS

Adjustments were made to the default Sim Traffic model parameters to increase real-world representation of the vehicles on Ramon Road. Vehicle, driver, and simulation interval parameters were adjusted, and are detailed in **Table B-1**, **Table B-2**, and **Table B-3**.

Table B-1 Sim Traffic Vehicle Parameters

Vehicle Type	1	2	3	7	8	9	10
Vehicle Name	Car1	Car2	Truck SU	Bus	Carpool1	Carpool2	Trailer
Vehicle Occurrence (%)	0.65	0.20	0.03	0.01	0.03	0.02	0.06
Max Speed (mph)	75	75	75	65	75	75	65
Max Acceleration (ft/s²)	10	9	5	5	10	9	6
Vehicle Length (ft)	16	14	35	40	16	15	30
Vehicle Width (ft)	6	6	8	8	6	6	7
Vehicle Fleet	Car	Car	Trk	Bus	Pool	Pool	Car
Occupancy (# people)	1.3	1.3	1.2	15	3.5	3.5	4.5
Graphics Shape	Car	Car	Truck	Bus	Car	Car	Car

Table B-2 Sim Traffic Driver Parameter Adjustments

Driver Types	Positioning Advantage (veh)	Optional Advantage (veh)	Mandatory Dist Adj (%)	Positioning Dist Adj (%)
1	15.0	1.5	200	150
2	12.0	1.3	170	140
3	10.0	1.2	150	130
4	8.0	1.1	135	120
5	5.0	1.0	110	110
6	2.0	0.9	90	95
7	2.0	0.8	80	90
8	2.0	0.7	70	80
9	1.2	0.6	65	70
10	1.2	0.5	50	60



Intervals

Seed interval duration was set to 5 minutes. This was calculated based on suggested FHWA Microsimulation Guidelines of two times the corridor free flow travel time. Assuming a 40 mph free flow speed, it takes approximately 2.6 minutes to travel the 2.1 mile Ramon Road corridor. This results in a 5 minute seed time. PHF was adjusted during the seed time, and recording was performed for 15 minutes to simulate the peak 15 minute period. Refer to **Table B-3**.

Table B-3 Sim Traffic Interval Parameters

Intervals	0	1
Interval Name	Seeding	Recording
Start Time(hhmm)	04:55P	05:00P
Duration (min)	5	15
Record Statistics	No	Yes
Growth Factor Adjust	Yes	Yes
PHF Adjust	Yes	Yes
AntiPHF Adjust	No	No
Percentile Adjust	No	No
Percentile Adjust (%ile)	-	-
Timing Plan ID	-	-
Data Start Time (hhmm)	-	-

B.3 VARIABILITY OF RESULTS

Due to the short links and multiple side streets along the Ramon Road corridor, queue lengths must be modeled within great precision and accuracy. Following the FHWA Microsimulation Guidelines, the following steps were performed:

- A confidence interval of +/- one vehicle was selected (assuming one vehicle is 20 feet, this is approximately 40 feet)
- Ten initial simulation runs were used to estimate the maximum standard deviation of various approaches for each base scenario (assuming no pedestrians)
- 100 simulation runs were completed for each scenario
- A student t-statistic was calculated and used to determine the alpha (probability) value
- The probability of queues within 40 feet was then estimated

Detailed worksheets are provided in **Table B-4** to **Table B-9**. For future conditions, eastbound queues at Date Palm frequently backed up to Rancho Vista, thus eastbound queues were measured at this intersection. Based on variances of each scenario, probabilities are calculated to evaluate accuracy of queue lengths. Using the maximum simulated variance, estimated queue lengths from micro-simulation are within 90% of the reported averages for all scenarios.



Table B-4 Existing AM Peak Queue Confidence

Intersection	Landau		Maravilla		Date Palm				Cathedral Village		Da Vall	
Run	EBT1	WBT1	EBT1	WBT1	EBT1	WBT1	NBT1	SBT1	EBT1	WBT1	EBT1	WBT1
1	44	144	149	112	107	101	79	204	87	51	136	101
2	71	138	160	208	157	87	76	170	80	47	119	83
3	45	181	139	145	118	90	90	172	89	73	130	81
4	59	145	172	167	133	85	92	208	115	59	164	80
5	54	187	199	288	109	86	88	242	98	35	150	65
6	33	175	160	104	197	71	62	197	55	33	131	63
7	86	183	166	180	166	87	85	180	101	105	121	89
8	85	151	204	277	129	67	77	194	117	46	121	70
9	45	185	166	128	272	89	86	349	90	53	130	78
10	55	118	208	187	131	94	71	193	95	64	123	76
Std Dev.	17.85	24.39	23.63	63.60	50.56	10.01	9.41	52.74	17.72	20.93	14.39	11.29

Confidence Interval: 40
 # of runs: 100
 Degrees of freedom: 99
 Resulting sample Std Dev: 63.60
 Resulting t-stat: 3.14
 Resulting alpha: 0.0011
 Resulting probability of
 simulated queue length: 99.8%

Table B-5 Existing MD Peak Queue Confidence

Intersection	Landau		Maravilla		Date Palm				Cathedral Village		Da Vall	
Run	EBT1	WBT1	EBT1	WBT1	EBT1	WBT1	NBT1	SBT1	EBT1	WBT1	EBT1	WBT1
1	83	130	189	70	84	84	69	81	114	113	76	92
2	62	136	204	143	105	82	93	78	109	107	91	101
3	66	175	167	135	108	79	58	91	98	111	106	94
4	46	111	180	132	105	97	80	78	124	158	96	134
5	42	125	215	103	105	86	101	95	112	106	77	106
6	51	154	207	128	129	91	88	88	134	103	96	103
7	48	131	173	133	103	98	83	66	64	109	59	93
8	33	143	196	106	130	87	83	68	123	96	94	101
9	41	156	207	103	150	114	113	92	77	118	119	108
10	21	123	200	128	117	97	99	73	80	130	99	129
Std Dev.	17.58	18.89	16.02	22.19	18.51	10.34	15.98	10.23	23.07	17.60	16.92	14.47

Confidence Interval: 40
 # of runs: 100
 Degrees of freedom: 99
 Resulting sample Std Dev: 23.07
 Resulting t-stat: 8.67
 Resulting alpha: 0.0001
 Resulting probability of
 simulated queue length: 100.0%



Table B-6 Existing PM Peak Queue Confidence

Intersection	Landau		Maravilla		Date Palm				Cathedral Village		Da Vall	
Run	EBT1	WBT1	EBT1	WBT1	EBT1	WBT1	NBT1	SBT1	EBT1	WBT1	EBT1	WBT1
1	293	218	350	417	154	142	184	107	131	77	130	99
2	270	208	336	385	203	152	326	156	80	49	92	115
3	226	242	350	355	212	147	267	141	82	52	97	126
4	236	193	326	379	257	169	188	125	109	70	87	141
5	443	241	344	440	236	148	181	126	91	57	97	105
6	362	210	369	487	223	164	184	153	109	63	87	102
7	156	187	354	471	177	227	280	104	74	75	88	147
8	344	180	342	317	287	163	283	128	137	110	106	155
9	334	154	369	482	189	153	302	156	84	67	82	103
10	230	185	360	424	184	154	277	120	87	63	96	122
Std Dev.	83.28	27.61	13.78	56.68	39.90	24.37	56.50	19.22	22.04	17.28	13.73	20.32

Confidence Interval: 40
 # of runs: 100
 Degrees of freedom: 99
 Resulting sample Std Dev: 83.28
 Resulting t-stat: 2.40
 Resulting alpha: 0.0091
 Resulting probability of
 simulated queue length: 98.2%

Table B-7 Short Term PM Peak Queue Confidence

Intersection	Landau		Maravilla		Date Palm				Cathedral Village		Da Vall	
Run	EBT1	WBT1	EBT1	WBT1	EBT1	WBT1	NBT1	SBT1	EBT1	WBT1	EBT1	WBT1
1	370	241	490	455	267	164	205	131	155	104	99	105
2	621	208	475	422	341	133	325	175	130	105	88	72
3	550	180	502	351	200	193	306	142	203	93	86	74
4	419	270	550	402	247	188	176	149	186	80	79	87
5	447	251	625	445	306	214	194	182	145	98	62	82
6	411	379	655	450	204	177	334	152	124	60	104	65
7	719	208	504	450	269	158	261	154	123	76	72	67
8	409	202	539	447	250	246	339	160	160	109	91	70
9	602	327	411	457	214	218	189	152	123	95	91	96
10	529	244	578	428	283	186	270	150	172	88	81	82
Std Dev.	114.61	61.29	72.72	32.92	45.24	32.64	64.67	14.83	28.34	15.18	12.42	13.05

Confidence Interval: 40
 # of runs: 100
 Degrees of freedom: 99
 Resulting sample Std Dev: 114.61
 Resulting t-stat: 1.74
 Resulting alpha: 0.0425
 Resulting probability of
 simulated queue length: 91.5%

Table B-8 Medium Term PM Peak Queue Confidence
(Assuming existing road configuration)

Intersection	Landau		Maravilla		Rancho Vista	Date Palm			Cathedral Village		Da Vall	
Run	EBT1	WBT1	EBT3	WBT3	EBT1	WBT1	NBT1	SBT1	EBT1	WBT1	EBT1	WBT1
1	438	290	593	310	144	344	768	482	346	146	163	141
2	823	245	617	288	279	456	452	437	299	168	163	161
3	574	232	585	241	400	425	730	368	369	175	148	125
4	600	254	536	467	234	441	775	504	269	237	140	120
5	743	289	678	361	130	400	704	320	228	166	187	136
6	536	347	643	411	103	440	570	411	261	134	184	132
7	715	182	604	372	324	442	674	482	314	430	202	147
8	634	259	673	363	421	427	790	385	320	210	123	128
9	741	250	582	335	332	457	713	480	248	201	149	124
10	582	282	575	363	405	442	700	414	278	178	183	156
Std Dev.	115.89	43.38	44.90	63.15	119.68	33.63	103.80	59.62	44.55	84.81	24.66	13.99

Confidence Interval: 40
 # of runs: 100
 Degrees of freedom: 99
 Resulting sample Std Dev: 119.68
 Resulting t-stat: 1.67
 Resulting alpha: 0.049
 Resulting probability of
 simulated queue length: 90.2%

Table B-9 Long Term PM Peak Queue Confidence
(Assuming existing road configuration)

Intersection	Landau		Maravilla		Rancho Vista	Date Palm			Cathedral Village		Da Vall	
Run	EBT1	WBT1	EBT3	WBT3	EBT1	WBT1	NBT1	SBT1	EBT1	WBT1	EBT1	WBT1
1	806	480	374	367	388	436	756	441	294	426	256	324
2	587	418	522	277	292	424	808	488	280	403	299	305
3	654	379	498	363	308	396	774	506	285	393	294	351
4	787	388	491	359	459	470	749	413	266	471	227	348
5	657	548	589	349	343	428	644	494	325	433	240	342
6	714	447	515	352	384	483	670	363	305	504	200	349
7	671	493	652	342	434	408	597	386	323	328	235	348
8	733	504	517	316	292	383	742	489	301	333	226	334
9	710	461	430	329	368	377	813	505	339	224	239	346
10	692	438	662	483	354	483	743	494	349	462	220	349
Std Dev.	64.82	52.85	89.99	52.80	56.70	39.35	70.67	53.22	26.81	83.08	31.47	14.78

Confidence Interval: 40
 # of runs: 100
 Degrees of freedom: 99
 Resulting sample Std Dev: 89.99
 Resulting t-stat: 2.22
 Resulting alpha: 0.0143
 Resulting probability of
 simulated queue length: 97.1%



APPENDIX C: MODELING OUTPUT

Most intersections were simulated using SimTraffic software. As mentioned in **Appendix A**, select unsignalized intersections were not included in micro-simulation runs to accurately estimate queues.

SimTraffic modeling outputs are presented in this section. Modeled scenarios assume no pedestrian demand, however delay and travel times presented within the report are adjusted for pedestrian activity. An appendix legend is provided to identify modeling results from each scenario.

Appendix Legend:

2006 AM PEAK = Existing AM volumes, existing lane configurations, no pedestrians
2006 MD PEAK = Existing MD volumes, existing lane configurations, no pedestrians
2006 PM PEAK = Existing PM volumes, existing lane configurations, no pedestrians
2010_R0_NOPED = Year 2010 volumes, existing lane configurations, no pedestrians
2020_R0_NOPED = Year 2020 volumes, existing lane configurations, no pedestrians
2030_R0_NOPED = Year 2030 volumes, existing lane configurations, no pedestrians
2010_R1_NOPED = Year 2010 volumes, short term recommendations, no pedestrians
2020_R2_NOPED = Year 2020 volumes, medium term recommendations, no pedestrians
2030_R3_NOPED = Year 2030 volumes, long term recommendations, no pedestrians

Summary of All Intervals

Run Number	1	10	100	11	12	13	14	15
Start Time	7:15	7:15	7:15	7:15	7:15	7:15	7:15	7:15
End Time	7:35	7:35	7:35	7:35	7:35	7:35	7:35	7:35
Total Time (min)	20	20	20	20	20	20	20	20
Time Recorded (min)	15	15	15	15	15	15	15	15
# of Intervals	2	2	2	2	2	2	2	2
# of Recorded Intvls	1	1	1	1	1	1	1	1
Vehs Entered	2555	2619	2612	2632	2626	2629	2658	2597
Vehs Exited	2491	2501	2538	2503	2516	2548	2512	2537
Starting Vehs	270	272	288	244	238	271	230	272
Ending Vehs	334	390	362	373	348	352	376	332
Denied Entry Before	1	1	0	4	4	8	2	2
Denied Entry After	23	5	26	33	22	19	12	11
Travel Distance (mi)	1485	1499	1437	1487	1465	1478	1479	1456
Travel Time (hr)	82.5	83.2	88.2	87.6	87.5	87.3	86.6	87.2
Total Delay (hr)	38.8	38.9	45.4	43.5	43.9	43.2	42.8	43.7
Total Stops	4010	4047	4277	4219	4244	4167	4267	4210
Fuel Used (gal)	130.9	132.5	132.2	133.4	132.1	133.4	133.2	133.1

Interval #0 Information Seeding

Start Time	7:15
End Time	7:20
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:20							
End Time	7:35							
Total Time (min)	15							
Volumes adjusted by PHF, Growth Factors.								
Run Number	1	10	100	11	12	13	14	15
Vehs Entered	2555	2619	2612	2632	2626	2629	2658	2597
Vehs Exited	2491	2501	2538	2503	2516	2548	2512	2537
Starting Vehs	270	272	288	244	238	271	230	272
Ending Vehs	334	390	362	373	348	352	376	332
Denied Entry Before	1	1	0	4	4	8	2	2
Denied Entry After	23	5	26	33	22	19	12	11
Travel Distance (mi)	1485	1499	1437	1487	1465	1478	1479	1456
Travel Time (hr)	82.5	83.2	88.2	87.6	87.5	87.3	86.6	87.2
Total Delay (hr)	38.8	38.9	45.4	43.5	43.9	43.2	42.8	43.7
Total Stops	4010	4047	4277	4219	4244	4167	4267	4210
Fuel Used (gal)	130.9	132.5	132.2	133.4	132.1	133.4	133.2	133.1

1: Ramon & Landau Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.7	0.3	1.9	0.1	0.8	1.1	4.7
Delay / Veh (s)	37.1	7.2	26.1	3.7	25.1	26.4	21.8
Stop Delay (hr)	0.6	0.2	1.3	0.0	0.7	0.8	3.6
St Del/Veh (s)	32.1	4.5	17.7	2.1	21.4	20.9	16.4
Total Stops	59	40	204	33	89	164	589
Stop/Veh	0.92	0.28	0.78	0.59	0.80	1.14	0.75
Travel Dist (mi)	6.4	14.7	30.2	6.4	16.2	21.1	94.9
Travel Time (hr)	0.9	0.7	2.7	0.3	1.4	1.9	7.9
Avg Speed (mph)	8	23	11	23	12	11	12
Fuel Used (gal)	0.8	1.2	2.3	0.3	1.3	1.6	7.7
Fuel Eff. (mpg)	7.6	11.8	13.1	21.2	12.2	12.8	12.4
HC Emissions (g)	3	5	7	1	4	5	24
CO Emissions (g)	95	271	111	38	130	142	786
NOx Emissions (g)	8	16	15	2	11	10	62
Vehicles Entered	64	145	265	56	111	146	787
Vehicles Exited	64	145	262	56	110	142	779
Hourly Exit Rate	256	580	1048	224	440	568	3116
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

2: Ramon & Candlewood Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Total Delay (hr)	0.1	0.0	0.0	0.1	0.0	0.2
Delay / Veh (s)	1.4	1.2	7.4	0.6	5.1	1.1
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	0.1	0.2	5.6	0.0	5.1	0.2
Total Stops	1	0	6	0	8	15
Stop/Veh	0.00	0.00	0.67	0.00	1.00	0.03
Travel Dist (mi)	33.0	0.5	0.5	16.7	0.4	51.0
Travel Time (hr)	1.1	0.0	0.0	0.5	0.0	1.6
Avg Speed (mph)	31	25	13	35	12	31
Fuel Used (gal)	3.1	0.0	0.0	0.8	0.0	4.1
Fuel Eff. (mpg)	10.5	11.9	16.3	19.7	15.0	12.5
HC Emissions (g)	13	0	0	3	0	16
CO Emissions (g)	816	10	2	130	2	960
NOx Emissions (g)	47	1	0	9	0	58
Vehicles Entered	263	4	9	296	8	580
Vehicles Exited	263	4	9	296	8	580
Hourly Exit Rate	1052	16	36	1184	32	2320
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0

4: Ramon & Shift Sands Performance by movement

Movement	EBT	EBR	WBT	NBR	All
Total Delay (hr)	0.0	0.0	0.3	0.0	0.3
Delay / Veh (s)	0.6	0.2	2.3	5.3	1.7
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	0.0	0.0	0.1	5.2	0.2
Total Stops	0	0	1	9	10
Stop/Veh	0.00	0.00	0.00	1.00	0.01
Travel Dist (mi)	14.8	0.5	24.6	0.4	40.3
Travel Time (hr)	0.4	0.0	1.0	0.0	1.5
Avg Speed (mph)	34	22	26	12	28
Fuel Used (gal)	0.6	0.0	3.8	0.0	4.5
Fuel Eff. (mpg)	23.0	27.3	6.5	14.7	9.0
HC Emissions (g)	2	0	15	0	18
CO Emissions (g)	94	1	971	2	1067
NOx Emissions (g)	6	0	64	0	71
Vehicles Entered	262	8	408	9	687
Vehicles Exited	262	8	407	9	686
Hourly Exit Rate	1048	32	1628	36	2744
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

6: Ramon & Wh. Palms Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.2	0.5	0.0	0.1	1.3	0.0	0.3	0.1	0.0	0.4	0.1	0.1
Delay / Veh (s)	30.5	8.0	5.4	25.9	13.5	8.7	26.9	17.6	7.5	29.1	19.0	10.3
Stop Delay (hr)	0.2	0.3	0.0	0.1	0.8	0.0	0.2	0.0	0.0	0.4	0.1	0.1
St Del/Veh (s)	27.9	4.5	3.8	22.6	8.1	6.2	23.5	13.9	6.3	25.2	14.8	8.4
Total Stops	19	88	5	8	192	6	32	8	12	45	11	21
Stop/Veh	0.95	0.38	0.50	0.89	0.55	0.60	0.89	0.73	0.75	0.90	0.79	0.78
Travel Dist (mi)	1.3	14.9	0.7	0.5	21.0	0.6	3.1	1.0	1.4	3.7	1.0	2.0
Travel Time (hr)	0.2	0.9	0.0	0.1	1.8	0.1	0.4	0.1	0.1	0.5	0.1	0.2
Avg Speed (mph)	6	16	15	6	11	12	9	11	15	8	10	13
Fuel Used (gal)	0.2	1.0	0.0	0.1	1.8	0.0	0.4	0.1	0.1	0.5	0.1	0.2
Fuel Eff. (mpg)	8.5	14.3	17.5	8.5	11.6	14.0	8.4	10.8	13.6	7.0	9.5	11.6
HC Emissions (g)	0	3	0	0	5	0	1	0	0	2	0	1
CO Emissions (g)	8	120	2	3	114	3	35	11	12	44	12	18
NOx Emissions (g)	1	10	0	1	14	0	3	1	1	5	1	2
Vehicles Entered	20	235	10	10	348	11	36	11	16	51	14	27
Vehicles Exited	20	234	10	9	344	10	36	11	16	50	14	27
Hourly Exit Rate	80	936	40	36	1376	40	144	44	64	200	56	108
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

6: Ramon & Wh. Palms Performance by movement

Movement	All
Total Delay (hr)	3.0
Delay / Veh (s)	13.7
Stop Delay (hr)	2.1
St Del/Veh (s)	9.6
Total Stops	447
Stop/Veh	0.57
Travel Dist (mi)	51.2
Travel Time (hr)	4.6
Avg Speed (mph)	12
Fuel Used (gal)	4.5
Fuel Eff. (mpg)	11.3
HC Emissions (g)	13
CO Emissions (g)	382
NOx Emissions (g)	40
Vehicles Entered	789
Vehicles Exited	781
Hourly Exit Rate	3124
Denied Entry Before	0
Denied Entry After	0

7: Ramon & Sky Blue Water Performance by movement

Movement	EBT	EBR	WBT	WBR	NBR	SBR	All
Total Delay (hr)	0.1	0.0	0.1	0.0	0.0	0.0	0.3
Delay / Veh (s)	1.8	1.3	1.1	0.1	4.8	7.4	1.5
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	0.2	0.2	0.0	0.0	4.7	7.3	0.2
Total Stops	0	0	0	0	6	4	10
Stop/Veh	0.00	0.00	0.00	0.00	1.00	1.00	0.02
Travel Dist (mi)	16.9	0.3	12.9	0.2	0.3	0.3	30.8
Travel Time (hr)	0.6	0.0	0.4	0.0	0.0	0.0	1.2
Avg Speed (mph)	26	19	30	19	12	13	27
Fuel Used (gal)	2.4	0.0	0.5	0.0	0.0	0.0	2.9
Fuel Eff. (mpg)	7.0	10.9	28.1	27.0	15.8	16.1	10.4
HC Emissions (g)	11	0	2	0	0	0	13
CO Emissions (g)	694	5	39	0	1	1	740
NOx Emissions (g)	40	0	3	0	0	0	44
Vehicles Entered	280	5	351	4	6	4	650
Vehicles Exited	279	5	349	4	6	4	647
Hourly Exit Rate	1116	20	1396	16	24	16	2588
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

8: Ramon & Roundup Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Total Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.2
Delay / Veh (s)	0.6	0.4	7.1	1.1	3.9	1.0
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	0.0	0.1	5.1	0.0	3.8	0.1
Total Stops	0	0	7	0	3	10
Stop/Veh	0.00	0.00	0.70	0.00	1.00	0.02
Travel Dist (mi)	8.2	0.8	0.8	25.6	0.1	35.5
Travel Time (hr)	0.3	0.0	0.0	0.8	0.0	1.1
Avg Speed (mph)	33	18	16	33	13	32
Fuel Used (gal)	0.6	0.0	0.0	1.3	0.0	2.0
Fuel Eff. (mpg)	13.7	21.7	18.0	19.0	17.1	17.5
HC Emissions (g)	2	0	0	5	0	7
CO Emissions (g)	139	2	3	203	0	348
NOx Emissions (g)	8	0	0	15	0	24
Vehicles Entered	223	22	10	358	3	616
Vehicles Exited	223	22	10	355	3	613
Hourly Exit Rate	892	88	40	1420	12	2452
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0

10: Ramon & Pueblo Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Total Delay (hr)	0.1	0.3	0.0	0.0	0.4
Delay / Veh (s)	1.4	2.5	1.9	6.5	2.1
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	0.0	0.1	0.1	6.3	0.1
Total Stops	0	0	0	6	6
Stop/Veh	0.00	0.00	0.00	1.00	0.01
Travel Dist (mi)	16.2	28.3	0.2	0.4	45.1
Travel Time (hr)	0.5	1.2	0.0	0.0	1.7
Avg Speed (mph)	32	25	19	14	27
Fuel Used (gal)	0.7	4.1	0.0	0.0	4.9
Fuel Eff. (mpg)	21.8	6.9	10.2	16.8	9.3
HC Emissions (g)	3	16	0	0	19
CO Emissions (g)	133	949	2	2	1086
NOx Emissions (g)	8	68	0	0	77
Vehicles Entered	226	395	2	6	629
Vehicles Exited	226	395	2	6	629
Hourly Exit Rate	904	1580	8	24	2516
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

11: Ramon & Maravilla Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.2	2.1	0.6	1.2	2.4	0.0	1.7	0.3	0.1	0.4	1.1	0.2
Delay / Veh (s)	57.6	44.5	57.5	80.0	31.8	36.3	57.6	60.1	4.8	92.2	93.9	32.3
Stop Delay (hr)	0.2	1.7	0.6	1.1	1.9	0.0	1.5	0.3	0.0	0.4	1.0	0.2
St Del/Veh (s)	53.6	36.8	52.5	73.2	24.9	32.5	52.3	53.5	4.1	85.7	85.8	27.2
Total Stops	17	164	47	76	205	1	120	22	25	27	66	25
Stop/Veh	1.13	0.96	1.18	1.41	0.75	1.00	1.14	1.16	0.66	1.59	1.61	1.25
Travel Dist (mi)	1.0	11.5	2.7	5.1	25.6	0.1	11.6	2.0	4.1	2.2	5.4	2.6
Travel Time (hr)	0.3	2.4	0.8	1.4	3.1	0.0	2.1	0.4	0.2	0.5	1.3	0.3
Avg Speed (mph)	4	5	4	4	9	8	6	5	19	4	4	10
Fuel Used (gal)	0.2	1.7	0.5	0.9	2.5	0.0	1.7	0.3	0.2	0.4	0.9	0.3
Fuel Eff. (mpg)	5.6	6.9	5.9	5.5	10.1	10.2	6.8	6.8	16.7	5.9	5.9	8.5
HC Emissions (g)	0	4	1	3	8	0	5	1	1	1	3	1
CO Emissions (g)	8	73	16	36	149	1	135	23	31	29	64	39
NOx Emissions (g)	2	11	2	6	19	0	13	2	2	3	7	3
Vehicles Entered	15	172	40	55	276	1	108	19	38	17	42	20
Vehicles Exited	15	171	40	53	274	1	104	19	38	16	39	20
Hourly Exit Rate	60	684	160	212	1096	4	416	76	152	64	156	80
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	1	0	0	0	0	0	0	0

11: Ramon & Maravilla Performance by movement

Movement	All
Total Delay (hr)	10.4
Delay / Veh (s)	46.9
Stop Delay (hr)	9.0
St Del/Veh (s)	40.5
Total Stops	795
Stop/Veh	1.00
Travel Dist (mi)	73.9
Travel Time (hr)	12.8
Avg Speed (mph)	6
Fuel Used (gal)	9.6
Fuel Eff. (mpg)	7.7
HC Emissions (g)	28
CO Emissions (g)	603
NOx Emissions (g)	70
Vehicles Entered	803
Vehicles Exited	790
Hourly Exit Rate	3160
Denied Entry Before	0
Denied Entry After	1

13: Ramon & Ximino Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.2	0.1	0.0	0.1	0.0	0.4
Delay / Veh (s)	12.5	3.7	0.7	0.2	45.1	6.5	3.0
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.2
St Del/Veh (s)	8.3	0.2	0.1	0.1	43.9	6.4	1.1
Total Stops	8	2	1	0	9	3	23
Stop/Veh	0.80	0.01	0.00	0.00	1.00	1.00	0.04
Travel Dist (mi)	1.1	22.2	15.7	0.1	0.5	0.2	39.7
Travel Time (hr)	0.1	0.9	0.5	0.0	0.1	0.0	1.5
Avg Speed (mph)	14	26	34	23	4	14	26
Fuel Used (gal)	0.1	3.0	0.8	0.0	0.1	0.0	4.1
Fuel Eff. (mpg)	8.3	7.3	20.0	26.8	5.5	16.8	9.8
HC Emissions (g)	0	12	3	0	0	0	16
CO Emissions (g)	25	771	146	0	6	1	949
NOx Emissions (g)	2	50	8	0	1	0	61
Vehicles Entered	10	214	278	1	9	3	515
Vehicles Exited	10	213	278	1	8	3	513
Hourly Exit Rate	40	852	1112	4	32	12	2052
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

14: Ramon & Alvera Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBR	SBR	All
Total Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2
Delay / Veh (s)	0.8	0.3	7.7	0.7	0.3	5.4	5.9	1.1
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	0.0	0.1	5.8	0.0	0.1	5.4	5.7	0.4
Total Stops	0	0	11	0	0	7	7	25
Stop/Veh	0.00	0.00	0.55	0.00	0.00	1.00	1.00	0.05
Travel Dist (mi)	12.7	0.3	1.3	17.3	0.6	0.3	0.4	32.9
Travel Time (hr)	0.4	0.0	0.1	0.5	0.0	0.0	0.0	1.1
Avg Speed (mph)	33	22	14	34	24	11	13	31
Fuel Used (gal)	0.8	0.0	0.1	1.0	0.0	0.0	0.0	1.9
Fuel Eff. (mpg)	16.5	25.1	16.4	17.5	26.3	14.5	15.7	17.1
HC Emissions (g)	3	0	0	3	0	0	0	7
CO Emissions (g)	144	1	6	184	2	1	2	339
NOx Emissions (g)	9	0	1	11	0	0	0	22
Vehicles Entered	217	4	21	269	10	7	7	535
Vehicles Exited	215	4	20	269	10	7	7	532
Hourly Exit Rate	860	16	80	1076	40	28	28	2128
Denied Entry Before	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0

16: Ramon & Juarez Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Total Delay (hr)	0.1	0.0	0.0	0.0	0.1
Delay / Veh (s)	0.9	0.6	0.3	5.9	0.8
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	0.1	0.1	0.1	5.8	0.1
Total Stops	0	0	0	7	7
Stop/Veh	0.00	0.00	0.00	1.00	0.01
Travel Dist (mi)	14.4	17.7	0.3	0.4	32.8
Travel Time (hr)	0.4	0.5	0.0	0.0	1.0
Avg Speed (mph)	33	34	23	13	33
Fuel Used (gal)	0.9	1.1	0.0	0.0	2.1
Fuel Eff. (mpg)	16.3	15.4	21.9	15.8	15.9
HC Emissions (g)	3	4	0	0	8
CO Emissions (g)	164	247	2	2	415
NOx Emissions (g)	10	14	0	0	25
Vehicles Entered	222	287	5	7	521
Vehicles Exited	221	287	5	7	520
Hourly Exit Rate	884	1148	20	28	2080
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

18: Ramon & Yermo Performance by movement

Movement	EBL	EBT	WBT	WBR	SBR	All
Total Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.2
Delay / Veh (s)	7.8	1.3	0.4	0.1	6.2	1.1
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	6.1	0.4	0.0	0.0	6.0	0.5
Total Stops	9	2	0	0	16	27
Stop/Veh	0.64	0.01	0.00	0.00	1.00	0.05
Travel Dist (mi)	0.9	12.8	6.1	0.1	0.9	20.7
Travel Time (hr)	0.1	0.4	0.2	0.0	0.1	0.7
Avg Speed (mph)	14	32	32	16	13	28
Fuel Used (gal)	0.0	0.7	0.5	0.0	0.1	1.3
Fuel Eff. (mpg)	17.5	18.2	11.8	19.9	14.1	15.5
HC Emissions (g)	0	2	2	0	0	5
CO Emissions (g)	3	108	128	0	6	245
NOx Emissions (g)	0	8	7	0	1	16
Vehicles Entered	14	206	278	4	16	518
Vehicles Exited	14	206	278	4	16	518
Hourly Exit Rate	56	824	1112	16	64	2072
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0

19: Ramon & Desert Vista Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Total Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.0	0.2
Delay / Veh (s)	0.7	0.2	8.3	1.2	16.9	4.8	1.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	0.3	0.2	6.6	0.5	15.2	4.4	0.8
Total Stops	7	0	6	12	5	10	40
Stop/Veh	0.03	0.00	0.60	0.04	1.00	0.91	0.08
Travel Dist (mi)	4.1	0.1	0.5	12.6	0.5	1.1	18.8
Travel Time (hr)	0.1	0.0	0.0	0.4	0.0	0.1	0.7
Avg Speed (mph)	29	15	11	31	11	18	27
Fuel Used (gal)	0.2	0.0	0.0	0.8	0.0	0.1	1.1
Fuel Eff. (mpg)	17.3	22.0	13.6	16.4	14.0	19.1	16.6
HC Emissions (g)	1	0	0	3	0	0	4
CO Emissions (g)	28	0	2	130	2	4	167
NOx Emissions (g)	3	0	0	9	0	0	12
Vehicles Entered	201	3	10	278	5	11	508
Vehicles Exited	202	3	10	277	5	11	508
Hourly Exit Rate	808	12	40	1108	20	44	2032
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

20: Ramon & Cielo Vista Performance by movement

Movement	EBT	EBR	WBT	NBR	All
Total Delay (hr)	0.2	0.0	0.0	0.0	0.2
Delay / Veh (s)	1.8	0.8	0.5	6.0	1.3
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.1
St Del/Veh (s)	1.2	0.7	0.0	5.9	0.7
Total Stops	0	0	0	5	5
Stop/Veh	0.00	0.00	0.00	1.00	0.01
Travel Dist (mi)	13.5	0.1	18.3	0.2	32.2
Travel Time (hr)	0.6	0.0	0.5	0.0	1.1
Avg Speed (mph)	30	20	36	11	33
Fuel Used (gal)	1.4	0.0	0.8	0.0	2.2
Fuel Eff. (mpg)	9.7	19.3	22.1	13.9	14.3
HC Emissions (g)	6	0	3	0	8
CO Emissions (g)	308	0	113	1	422
NOx Emissions (g)	20	0	8	0	28
Vehicles Entered	344	3	256	5	608
Vehicles Exited	344	3	256	5	608
Hourly Exit Rate	1376	12	1024	20	2432
Denied Entry Before	0	0	0	0	0
Denied Entry After	1	0	0	0	1

22: Ramon & Rancho Vista Performance by movement

Movement	EBL	EBT	EBR	WBT	NBT	NBR	All
Total Delay (hr)	0.0	0.1	0.0	0.1	0.0	0.0	0.3
Delay / Veh (s)	6.3	1.0	0.2	1.9	41.1	6.9	1.6
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	4.3	0.0	0.0	0.3	39.6	6.9	0.4
Total Stops	9	0	0	0	1	6	16
Stop/Veh	0.64	0.00	0.00	0.00	1.00	1.00	0.03
Travel Dist (mi)	1.0	22.3	0.4	19.9	0.0	0.3	44.0
Travel Time (hr)	0.1	0.7	0.0	0.8	0.0	0.0	1.6
Avg Speed (mph)	16	33	25	25	3	11	27
Fuel Used (gal)	0.1	1.4	0.0	3.3	0.0	0.0	4.9
Fuel Eff. (mpg)	15.5	15.5	18.7	6.0	4.8	13.8	9.0
HC Emissions (g)	0	6	0	15	0	0	21
CO Emissions (g)	8	372	5	977	0	2	1364
NOx Emissions (g)	1	19	0	57	0	0	77
Vehicles Entered	14	329	6	260	1	6	616
Vehicles Exited	14	329	6	260	1	6	616
Hourly Exit Rate	56	1316	24	1040	4	24	2464
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

23: Ramon & Date Palm Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.4	1.1	0.1	0.5	1.0	0.1	0.4	0.8	0.1	0.6	2.0	0.2
Delay / Veh (s)	38.6	21.9	6.6	55.0	21.6	13.4	38.1	27.5	12.6	43.5	33.3	8.3
Stop Delay (hr)	0.4	0.8	0.1	0.4	0.7	0.1	0.4	0.7	0.1	0.5	1.7	0.2
St Del/Veh (s)	33.4	15.9	5.9	49.4	15.0	10.3	35.4	22.9	10.9	37.6	27.2	6.6
Total Stops	47	130	29	35	98	21	37	93	22	58	216	62
Stop/Veh	1.12	0.69	0.59	1.13	0.62	0.81	0.97	0.85	0.81	1.14	0.99	0.72
Travel Dist (mi)	3.0	13.1	3.6	3.3	15.5	2.7	5.9	16.9	4.1	4.8	20.5	8.0
Travel Time (hr)	0.6	1.5	0.2	0.6	1.3	0.2	0.6	1.4	0.3	0.8	2.8	0.5
Avg Speed (mph)	5	9	15	6	12	14	10	12	18	7	8	16
Fuel Used (gal)	0.4	1.3	0.2	0.5	1.6	0.2	0.6	1.4	0.3	0.7	2.6	0.6
Fuel Eff. (mpg)	7.6	10.4	17.9	7.1	9.9	11.7	10.4	12.0	12.8	6.5	8.0	13.5
HC Emissions (g)	1	4	1	1	6	1	2	4	1	2	7	2
CO Emissions (g)	18	77	18	37	236	34	59	148	45	63	202	76
NOx Emissions (g)	3	10	1	4	19	3	5	12	3	7	22	5
Vehicles Entered	42	189	48	31	160	26	39	111	27	51	221	85
Vehicles Exited	42	187	49	31	159	26	39	110	27	51	217	85
Hourly Exit Rate	168	748	196	124	636	104	156	440	108	204	868	340
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

23: Ramon & Date Palm Performance by movement

Movement	All
Total Delay (hr)	7.4
Delay / Veh (s)	25.9
Stop Delay (hr)	6.0
St Del/Veh (s)	20.9
Total Stops	848
Stop/Veh	0.83
Travel Dist (mi)	101.4
Travel Time (hr)	10.8
Avg Speed (mph)	10
Fuel Used (gal)	10.3
Fuel Eff. (mpg)	9.8
HC Emissions (g)	32
CO Emissions (g)	1012
NOx Emissions (g)	94
Vehicles Entered	1030
Vehicles Exited	1023
Hourly Exit Rate	4092
Denied Entry Before	0
Denied Entry After	0

24: Ramon & Cathedral Village Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.1	0.6	0.0	0.2	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Delay / Veh (s)	25.7	10.9	5.2	21.3	5.8	3.1	23.8	15.4	10.2	26.9	18.8	5.0
Stop Delay (hr)	0.1	0.3	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0
St Del/Veh (s)	20.3	4.6	1.9	18.1	2.7	2.0	22.4	13.8	10.0	24.8	16.8	4.7
Total Stops	17	71	10	26	55	3	5	1	15	9	1	4
Stop/Veh	0.94	0.35	0.40	0.87	0.23	0.33	1.00	1.00	1.00	0.90	1.00	1.00
Travel Dist (mi)	2.0	22.0	2.7	3.5	26.3	1.0	0.3	0.0	0.8	0.6	0.0	0.3
Travel Time (hr)	0.2	1.2	0.1	0.3	1.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Avg Speed (mph)	10	18	19	11	24	23	6	6	13	6	7	15
Fuel Used (gal)	0.3	2.7	0.3	0.3	2.3	0.1	0.0	0.0	0.1	0.1	0.0	0.0
Fuel Eff. (mpg)	7.9	8.2	9.6	10.6	11.5	13.1	7.9	8.7	9.4	7.3	9.7	16.1
HC Emissions (g)	1	10	1	1	10	0	0	0	0	0	0	0
CO Emissions (g)	33	519	53	47	571	18	3	0	10	5	0	1
NOx Emissions (g)	3	40	4	4	33	1	0	0	1	1	0	0
Vehicles Entered	18	204	26	30	240	9	5	1	15	10	1	4
Vehicles Exited	18	203	25	30	239	9	5	1	15	10	1	4
Hourly Exit Rate	72	812	100	120	956	36	20	4	60	40	4	16
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

24: Ramon & Cathedral Village Performance by movement

Movement	All
Total Delay (hr)	1.5
Delay / Veh (s)	9.7
Stop Delay (hr)	0.9
St Del/Veh (s)	5.6
Total Stops	217
Stop/Veh	0.39
Travel Dist (mi)	59.5
Travel Time (hr)	3.3
Avg Speed (mph)	18
Fuel Used (gal)	6.1
Fuel Eff. (mpg)	9.7
HC Emissions (g)	24
CO Emissions (g)	1260
NOx Emissions (g)	87
Vehicles Entered	563
Vehicles Exited	560
Hourly Exit Rate	2240
Denied Entry Before	0
Denied Entry After	0

25: Ramon & San Eljay Ave. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.1	0.2	0.0	0.0	0.6	0.2	1.1
Delay / Veh (s)	10.8	2.8	0.8	0.3	75.1	8.6	7.0
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.6	0.2	0.8
St Del/Veh (s)	6.8	0.2	0.1	0.2	74.4	7.8	5.4
Total Stops	23	0	1	0	29	75	128
Stop/Veh	0.70	0.00	0.00	0.00	1.04	1.00	0.23
Travel Dist (mi)	3.9	23.6	9.0	0.3	1.6	4.2	42.5
Travel Time (hr)	0.2	0.7	0.3	0.0	0.7	0.4	2.3
Avg Speed (mph)	17	33	34	20	2	11	19
Fuel Used (gal)	0.4	2.4	0.7	0.0	0.4	0.4	4.3
Fuel Eff. (mpg)	10.9	9.7	13.0	22.7	3.6	10.6	9.8
HC Emissions (g)	1	10	3	0	1	1	16
CO Emissions (g)	58	614	168	1	26	37	905
NOx Emissions (g)	5	40	10	0	4	4	62
Vehicles Entered	33	204	203	7	29	75	551
Vehicles Exited	33	204	203	7	26	75	548
Hourly Exit Rate	132	816	812	28	104	300	2192
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

26: Ramon & El Toro Rd. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Delay / Veh (s)	5.3	0.7	0.5	0.1	16.4	3.6	0.9
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	3.7	0.2	0.0	0.0	15.2	3.4	0.4
Total Stops	1	0	0	0	5	10	16
Stop/Veh	0.33	0.00	0.00	0.00	1.00	1.00	0.04
Travel Dist (mi)	0.1	11.1	9.8	0.3	0.3	0.5	22.1
Travel Time (hr)	0.0	0.3	0.3	0.0	0.0	0.0	0.7
Avg Speed (mph)	13	34	38	23	7	15	33
Fuel Used (gal)	0.0	0.8	0.5	0.0	0.0	0.0	1.4
Fuel Eff. (mpg)	12.9	13.4	19.6	31.8	10.7	16.9	15.7
HC Emissions (g)	0	3	2	0	0	0	5
CO Emissions (g)	1	178	102	0	1	3	286
NOx Emissions (g)	0	12	6	0	0	0	18
Vehicles Entered	3	241	179	5	5	10	443
Vehicles Exited	3	240	179	5	5	10	442
Hourly Exit Rate	12	960	716	20	20	40	1768
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

27: Ramon & Victor Rd. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.1	0.0	0.0	0.1	0.0	0.2
Delay / Veh (s)	5.1	0.7	0.4	0.2	22.8	2.9	1.2
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.1	0.0	0.1
St Del/Veh (s)	3.7	0.2	0.0	0.0	21.4	2.8	0.7
Total Stops	1	0	0	0	14	4	19
Stop/Veh	0.50	0.00	0.00	0.00	1.08	1.00	0.04
Travel Dist (mi)	0.1	13.6	9.9	0.0	0.7	0.2	24.5
Travel Time (hr)	0.0	0.4	0.3	0.0	0.1	0.0	0.8
Avg Speed (mph)	15	37	39	21	6	15	33
Fuel Used (gal)	0.0	0.9	0.5	0.0	0.1	0.0	1.5
Fuel Eff. (mpg)	16.5	15.1	19.6	16.0	8.4	17.8	16.2
HC Emissions (g)	0	3	2	0	0	0	6
CO Emissions (g)	1	207	99	0	6	1	314
NOx Emissions (g)	0	12	6	0	1	0	19
Vehicles Entered	2	260	190	1	14	4	471
Vehicles Exited	2	260	190	1	13	4	470
Hourly Exit Rate	8	1040	760	4	52	16	1880
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

28: Ramon & Neuma Dr. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.2
Delay / Veh (s)	5.6	0.5	1.7	1.5	20.2	3.3	1.3
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	4.0	0.1	0.1	0.5	18.9	3.2	0.4
Total Stops	2	0	0	0	6	7	15
Stop/Veh	0.67	0.00	0.00	0.00	1.00	1.00	0.03
Travel Dist (mi)	0.2	14.4	32.2	0.8	0.3	0.4	48.4
Travel Time (hr)	0.0	0.4	0.8	0.0	0.0	0.0	1.3
Avg Speed (mph)	15	37	38	31	7	15	36
Fuel Used (gal)	0.0	0.9	1.8	0.0	0.0	0.0	2.8
Fuel Eff. (mpg)	16.4	16.4	17.4	17.5	9.5	17.2	17.0
HC Emissions (g)	0	3	7	0	0	0	10
CO Emissions (g)	1	189	373	9	2	2	576
NOx Emissions (g)	0	11	23	1	0	0	36
Vehicles Entered	3	272	183	5	6	7	476
Vehicles Exited	3	271	183	5	6	7	475
Hourly Exit Rate	12	1084	732	20	24	28	1900
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

29: Ramon & Via Campanile Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Total Delay (hr)	0.0	0.4	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.7
Delay / Veh (s)	17.8	4.8	4.0	18.6	3.4	0.7	21.4	2.9	20.6		3.9	5.0
Stop Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
St Del/Veh (s)	15.6	1.1	1.0	16.1	0.7	0.4	19.5	2.9	19.1		4.2	1.9
Total Stops	4	40	1	8	17	2	8	8	4	0	7	99
Stop/Veh	1.00	0.15	0.33	0.89	0.11	0.15	0.89	0.89	1.00		1.00	0.20
Travel Dist (mi)	0.7	49.6	0.6	1.8	31.9	2.6	0.4	0.4	0.2	0.0	0.4	88.6
Travel Time (hr)	0.0	1.5	0.0	0.1	0.8	0.1	0.1	0.0	0.0	0.0	0.0	2.7
Avg Speed (mph)	17	33	28	19	39	38	7	14	8	7	15	33
Fuel Used (gal)	0.0	2.4	0.0	0.1	1.4	0.1	0.1	0.0	0.0	0.0	0.0	4.2
Fuel Eff. (mpg)	17.7	20.5	22.7	19.3	22.9	25.5	7.3	16.1	8.3	9.5	16.2	21.1
HC Emissions (g)	0	8	0	0	5	0	0	0	0	0	0	14
CO Emissions (g)	4	324	3	8	193	16	3	2	2	0	3	557
NOx Emissions (g)	0	26	0	1	15	1	0	0	0	0	0	45
Vehicles Entered	4	273	3	9	159	13	9	9	4	0	7	490
Vehicles Exited	4	271	3	9	158	13	9	9	4	0	7	487
Hourly Exit Rate	16	1084	12	36	632	52	36	36	16	0	28	1948
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

30: Ramon & Charter Hospital Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.4
Delay / Veh (s)	6.7	2.3	1.6	5.6	3.5	2.8	30.0	1.7	26.7	3.0	3.2
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	3.9	0.1	0.1	3.3	0.2	0.3	28.3	1.9	25.3	3.5	0.6
Total Stops	3	1	0	0	1	0	3	1	5	4	18
Stop/Veh	0.50	0.00	0.00	0.00	0.01	0.00	1.00	1.00	1.25	1.00	0.04
Travel Dist (mi)	1.3	54.2	0.4	0.1	37.4	0.4	0.1	0.0	0.1	0.1	94.2
Travel Time (hr)	0.0	1.3	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	2.5
Avg Speed (mph)	28	41	35	25	36	33	5	14	3	9	38
Fuel Used (gal)	0.1	3.8	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	7.9
Fuel Eff. (mpg)	14.7	14.1	10.9	10.1	9.7	9.7	6.5	16.8	3.5	12.0	11.9
HC Emissions (g)	0	15	0	0	16	0	0	0	0	0	32
CO Emissions (g)	17	943	12	3	1126	16	1	0	1	0	2121
NOx Emissions (g)	1	58	1	0	65	1	0	0	0	0	127
Vehicles Entered	6	274	2	1	176	2	3	1	4	4	473
Vehicles Exited	6	273	2	1	177	2	3	1	4	4	473
Hourly Exit Rate	24	1092	8	4	708	8	12	4	16	16	1892
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0

32: Ramon & Da Vall Dr. Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.1	1.8	0.5	0.6	0.6	0.0	0.6	0.3	0.0	2.0	3.2	0.3
Delay / Veh (s)	42.3	31.6	22.8	82.4	17.3	5.5	59.1	32.0	3.8	107.2	105.2	96.6
Stop Delay (hr)	0.1	1.2	0.4	0.6	0.5	0.0	0.6	0.3	0.0	1.7	2.7	0.3
St Del/Veh (s)	36.3	21.9	16.7	77.9	13.8	5.1	54.5	27.3	3.5	92.4	89.1	82.8
Total Stops	7	163	79	34	78	16	46	28	9	144	212	21
Stop/Veh	1.00	0.81	0.95	1.26	0.59	0.64	1.21	0.85	0.75	2.18	1.96	1.91
Travel Dist (mi)	1.4	40.6	16.8	1.8	8.7	1.7	4.8	4.2	1.5	10.5	17.3	1.7
Travel Time (hr)	0.1	2.6	1.0	0.7	0.9	0.1	0.8	0.4	0.1	2.3	3.8	0.4
Avg Speed (mph)	12	16	17	3	10	15	6	10	21	6	6	6
Fuel Used (gal)	0.1	2.4	0.9	0.5	1.2	0.1	0.7	0.4	0.1	1.8	2.7	0.3
Fuel Eff. (mpg)	14.5	16.6	18.4	3.4	7.1	11.1	7.2	10.2	20.8	5.9	6.3	6.6
HC Emissions (g)	0	8	3	1	5	1	2	1	0	5	8	1
CO Emissions (g)	8	216	81	36	228	30	62	42	5	88	110	10
NOx Emissions (g)	1	20	7	5	16	2	6	4	0	10	14	1
Vehicles Entered	8	203	85	28	132	25	38	33	12	70	115	11
Vehicles Exited	7	198	82	27	132	25	37	33	12	63	103	10
Hourly Exit Rate	28	792	328	108	528	100	148	132	48	252	412	40
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	4	7	1

32: Ramon & Da Vall Dr. Performance by movement

Movement	All
Total Delay (hr)	10.0
Delay / Veh (s)	48.4
Stop Delay (hr)	8.3
St Del/Veh (s)	40.0
Total Stops	837
Stop/Veh	1.12
Travel Dist (mi)	110.9
Travel Time (hr)	13.3
Avg Speed (mph)	9
Fuel Used (gal)	11.3
Fuel Eff. (mpg)	9.9
HC Emissions (g)	36
CO Emissions (g)	918
NOx Emissions (g)	86
Vehicles Entered	760
Vehicles Exited	729
Hourly Exit Rate	2916
Denied Entry Before	0
Denied Entry After	12

Total Network Performance

Total Delay (hr)	43.7
Delay / Veh (s)	61.1
Stop Delay (hr)	31.9
St Del/Veh (s)	44.6
Total Stops	4222
Stop/Veh	1.64
Travel Dist (mi)	1484.8
Travel Time (hr)	87.7
Avg Speed (mph)	17
Fuel Used (gal)	134.0
Fuel Eff. (mpg)	11.1
HC Emissions (g)	482
CO Emissions (g)	23579
NOx Emissions (g)	1644
Vehicles Entered	2627
Vehicles Exited	2526
Hourly Exit Rate	10104
Denied Entry Before	0
Denied Entry After	14

Arterial Level of Service: EB Ramon

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Landau	7.2	17.6	0.1	24
Candlewood	1.6	12.9	0.1	35
Shift Sands	0.6	5.9	0.1	35
Wh. Palms	7.9	13.8	0.1	17
Sky Blue Water	2.2	7.7	0.1	30
Roundup	0.6	4.0	0.0	34
Pueblo	1.4	8.0	0.1	32
Cathedral Canyon	44.5	50.8	0.1	5
Ximino	4.7	14.4	0.1	26
Cyn Vista	0.8	6.2	0.1	34
Juarez	0.9	6.9	0.1	34
Yermo	1.3	7.0	0.1	32
Desert Vista	0.7	2.6	0.0	30
Cielo Vista	1.8	5.7	0.1	40
Rancho Vista	1.0	7.4	0.1	35
Date Palm	21.9	28.4	0.1	10
	11.3	20.5	0.1	19
San Eljay Ave.	3.0	12.5	0.1	35
El Toro Rd.	0.6	4.4	0.0	40
Victor Rd.	0.7	5.1	0.1	40
Neuma Dr.	0.5	4.9	0.1	39
Via Campanile	4.8	19.8	0.2	33
Desert Shadows	2.4	17.3	0.2	42
	31.7	47.0	0.2	16
Total	154.3	330.8	2.1	23

Arterial Level of Service: WB Ramon

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Da Vall Dr.	17.3	24.9	0.1	11
Charter Hospital	4.4	20.2	0.2	38
Via Campanile	3.4	18.4	0.2	40
Neuma Dr.	1.7	16.1	0.2	41
Victor Rd.	0.4	4.7	0.1	41
El Toro Rd.	0.5	5.0	0.1	39
San Eljay Ave.	0.8	4.6	0.0	38
Cathedral Village	5.9	15.2	0.1	28
Date Palm	21.6	29.7	0.1	13
Rancho Vista	3.0	10.5	0.1	27
Cielo Vista	0.5	7.1	0.1	37
Desert Vista	1.2	5.5	0.1	34
Yermo	0.4	2.4	0.0	32
Juarez	0.6	6.3	0.1	36
Alvera	0.7	6.7	0.1	35
Ximino	0.7	5.8	0.1	36
Maravilla	31.9	40.7	0.1	10
Pueblo	3.3	9.8	0.1	26
Roundup	1.1	7.7	0.1	34
Sky Blue Water	1.1	4.5	0.0	30
Wh. Palms	13.5	19.1	0.1	12
Shift Sands	2.7	8.2	0.1	29
Candlewood	0.6	5.8	0.1	35
Landau	26.1	36.8	0.1	12
Total	143.2	315.5	2.1	24

Intersection: 1: Ramon & Landau

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	L	T	T	T	T	R	L	L	R
Maximum Queue (ft)	153	216	133	304	318	97	140	228	376
Average Queue (ft)	121	94	65	215	215	49	88	124	232
95th Queue (ft)	172	231	138	326	340	116	144	295	440
Link Distance (ft)		532	532	583	583	583		756	756
Upstream Blk Time (%)								0	0
Queuing Penalty (veh)								0	0
Storage Bay Dist (ft)	125						200		
Storage Blk Time (%)	12	0					0	0	
Queuing Penalty (veh)	34	0					0	0	

Intersection: 2: Ramon & Candlewood

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	R
Maximum Queue (ft)	1	44	1	42
Average Queue (ft)	0	19	0	23
95th Queue (ft)	3	49	8	51
Link Distance (ft)	583		243	232
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		75		
Storage Blk Time (%)		0		
Queuing Penalty (veh)		0		

Intersection: 4: Ramon & Shift Sands

Movement	EB	NB
Directions Served	TR	R
Maximum Queue (ft)	0	45
Average Queue (ft)	0	24
95th Queue (ft)	2	53
Link Distance (ft)	243	240
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Ramon & Wh. Palms

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	89	102	120	129	78	228	241	210	114	96	126	155
Average Queue (ft)	51	60	74	79	32	149	163	133	71	47	90	74
95th Queue (ft)	95	109	125	135	84	243	258	224	120	97	138	157
Link Distance (ft)		287	287	287		268	268	268		451		385
Upstream Blk Time (%)						0	0	0				
Queuing Penalty (veh)						0	1	0				
Storage Bay Dist (ft)	150				150				100		100	
Storage Blk Time (%)	0	0				5			4	0	9	1
Queuing Penalty (veh)	0	0				2			4	1	14	2

Intersection: 7: Ramon & Sky Blue Water

Movement	EB	WB	NB	SB
Directions Served	TR	T	R	R
Maximum Queue (ft)	0	1	40	36
Average Queue (ft)	0	0	17	14
95th Queue (ft)	0	2	46	42
Link Distance (ft)	268	138	230	332
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Ramon & Roundup

Movement	EB	EB	EB	WB	NB
Directions Served	T	T	TR	L	R
Maximum Queue (ft)	1	1	7	47	30
Average Queue (ft)	0	0	1	21	9
95th Queue (ft)	3	4	11	52	33
Link Distance (ft)	138	138	138		242
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				75	
Storage Blk Time (%)				0	
Queuing Penalty (veh)				1	

Intersection: 10: Ramon & Pueblo

Movement	EB	EB	SB
Directions Served	T	T	R
Maximum Queue (ft)	3	5	42
Average Queue (ft)	0	1	19
95th Queue (ft)	8	12	48
Link Distance (ft)	325	325	354
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 11: Ramon & Maravilla

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	LT	R	LT
Maximum Queue (ft)	115	212	256	279	214	304	284	244	240	259	70	366
Average Queue (ft)	55	141	179	206	166	210	194	168	176	185	41	249
95th Queue (ft)	119	228	269	300	250	357	305	255	275	306	71	469
Link Distance (ft)		290	290	290		458	458	458		568	568	688
Upstream Blk Time (%)		0	1	2		1	0			0		0
Queuing Penalty (veh)		0	2	6		2	0			0		0
Storage Bay Dist (ft)	120				190				280			
Storage Blk Time (%)	1	12			18	3			1	2		32
Queuing Penalty (veh)	3	7			66	7			4	4		26

Intersection: 11: Ramon & Maravilla

Movement	SB
Directions Served	R
Maximum Queue (ft)	180
Average Queue (ft)	76
95th Queue (ft)	195
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	175
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 13: Ramon & Ximino

Movement	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	TR	L	R
Maximum Queue (ft)	56	4	2	2	72	33
Average Queue (ft)	25	1	0	0	34	12
95th Queue (ft)	62	23	11	6	80	37
Link Distance (ft)		244	244	244	309	309
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	135					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 14: Ramon & Alvera

Movement	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	T	TR	L	T	T	TR	R	R
Maximum Queue (ft)	0	3	60	8	0	0	43	43
Average Queue (ft)	0	1	29	1	0	0	19	20
95th Queue (ft)	2	7	63	18	2	0	48	49
Link Distance (ft)	244	244		287	287	287	222	304
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			60					
Storage Blk Time (%)			1					
Queuing Penalty (veh)			4					

Intersection: 16: Ramon & Juarez

Movement	EB	EB	SB
Directions Served	T	T	R
Maximum Queue (ft)	3	2	42
Average Queue (ft)	0	0	20
95th Queue (ft)	12	11	48
Link Distance (ft)	287	287	314
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: Ramon & Yermo

Movement	EB	EB	EB	EB	WB	SB
Directions Served	L	T	T	T	TR	R
Maximum Queue (ft)	58	36	16	4	2	54
Average Queue (ft)	27	6	3	1	0	33
95th Queue (ft)	64	43	30	15	4	60
Link Distance (ft)	272	272	272	272	53	299
Upstream Blk Time (%)		0	0			
Queuing Penalty (veh)		0	0			
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 19: Ramon & Desert Vista

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	50	43	22	45	60	45	54	44	47
Average Queue (ft)	13	11	4	20	16	10	16	17	26
95th Queue (ft)	50	41	23	51	58	42	54	48	54
Link Distance (ft)	53	53	53		208	208	208	504	504
Upstream Blk Time (%)	1	1	0						
Queuing Penalty (veh)	3	2	1						
Storage Bay Dist (ft)				150					
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 20: Ramon & Cielo Vista

Movement	EB	EB	EB	NB
Directions Served	T	T	TR	R
Maximum Queue (ft)	2	2	2	38
Average Queue (ft)	1	1	1	16
95th Queue (ft)	21	20	19	45
Link Distance (ft)	208	208	208	234
Upstream Blk Time (%)	0	0	0	
Queuing Penalty (veh)	1	1	1	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 22: Ramon & Rancho Vista

Movement	EB	EB	EB	NB	NB
Directions Served	L	T	T	T	R
Maximum Queue (ft)	43	6	0	18	41
Average Queue (ft)	20	1	0	4	18
95th Queue (ft)	48	13	2	21	47
Link Distance (ft)		327	327	248	248
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	125				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 23: Ramon & Date Palm

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	TR	L	L	T	T
Maximum Queue (ft)	157	242	216	92	140	138	123	132	79	82	154	145
Average Queue (ft)	102	151	134	46	88	88	77	80	46	51	104	90
95th Queue (ft)	172	251	224	92	170	161	138	138	85	89	164	156
Link Distance (ft)		309	309	309		468	468	468		800	800	800
Upstream Blk Time (%)		0	0			0						
Queuing Penalty (veh)		1	0			0						
Storage Bay Dist (ft)	135				235				235			
Storage Blk Time (%)	5	8			1							1
Queuing Penalty (veh)	16	14			2							1

Intersection: 23: Ramon & Date Palm

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (ft)	74	213	316	308	160
Average Queue (ft)	34	134	220	217	85
95th Queue (ft)	78	228	360	348	181
Link Distance (ft)			492	492	492
Upstream Blk Time (%)			0	0	0
Queuing Penalty (veh)			0	0	0
Storage Bay Dist (ft)	160	200			
Storage Blk Time (%)		2	11		
Queuing Penalty (veh)		8	22		

Intersection: 24: Ramon & Cathedral Village

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	TR	L	LT	R	L
Maximum Queue (ft)	95	181	174	87	92	109	78	78	22	33	39	59
Average Queue (ft)	49	97	92	32	54	54	36	35	5	11	20	31
95th Queue (ft)	100	191	184	87	97	113	82	80	22	33	41	65
Link Distance (ft)		468	468			545	545	545		276		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	150			100	190				75		75	75
Storage Blk Time (%)	0	2	5	0							0	0
Queuing Penalty (veh)	0	1	5	0							0	0

Intersection: 24: Ramon & Cathedral Village

Movement	SB
Directions Served	TR
Maximum Queue (ft)	39
Average Queue (ft)	16
95th Queue (ft)	45
Link Distance (ft)	298
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 25: Ramon & San Eljay Ave.

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	TR	L	R
Maximum Queue (ft)	84	6	4	12	6	9	168	131
Average Queue (ft)	47	1	1	2	1	1	100	76
95th Queue (ft)	89	13	10	15	9	10	199	146
Link Distance (ft)		545	545	183	183	183	290	290
Upstream Blk Time (%)							1	0
Queuing Penalty (veh)							0	0
Storage Bay Dist (ft)	150							
Storage Blk Time (%)	0							
Queuing Penalty (veh)	0							

Intersection: 26: Ramon & El Toro Rd.

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	TR	L	R
Maximum Queue (ft)	29	4	4	3	1	1	42	42
Average Queue (ft)	6	1	1	0	0	0	17	25
95th Queue (ft)	28	9	10	7	4	5	47	50
Link Distance (ft)		183	183	220	220	220	291	291
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	75							
Storage Blk Time (%)	0							
Queuing Penalty (veh)	0							

Intersection: 27: Ramon & Victor Rd.

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	L	R
Maximum Queue (ft)	24	3	4	2	2	66	33
Average Queue (ft)	4	0	1	0	0	36	12
95th Queue (ft)	22	6	8	7	5	73	37
Link Distance (ft)		220	220	213	213	283	283
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	75						
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 28: Ramon & Neuma Dr.

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	TR	L	R
Maximum Queue (ft)	27	6	7	2	2	1	46	40
Average Queue (ft)	7	1	1	0	0	0	21	21
95th Queue (ft)	27	10	12	6	6	2	51	48
Link Distance (ft)		213	213	900	900		273	273
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	75					75		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 29: Ramon & Via Campanile

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	R	L	TR	L
Maximum Queue (ft)	36	99	85	64	16	56	76	70	26	51	33	31
Average Queue (ft)	12	47	44	19	3	24	27	25	7	25	18	11
95th Queue (ft)	40	104	91	64	17	61	77	71	27	56	39	34
Link Distance (ft)		900	900				999	999	999		242	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	150			100	100	150				50		50
Storage Blk Time (%)		0	0	0		0	0			2	0	0
Queuing Penalty (veh)		0	1	0		0	0			1	0	0

Intersection: 29: Ramon & Via Campanile

Movement	SB
Directions Served	TR
Maximum Queue (ft)	28
Average Queue (ft)	13
95th Queue (ft)	31
Link Distance (ft)	288
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 30: Ramon & Charter Hospital

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	T	L	TR	L
Maximum Queue (ft)	31	8	12	3	0	8	9	6	1	33	10	37
Average Queue (ft)	9	1	2	0	0	1	1	1	0	11	1	15
95th Queue (ft)	32	13	17	7	1	10	15	11	3	36	10	42
Link Distance (ft)		999	999	999			1053	1053	1053		238	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	150				150	150				60		60
Storage Blk Time (%)										0		0
Queuing Penalty (veh)										0		0

Intersection: 30: Ramon & Charter Hospital

Movement	SB
Directions Served	TR
Maximum Queue (ft)	30
Average Queue (ft)	11
95th Queue (ft)	34
Link Distance (ft)	106
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 32: Ramon & Da Vall Dr.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	T	R	L
Maximum Queue (ft)	79	231	231	275	142	143	126	92	165	165	45	183
Average Queue (ft)	30	162	158	178	91	88	72	45	109	91	25	156
95th Queue (ft)	86	245	243	288	182	172	143	98	188	198	52	214
Link Distance (ft)		1053	1053	1053		334	334	334		663	663	
Upstream Blk Time (%)						0	0					
Queuing Penalty (veh)						0	0					
Storage Bay Dist (ft)	175				200				175			150
Storage Blk Time (%)		6			3				5	0		14
Queuing Penalty (veh)		2			6				7	0		74

Intersection: 32: Ramon & Da Vall Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	825
Average Queue (ft)	611
95th Queue (ft)	1024
Link Distance (ft)	836
Upstream Blk Time (%)	17
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	41
Queuing Penalty (veh)	123

Network Summary

Network wide Queuing Penalty: 487

Intersection: 1: Ramon & Landau

Phase	2	3	5	6
Movement(s) Served	EBT	SBL	EBL	WBT
Maximum Green (s)	44.0	15.0	15.0	24.0
Minimum Green (s)	10.0	8.0	4.0	10.0
Recall	Min	None	None	Min
Avg. Green (s)	43.2	15.4	12.6	23.6
g/C Ratio	0.62	0.22	0.18	0.34
Cycles Skipped (%)	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0
Cycles Maxed Out (%)	25	100	38	77
Cycles with Peds (%)	0	0	0	0

Controller Summary

Average Cycle Length (s): 69.5

Number of Complete Cycles : 12

Intersection: 6: Ramon & Wh. Palms

Phase	1	2	4	5	6	8
Movement(s) Served	WBL	EBT	SBTL	EBL	WBT	NBTL
Maximum Green (s)	5.0	19.5	15.0	4.0	20.5	15.0
Minimum Green (s)	3.0	10.0	4.0	3.0	10.0	4.0
Recall	None	Min	None	None	Min	None
Avg. Green (s)	5.2	23.9	13.3	4.3	21.5	13.3
g/C Ratio	0.04	0.45	0.25	0.06	0.41	0.25
Cycles Skipped (%)	63	0	0	31	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	13	76	47	69	65	47
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 53.0

Number of Complete Cycles : 16

Intersection: 11: Ramon & Maravilla

Phase	1	2	3	4	5	6
Movement(s) Served	WBL	EBT	SBTL	NBTL	EBL	WBT
Maximum Green (s)	12.0	17.0	12.0	14.0	5.0	24.0
Minimum Green (s)	4.0	10.0	4.0	4.0	4.0	10.0
Recall	None	C-Min	None	None	None	Min
Avg. Green (s)	12.8	20.6	11.8	15.0	5.3	29.5
g/C Ratio	0.14	0.23	0.13	0.17	0.05	0.33
Cycles Skipped (%)	0	0	0	0	11	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	89	100	89	89	67	100
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 90.0

Number of Complete Cycles : 9

Intersection: 19: Ramon & Desert Vista

Phase	2	4	6
Movement(s) Served	EBT	NBL	WBTL
Maximum Green (s)	19.0	14.0	19.0
Minimum Green (s)	8.0	8.0	8.0
Recall	Min	None	Min
Avg. Green (s)	140.4	10.2	140.4
g/C Ratio	0.92	0.07	0.92
Cycles Skipped (%)	0	0	0
Cycles @ Minimum (%)	0	75	0
Cycles Maxed Out (%)	25	0	25
Cycles with Peds (%)	0	0	0

Controller Summary

Average Cycle Length (s): 152.9

Number of Complete Cycles : 4

Intersection: 23: Ramon & Date Palm

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	EBL	WBT	SBL	NBT	WBL	EBT	NBL	SBT
Maximum Green (s)	9.0	13.5	11.0	10.5	6.0	16.5	4.0	17.5
Minimum Green (s)	4.0	10.0	4.0	10.0	4.0	10.0	4.0	10.0
Recall	None	None	None	Min	None	None	None	Min
Avg. Green (s)	8.9	15.5	10.0	12.9	6.1	18.1	4.1	18.8
g/C Ratio	0.14	0.24	0.16	0.20	0.09	0.28	0.06	0.29
Cycles Skipped (%)	0	0	0	0	8	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0	100	0
Cycles Maxed Out (%)	67	92	54	100	77	85	100	100
Cycles with Peds (%)	0	0	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 64.3

Number of Complete Cycles : 13

Intersection: 24: Ramon & Cathedral Village

Phase	1	2	5	6	7	8
Movement(s) Served	WBL	EBT	EBL	WBT	SBTL	NBTL
Maximum Green (s)	8.0	19.5	7.0	20.5	6.0	6.0
Minimum Green (s)	4.0	8.0	4.0	8.0	6.0	6.0
Recall	None	Min	None	Min	None	None
Avg. Green (s)	6.7	29.1	6.2	34.1	6.1	7.1
g/C Ratio	0.10	0.55	0.07	0.60	0.06	0.04
Cycles Skipped (%)	22	6	41	12	53	69
Cycles @ Minimum (%)	0	0	0	0	47	31
Cycles Maxed Out (%)	28	53	24	35	47	31
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 50.1

Number of Complete Cycles : 17

Average All-Red Dwell (s): 0.1

Cycles with All-Red Dwell (%): 6

Intersection: 29: Ramon & Via Campanile

Phase	1	2	4	5	6	8
Movement(s) Served	WBL	EBT	NBTL	EBL	WBT	SBTL
Maximum Green (s)	5.0	13.5	5.0	5.0	13.5	5.0
Minimum Green (s)	4.0	9.5	4.0	4.0	9.5	4.0
Recall	None	Min	None	None	Min	None
Avg. Green (s)	5.3	45.1	4.9	5.2	55.5	4.8
g/C Ratio	0.04	0.71	0.04	0.02	0.80	0.02
Cycles Skipped (%)	57	7	50	79	15	71
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	14	57	14	0	54	7
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 58.9
 Number of Complete Cycles : 14
 Average All-Red Dwell (s): 0.1
 Cycles with All-Red Dwell (%): 7

Intersection: 32: Ramon & Da Vall Dr.

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBT
Maximum Green (s)	5.5	17.5	7.5	21.5	5.0	18.0	17.5	11.5
Minimum Green (s)	5.0	9.5	5.0	10.0	5.0	9.5	5.0	10.0
Recall	None	Min	None	None	None	Min	None	None
Avg. Green (s)	5.5	19.4	7.8	23.3	5.1	25.4	17.6	15.5
g/C Ratio	0.07	0.26	0.10	0.31	0.03	0.34	0.24	0.19
Cycles Skipped (%)	0	0	0	0	55	0	0	9
Cycles @ Minimum (%)	9	0	9	0	45	0	0	0
Cycles Maxed Out (%)	82	100	82	91	45	100	36	82
Cycles with Peds (%)	0	0	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 74.5
 Number of Complete Cycles : 11

Summary of All Intervals

Run Number	1	10	100	11	12	13	14	15
Start Time	12:10	12:10	12:10	12:10	12:10	12:10	12:10	12:10
End Time	12:30	12:30	12:30	12:30	12:30	12:30	12:30	12:30
Total Time (min)	20	20	20	20	20	20	20	20
Time Recorded (min)	15	15	15	15	15	15	15	15
# of Intervals	2	2	2	2	2	2	2	2
# of Recorded Intvls	1	1	1	1	1	1	1	1
Vehs Entered	2616	2682	2771	2641	2572	2669	2614	2623
Vehs Exited	2618	2622	2680	2569	2530	2605	2571	2597
Starting Vehs	291	253	261	243	262	279	267	275
Ending Vehs	289	313	352	315	304	343	310	301
Denied Entry Before	6	10	3	2	5	1	2	5
Denied Entry After	6	6	3	6	6	6	13	2
Travel Distance (mi)	1540	1558	1539	1483	1493	1531	1481	1503
Travel Time (hr)	81.5	82.7	82.6	78.6	78.0	80.8	78.0	80.0
Total Delay (hr)	37.4	38.4	38.4	36.0	35.2	37.0	35.6	37.3
Total Stops	4005	4070	3977	3741	3736	3879	3877	3850
Fuel Used (gal)	134.3	136.9	135.4	129.9	128.4	132.7	131.2	132.0

Interval #0 Information Seeding

Start Time	12:10
End Time	12:15
Total Time (min)	5
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	12:15							
End Time	12:30							
Total Time (min)	15							
Volumes adjusted by PHF, Growth Factors.								
Run Number	1	10	100	11	12	13	14	15
Vehs Entered	2616	2682	2771	2641	2572	2669	2614	2623
Vehs Exited	2618	2622	2680	2569	2530	2605	2571	2597
Starting Vehs	291	253	261	243	262	279	267	275
Ending Vehs	289	313	352	315	304	343	310	301
Denied Entry Before	6	10	3	2	5	1	2	5
Denied Entry After	6	6	3	6	6	6	13	2
Travel Distance (mi)	1540	1558	1539	1483	1493	1531	1481	1503
Travel Time (hr)	81.5	82.7	82.6	78.6	78.0	80.8	78.0	80.0
Total Delay (hr)	37.4	38.4	38.4	36.0	35.2	37.0	35.6	37.3
Total Stops	4005	4070	3977	3741	3736	3879	3877	3850
Fuel Used (gal)	134.3	136.9	135.4	129.9	128.4	132.7	131.2	132.0

1: Ramon & Landau Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.9	0.6	1.6	0.1	0.5	0.4	4.1
Delay / Veh (s)	35.8	8.9	24.0	4.8	25.0	13.8	18.0
Stop Delay (hr)	0.8	0.4	1.1	0.1	0.4	0.3	3.0
St Del/Veh (s)	29.8	5.4	16.1	2.7	22.2	11.1	13.2
Total Stops	88	57	186	44	59	104	538
Stop/Veh	0.95	0.23	0.78	0.62	0.84	0.95	0.65
Travel Dist (mi)	9.4	24.6	27.9	8.2	10.1	15.8	96.0
Travel Time (hr)	1.2	1.3	2.3	0.4	0.9	1.1	7.2
Avg Speed (mph)	9	23	12	21	12	15	14
Fuel Used (gal)	1.2	2.2	2.0	0.4	0.8	1.0	7.7
Fuel Eff. (mpg)	7.8	11.4	13.7	21.4	11.9	15.2	12.5
HC Emissions (g)	4	9	6	1	3	3	26
CO Emissions (g)	122	409	113	40	94	108	886
NOx Emissions (g)	10	26	14	3	8	7	69
Vehicles Entered	94	244	241	71	70	109	829
Vehicles Exited	92	243	239	70	70	108	822
Hourly Exit Rate	368	972	956	280	280	432	3288
Denied Entry Before	1	1	0	0	0	0	2
Denied Entry After	1	1	0	0	0	0	2

2: Ramon & Candlewood Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Total Delay (hr)	0.1	0.0	0.0	0.1	0.0	0.3
Delay / Veh (s)	1.7	1.3	9.5	0.7	5.3	1.5
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	0.1	0.1	7.7	0.0	5.1	0.4
Total Stops	0	0	12	0	14	26
Stop/Veh	0.00	0.00	0.75	0.00	1.00	0.04
Travel Dist (mi)	37.4	1.9	0.9	16.7	0.6	57.5
Travel Time (hr)	1.2	0.1	0.1	0.5	0.1	1.9
Avg Speed (mph)	32	26	12	35	12	31
Fuel Used (gal)	3.2	0.1	0.1	0.9	0.0	4.3
Fuel Eff. (mpg)	11.7	12.9	15.2	19.4	14.0	13.3
HC Emissions (g)	13	1	0	3	0	17
CO Emissions (g)	793	36	3	129	3	964
NOx Emissions (g)	47	2	0	10	0	59
Vehicles Entered	297	15	15	296	14	637
Vehicles Exited	297	15	15	296	14	637
Hourly Exit Rate	1188	60	60	1184	56	2548
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0

4: Ramon & Shift Sands Performance by movement

Movement	EBT	EBR	WBT	NBR	All
Total Delay (hr)	0.1	0.0	0.2	0.0	0.3
Delay / Veh (s)	0.7	0.5	2.1	5.4	1.5
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	0.1	0.3	0.1	5.3	0.2
Total Stops	0	0	0	8	8
Stop/Veh	0.00	0.00	0.00	1.00	0.01
Travel Dist (mi)	17.3	0.5	24.0	0.3	42.1
Travel Time (hr)	0.5	0.0	0.9	0.0	1.5
Avg Speed (mph)	33	22	28	12	29
Fuel Used (gal)	0.9	0.0	3.2	0.0	4.2
Fuel Eff. (mpg)	18.3	23.7	7.5	14.6	10.1
HC Emissions (g)	4	0	13	0	17
CO Emissions (g)	174	1	798	2	975
NOx Emissions (g)	11	0	53	0	64
Vehicles Entered	323	9	386	8	726
Vehicles Exited	323	9	386	8	726
Hourly Exit Rate	1292	36	1544	32	2904
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

6: Ramon & Wh. Palms Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.1	0.5	0.0	0.1	0.9	0.0	0.2	0.0	0.0	0.1	0.0	0.0
Delay / Veh (s)	20.6	5.5	3.5	22.1	8.5	4.6	25.1	14.8	6.3	21.6	16.4	5.3
Stop Delay (hr)	0.1	0.2	0.0	0.1	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	18.0	2.6	2.4	19.2	4.6	3.3	22.4	11.6	5.4	19.4	13.3	4.8
Total Stops	16	86	3	18	144	2	22	4	6	8	5	5
Stop/Veh	0.94	0.28	0.50	0.95	0.40	0.40	0.92	0.80	0.86	0.89	0.83	0.83
Travel Dist (mi)	1.1	19.1	0.4	1.1	20.3	0.3	2.0	0.4	0.6	0.6	0.5	0.4
Travel Time (hr)	0.1	1.0	0.0	0.2	1.4	0.0	0.2	0.0	0.0	0.1	0.0	0.0
Avg Speed (mph)	8	20	17	7	15	16	9	12	16	9	10	15
Fuel Used (gal)	0.1	1.3	0.0	0.1	1.7	0.0	0.2	0.0	0.0	0.1	0.0	0.0
Fuel Eff. (mpg)	10.9	15.0	19.0	9.2	12.0	15.6	9.4	12.2	15.1	9.0	11.6	15.4
HC Emissions (g)	0	4	0	0	5	0	1	0	0	0	0	0
CO Emissions (g)	6	167	2	6	168	1	18	4	4	6	4	3
NOx Emissions (g)	1	13	0	1	16	0	2	0	0	1	0	0
Vehicles Entered	18	307	6	19	359	5	24	5	7	9	6	6
Vehicles Exited	17	307	6	19	358	5	24	5	7	9	6	6
Hourly Exit Rate	68	1228	24	76	1432	20	96	20	28	36	24	24
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

6: Ramon & Wh. Palms Performance by movement

Movement	All
Total Delay (hr)	1.8
Delay / Veh (s)	8.6
Stop Delay (hr)	1.1
St Del/Veh (s)	5.3
Total Stops	319
Stop/Veh	0.41
Travel Dist (mi)	46.9
Travel Time (hr)	3.2
Avg Speed (mph)	15
Fuel Used (gal)	3.7
Fuel Eff. (mpg)	12.8
HC Emissions (g)	11
CO Emissions (g)	389
NOx Emissions (g)	35
Vehicles Entered	771
Vehicles Exited	769
Hourly Exit Rate	3076
Denied Entry Before	0
Denied Entry After	0

7: Ramon & Sky Blue Water Performance by movement

Movement	EBT	EBR	WBT	WBR	NBR	SBR	All
Total Delay (hr)	0.2	0.0	0.1	0.0	0.0	0.0	0.3
Delay / Veh (s)	1.9	1.5	0.9	0.1	6.3	6.6	1.5
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	0.3	0.5	0.0	0.0	6.2	6.5	0.3
Total Stops	0	0	0	0	6	8	14
Stop/Veh	0.00	0.00	0.00	0.00	1.00	1.00	0.02
Travel Dist (mi)	19.5	0.4	11.8	0.1	0.3	0.5	32.6
Travel Time (hr)	0.7	0.0	0.4	0.0	0.0	0.0	1.2
Avg Speed (mph)	28	20	31	19	11	13	28
Fuel Used (gal)	2.4	0.0	0.5	0.0	0.0	0.0	2.9
Fuel Eff. (mpg)	8.1	12.5	25.6	27.3	15.0	15.5	11.1
HC Emissions (g)	10	0	2	0	0	0	12
CO Emissions (g)	618	4	47	0	1	2	673
NOx Emissions (g)	39	0	4	0	0	0	44
Vehicles Entered	336	7	319	4	6	8	680
Vehicles Exited	335	7	319	4	6	8	679
Hourly Exit Rate	1340	28	1276	16	24	32	2716
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

8: Ramon & Roundup Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Total Delay (hr)	0.1	0.0	0.0	0.1	0.0	0.2
Delay / Veh (s)	0.6	0.4	9.4	1.1	4.9	1.0
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	0.1	0.1	7.5	0.0	4.8	0.2
Total Stops	0	0	8	0	6	14
Stop/Veh	0.00	0.00	0.73	0.00	1.00	0.02
Travel Dist (mi)	12.3	0.5	0.8	23.4	0.3	37.3
Travel Time (hr)	0.4	0.0	0.1	0.7	0.0	1.2
Avg Speed (mph)	32	18	13	33	12	31
Fuel Used (gal)	0.8	0.0	0.0	1.3	0.0	2.2
Fuel Eff. (mpg)	14.9	21.6	16.6	18.2	15.8	17.0
HC Emissions (g)	3	0	0	4	0	8
CO Emissions (g)	177	2	3	204	1	386
NOx Emissions (g)	11	0	0	15	0	26
Vehicles Entered	327	14	11	329	6	687
Vehicles Exited	327	14	11	329	6	687
Hourly Exit Rate	1308	56	44	1316	24	2748
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0

10: Ramon & Pueblo Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Total Delay (hr)	0.2	0.3	0.0	0.0	0.5
Delay / Veh (s)	2.0	2.7	2.1	5.4	2.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	0.2	0.1	0.2	5.3	0.2
Total Stops	1	0	0	6	7
Stop/Veh	0.00	0.00	0.00	1.00	0.01
Travel Dist (mi)	23.9	27.3	0.4	0.4	52.0
Travel Time (hr)	0.8	1.1	0.0	0.0	1.9
Avg Speed (mph)	30	25	19	15	27
Fuel Used (gal)	1.2	3.8	0.0	0.0	5.0
Fuel Eff. (mpg)	20.8	7.2	10.2	17.4	10.4
HC Emissions (g)	5	14	0	0	19
CO Emissions (g)	183	861	5	2	1051
NOx Emissions (g)	12	63	1	0	76
Vehicles Entered	333	369	5	6	713
Vehicles Exited	332	368	5	6	711
Hourly Exit Rate	1328	1472	20	24	2844
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

11: Ramon & Maravilla Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.3	2.6	0.3	0.7	2.1	0.0	0.8	0.2	0.1	0.3	0.4	0.1
Delay / Veh (s)	64.5	34.5	35.2	60.2	26.1	22.8	40.3	41.1	6.4	58.5	58.2	15.8
Stop Delay (hr)	0.3	2.1	0.3	0.6	1.5	0.0	0.8	0.2	0.1	0.2	0.3	0.1
St Del/Veh (s)	58.8	26.9	31.1	54.3	19.2	20.0	38.3	37.8	6.0	55.1	53.5	13.1
Total Stops	27	224	29	48	200	3	68	17	32	19	25	13
Stop/Veh	1.42	0.81	0.88	1.20	0.69	0.75	0.94	0.94	0.71	1.19	1.14	0.93
Travel Dist (mi)	1.3	18.8	2.4	3.9	28.0	0.4	3.1	0.8	1.9	1.1	1.5	1.0
Travel Time (hr)	0.4	3.1	0.4	0.8	2.8	0.0	1.0	0.2	0.2	0.3	0.4	0.1
Avg Speed (mph)	3	6	6	5	10	9	3	3	11	4	4	11
Fuel Used (gal)	0.3	2.3	0.3	0.6	2.4	0.0	0.8	0.2	0.2	0.2	0.3	0.1
Fuel Eff. (mpg)	5.1	8.1	8.4	7.1	11.7	11.6	4.0	4.2	11.6	4.7	4.7	6.9
HC Emissions (g)	1	6	1	2	7	0	2	1	0	1	1	0
CO Emissions (g)	11	103	11	26	152	2	45	11	12	17	23	19
NOx Emissions (g)	2	15	2	4	18	0	7	2	1	2	3	2
Vehicles Entered	20	279	34	41	291	4	72	18	45	17	22	14
Vehicles Exited	19	273	33	40	288	4	72	18	45	16	21	14
Hourly Exit Rate	76	1092	132	160	1152	16	288	72	180	64	84	56
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

11: Ramon & Maravilla Performance by movement

Movement	All
Total Delay (hr)	7.9
Delay / Veh (s)	33.3
Stop Delay (hr)	6.5
St Del/Veh (s)	27.4
Total Stops	705
Stop/Veh	0.83
Travel Dist (mi)	64.0
Travel Time (hr)	9.8
Avg Speed (mph)	7
Fuel Used (gal)	7.6
Fuel Eff. (mpg)	8.4
HC Emissions (g)	21
CO Emissions (g)	430
NOx Emissions (g)	58
Vehicles Entered	857
Vehicles Exited	843
Hourly Exit Rate	3372
Denied Entry Before	0
Denied Entry After	0

13: Ramon & Ximino Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.1	0.4	0.1	0.0	0.0	0.0	0.5
Delay / Veh (s)	16.1	4.5	0.7	0.2	42.2	6.6	3.1
Stop Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.2
St Del/Veh (s)	11.1	1.0	0.1	0.0	41.1	6.4	1.0
Total Stops	12	2	0	0	3	6	23
Stop/Veh	0.80	0.01	0.00	0.00	1.00	1.00	0.04
Travel Dist (mi)	1.5	28.0	17.4	0.3	0.2	0.4	47.7
Travel Time (hr)	0.1	1.2	0.5	0.0	0.0	0.0	1.9
Avg Speed (mph)	12	24	34	22	4	13	25
Fuel Used (gal)	0.2	3.8	0.9	0.0	0.0	0.0	5.0
Fuel Eff. (mpg)	8.7	7.3	18.7	26.3	5.9	15.9	9.5
HC Emissions (g)	1	15	4	0	0	0	20
CO Emissions (g)	22	932	177	1	2	2	1135
NOx Emissions (g)	2	63	11	0	0	0	76
Vehicles Entered	15	297	318	5	3	6	644
Vehicles Exited	15	296	318	5	3	6	643
Hourly Exit Rate	60	1184	1272	20	12	24	2572
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

14: Ramon & Alvera Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBR	SBR	All
Total Delay (hr)	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.2
Delay / Veh (s)	1.6	0.3	8.0	0.7	0.3	7.3	5.8	1.4
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	0.8	0.1	6.1	0.0	0.0	7.2	5.7	0.7
Total Stops	0	0	9	0	0	10	8	27
Stop/Veh	0.00	0.00	0.50	0.00	0.00	1.00	1.00	0.04
Travel Dist (mi)	14.5	0.4	1.1	20.6	0.4	0.4	0.5	38.0
Travel Time (hr)	0.5	0.0	0.1	0.6	0.0	0.0	0.0	1.3
Avg Speed (mph)	30	22	14	34	23	10	13	30
Fuel Used (gal)	0.8	0.0	0.1	1.3	0.0	0.0	0.0	2.3
Fuel Eff. (mpg)	17.2	28.5	15.7	15.9	22.7	13.2	16.0	16.5
HC Emissions (g)	3	0	0	5	0	0	0	8
CO Emissions (g)	132	1	6	272	2	2	3	417
NOx Emissions (g)	9	0	1	16	0	0	0	27
Vehicles Entered	249	7	18	331	7	10	8	630
Vehicles Exited	249	7	18	331	7	10	8	630
Hourly Exit Rate	996	28	72	1324	28	40	32	2520
Denied Entry Before	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0

16: Ramon & Juarez Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Total Delay (hr)	0.1	0.1	0.0	0.0	0.3
Delay / Veh (s)	1.9	1.0	0.7	6.0	1.4
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.1
St Del/Veh (s)	1.3	0.2	0.3	5.9	0.7
Total Stops	0	0	0	7	7
Stop/Veh	0.00	0.00	0.00	1.00	0.01
Travel Dist (mi)	17.4	20.2	1.0	0.4	39.0
Travel Time (hr)	0.6	0.6	0.0	0.0	1.3
Avg Speed (mph)	30	33	22	13	31
Fuel Used (gal)	1.0	1.4	0.0	0.0	2.5
Fuel Eff. (mpg)	16.8	14.3	21.9	16.0	15.5
HC Emissions (g)	4	5	0	0	9
CO Emissions (g)	179	304	4	2	489
NOx Emissions (g)	11	18	0	0	29
Vehicles Entered	275	350	17	7	649
Vehicles Exited	275	349	17	7	648
Hourly Exit Rate	1100	1396	68	28	2592
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

18: Ramon & Yermo Performance by movement

Movement	EBL	EBT	WBT	WBR	SBR	All
Total Delay (hr)	0.0	0.2	0.0	0.0	0.0	0.3
Delay / Veh (s)	9.9	2.2	0.4	0.1	6.5	1.5
Stop Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.1
St Del/Veh (s)	7.9	1.1	0.0	0.0	6.3	0.7
Total Stops	6	5	0	0	11	22
Stop/Veh	0.67	0.02	0.00	0.00	1.00	0.04
Travel Dist (mi)	0.6	16.7	7.0	0.1	0.6	24.9
Travel Time (hr)	0.0	0.6	0.2	0.0	0.0	0.9
Avg Speed (mph)	12	28	32	16	12	27
Fuel Used (gal)	0.0	0.9	0.5	0.0	0.0	1.4
Fuel Eff. (mpg)	15.2	18.9	15.1	19.6	14.4	17.5
HC Emissions (g)	0	3	2	0	0	5
CO Emissions (g)	2	121	73	0	4	201
NOx Emissions (g)	0	8	6	0	0	15
Vehicles Entered	9	273	317	5	11	615
Vehicles Exited	9	273	317	5	11	615
Hourly Exit Rate	36	1092	1268	20	44	2460
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0

19: Ramon & Desert Vista Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Total Delay (hr)	0.1	0.0	0.0	0.1	0.0	0.0	0.3
Delay / Veh (s)	1.1	0.3	11.7	1.2	17.6	5.5	1.5
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	0.6	0.2	9.8	0.3	15.9	5.2	0.8
Total Stops	11	1	7	15	6	9	49
Stop/Veh	0.04	0.12	0.70	0.05	1.00	1.00	0.08
Travel Dist (mi)	5.5	0.2	0.5	16.3	0.6	0.9	23.9
Travel Time (hr)	0.2	0.0	0.1	0.5	0.1	0.1	0.9
Avg Speed (mph)	25	15	9	31	11	17	26
Fuel Used (gal)	0.3	0.0	0.0	0.8	0.0	0.0	1.3
Fuel Eff. (mpg)	15.8	21.2	12.4	20.0	13.7	18.9	18.4
HC Emissions (g)	1	0	0	3	0	0	4
CO Emissions (g)	45	0	2	108	3	3	162
NOx Emissions (g)	4	0	0	8	0	0	12
Vehicles Entered	265	8	10	332	6	9	630
Vehicles Exited	265	8	10	332	6	9	630
Hourly Exit Rate	1060	32	40	1328	24	36	2520
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

20: Ramon & Cielo Vista Performance by movement

Movement	EBT	EBR	WBT	NBR	All
Total Delay (hr)	0.1	0.0	0.1	0.0	0.2
Delay / Veh (s)	1.3	0.5	0.6	6.3	1.0
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.1
St Del/Veh (s)	0.5	0.3	0.0	6.2	0.3
Total Stops	0	0	0	4	4
Stop/Veh	0.00	0.00	0.00	1.00	0.01
Travel Dist (mi)	15.3	0.2	24.8	0.2	40.4
Travel Time (hr)	0.5	0.0	0.7	0.0	1.3
Avg Speed (mph)	31	20	36	11	33
Fuel Used (gal)	1.2	0.0	1.3	0.0	2.5
Fuel Eff. (mpg)	12.3	20.1	19.3	14.3	15.9
HC Emissions (g)	5	0	4	0	9
CO Emissions (g)	248	1	223	1	472
NOx Emissions (g)	17	0	14	0	31
Vehicles Entered	339	3	342	4	688
Vehicles Exited	339	3	342	4	688
Hourly Exit Rate	1356	12	1368	16	2752
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

22: Ramon & Rancho Vista Performance by movement

Movement	EBL	EBT	EBR	WBT	NBT	NBR	All
Total Delay (hr)	0.1	0.1	0.0	0.2	0.0	0.0	0.5
Delay / Veh (s)	10.1	1.6	0.4	2.0	54.6	8.7	2.5
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.0	0.2
St Del/Veh (s)	7.5	0.1	0.0	0.3	52.8	8.6	0.8
Total Stops	26	1	0	0	2	8	37
Stop/Veh	0.70	0.00	0.00	0.00	1.00	1.00	0.05
Travel Dist (mi)	2.7	22.0	0.6	23.7	0.1	0.4	49.5
Travel Time (hr)	0.2	0.7	0.0	1.0	0.0	0.0	2.0
Avg Speed (mph)	13	31	24	25	3	10	25
Fuel Used (gal)	0.2	1.3	0.0	3.9	0.0	0.0	5.4
Fuel Eff. (mpg)	14.9	17.4	20.8	6.1	4.1	12.5	9.1
HC Emissions (g)	1	5	0	16	0	0	23
CO Emissions (g)	15	263	5	1083	1	2	1369
NOx Emissions (g)	2	15	0	67	0	0	84
Vehicles Entered	37	301	8	334	2	8	690
Vehicles Exited	37	301	8	334	2	8	690
Hourly Exit Rate	148	1204	32	1336	8	32	2760
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

23: Ramon & Date Palm Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.6	1.2	0.1	0.4	1.4	0.2	0.6	0.9	0.1	0.7	0.9	0.1
Delay / Veh (s)	40.8	24.1	5.4	37.3	20.3	19.4	29.8	26.6	12.1	47.8	27.9	7.0
Stop Delay (hr)	0.5	0.9	0.1	0.3	0.9	0.1	0.6	0.7	0.1	0.6	0.8	0.1
St Del/Veh (s)	35.2	17.9	4.1	30.9	13.1	14.4	27.0	22.5	10.2	42.9	23.5	6.0
Total Stops	62	129	39	35	122	28	65	95	21	55	98	37
Stop/Veh	1.17	0.71	0.53	0.97	0.49	0.90	0.87	0.81	0.78	1.10	0.83	0.77
Travel Dist (mi)	3.8	12.3	5.3	3.7	21.7	3.3	6.7	10.5	2.4	4.6	11.0	4.5
Travel Time (hr)	0.7	1.5	0.3	0.5	1.9	0.3	0.9	1.3	0.2	0.8	1.3	0.3
Avg Speed (mph)	5	8	16	7	11	11	8	9	15	6	9	16
Fuel Used (gal)	0.5	1.3	0.3	0.5	2.7	0.4	0.8	1.3	0.3	0.7	1.3	0.3
Fuel Eff. (mpg)	7.2	9.6	18.1	7.6	8.2	9.0	7.9	8.2	9.6	6.3	8.4	14.3
HC Emissions (g)	1	4	1	1	9	1	3	4	1	2	4	1
CO Emissions (g)	22	79	24	46	391	46	93	147	35	69	144	40
NOx Emissions (g)	4	10	2	5	34	4	9	13	3	7	13	3
Vehicles Entered	54	181	73	36	247	31	75	117	27	50	118	48
Vehicles Exited	52	180	73	36	246	31	75	117	27	49	117	48
Hourly Exit Rate	208	720	292	144	984	124	300	468	108	196	468	192
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

23: Ramon & Date Palm Performance by movement

Movement	All
Total Delay (hr)	7.1
Delay / Veh (s)	24.3
Stop Delay (hr)	5.7
St Del/Veh (s)	19.3
Total Stops	786
Stop/Veh	0.75
Travel Dist (mi)	89.9
Travel Time (hr)	10.1
Avg Speed (mph)	9
Fuel Used (gal)	10.3
Fuel Eff. (mpg)	8.7
HC Emissions (g)	33
CO Emissions (g)	1138
NOx Emissions (g)	106
Vehicles Entered	1057
Vehicles Exited	1051
Hourly Exit Rate	4204
Denied Entry Before	0
Denied Entry After	0

24: Ramon & Cathedral Village Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.2	1.1	0.1	0.3	1.3	0.0	0.2	0.0	0.1	0.2	0.0	0.0
Delay / Veh (s)	33.4	18.3	8.7	33.7	16.4	7.5	27.7	30.2	13.0	31.0	24.7	8.9
Stop Delay (hr)	0.2	0.6	0.0	0.2	0.8	0.0	0.2	0.0	0.1	0.2	0.0	0.0
St Del/Veh (s)	27.4	10.8	4.6	28.8	9.6	5.5	25.5	26.8	11.8	28.1	21.8	8.1
Total Stops	25	117	20	26	159	6	20	4	34	21	6	6
Stop/Veh	1.00	0.56	0.67	0.96	0.56	0.60	0.91	1.00	0.92	0.91	0.86	0.86
Travel Dist (mi)	2.5	21.3	3.0	3.2	33.6	1.2	1.2	0.2	2.0	1.3	0.4	0.4
Travel Time (hr)	0.3	1.7	0.2	0.4	2.1	0.1	0.2	0.0	0.2	0.3	0.1	0.0
Avg Speed (mph)	8	13	16	9	16	19	6	5	11	6	7	11
Fuel Used (gal)	0.4	2.6	0.3	0.3	2.3	0.1	0.2	0.0	0.3	0.2	0.1	0.0
Fuel Eff. (mpg)	7.1	8.2	9.6	10.8	14.8	15.8	6.5	6.5	7.7	6.3	7.8	11.6
HC Emissions (g)	1	9	1	1	8	0	1	0	1	1	0	0
CO Emissions (g)	35	375	45	24	268	13	14	3	25	14	5	3
NOx Emissions (g)	4	34	4	3	22	1	2	0	3	2	1	0
Vehicles Entered	25	210	30	27	286	10	22	4	37	23	7	7
Vehicles Exited	25	209	30	27	286	10	22	4	37	23	7	7
Hourly Exit Rate	100	836	120	108	1144	40	88	16	148	92	28	28
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

24: Ramon & Cathedral Village Performance by movement

Movement	All
Total Delay (hr)	3.5
Delay / Veh (s)	18.6
Stop Delay (hr)	2.4
St Del/Veh (s)	12.5
Total Stops	444
Stop/Veh	0.65
Travel Dist (mi)	70.4
Travel Time (hr)	5.6
Avg Speed (mph)	13
Fuel Used (gal)	6.7
Fuel Eff. (mpg)	10.5
HC Emissions (g)	22
CO Emissions (g)	824
NOx Emissions (g)	75
Vehicles Entered	688
Vehicles Exited	687
Hourly Exit Rate	2748
Denied Entry Before	0
Denied Entry After	0

25: Ramon & San Eljay Ave. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.2	0.2	0.1	0.0	0.2	0.1	0.7
Delay / Veh (s)	16.8	3.2	0.8	0.3	76.8	5.8	4.0
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.2	0.0	0.4
St Del/Veh (s)	12.3	0.2	0.0	0.1	75.8	5.5	2.1
Total Stops	27	0	1	1	9	31	69
Stop/Veh	0.79	0.00	0.00	0.07	1.00	1.00	0.11
Travel Dist (mi)	4.0	27.5	13.7	0.7	0.5	1.7	48.1
Travel Time (hr)	0.3	0.9	0.4	0.0	0.2	0.1	2.0
Avg Speed (mph)	14	30	36	20	2	13	24
Fuel Used (gal)	0.4	3.4	0.8	0.0	0.1	0.1	4.9
Fuel Eff. (mpg)	8.9	8.1	17.9	26.6	3.7	12.8	9.8
HC Emissions (g)	2	14	3	0	0	0	19
CO Emissions (g)	72	874	164	2	9	14	1133
NOx Emissions (g)	6	57	10	0	1	1	76
Vehicles Entered	34	236	293	14	9	31	617
Vehicles Exited	34	235	292	14	9	31	615
Hourly Exit Rate	136	940	1168	56	36	124	2460
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

26: Ramon & El Toro Rd. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Delay / Veh (s)	8.6	0.5	0.7	0.0	23.9	4.4	0.8
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	7.0	0.0	0.0	0.0	22.7	4.3	0.2
Total Stops	2	0	0	0	3	4	9
Stop/Veh	0.67	0.00	0.00	0.00	1.00	1.00	0.02
Travel Dist (mi)	0.1	11.1	16.6	0.1	0.2	0.2	28.3
Travel Time (hr)	0.0	0.3	0.4	0.0	0.0	0.0	0.8
Avg Speed (mph)	10	38	38	23	6	14	36
Fuel Used (gal)	0.0	0.6	0.9	0.0	0.0	0.0	1.5
Fuel Eff. (mpg)	14.1	18.0	19.5	32.9	8.6	17.0	18.7
HC Emissions (g)	0	2	3	0	0	0	6
CO Emissions (g)	1	112	172	0	1	1	287
NOx Emissions (g)	0	8	10	0	0	0	18
Vehicles Entered	3	234	309	1	3	4	554
Vehicles Exited	3	234	308	1	3	4	553
Hourly Exit Rate	12	936	1232	4	12	16	2212
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

27: Ramon & Victor Rd. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Delay / Veh (s)	10.3	0.5	0.6	0.3	29.7	4.5	0.8
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	8.7	0.0	0.0	0.1	28.6	4.4	0.3
Total Stops	3	1	1	0	3	2	10
Stop/Veh	0.75	0.00	0.00	0.00	1.00	1.00	0.02
Travel Dist (mi)	0.2	12.3	16.2	0.1	0.2	0.1	29.2
Travel Time (hr)	0.0	0.3	0.4	0.0	0.0	0.0	0.8
Avg Speed (mph)	11	39	37	21	5	15	36
Fuel Used (gal)	0.0	0.6	0.9	0.0	0.0	0.0	1.5
Fuel Eff. (mpg)	15.1	21.2	18.8	16.5	7.4	18.0	19.5
HC Emissions (g)	0	2	3	0	0	0	5
CO Emissions (g)	1	93	168	1	1	1	265
NOx Emissions (g)	0	6	10	0	0	0	17
Vehicles Entered	4	230	309	2	3	2	550
Vehicles Exited	4	230	308	2	3	2	549
Hourly Exit Rate	16	920	1232	8	12	8	2196
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

28: Ramon & Neuma Dr. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.0	0.2	0.0	0.0	0.0	0.3
Delay / Veh (s)	8.5	0.5	2.8	2.3	24.9	4.3	2.2
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	7.2	0.0	0.1	0.4	23.8	4.1	0.5
Total Stops	3	0	2	0	6	7	18
Stop/Veh	0.60	0.00	0.01	0.00	1.00	1.00	0.03
Travel Dist (mi)	0.2	11.7	54.4	0.8	0.3	0.4	67.7
Travel Time (hr)	0.0	0.3	1.5	0.0	0.1	0.0	1.9
Avg Speed (mph)	11	39	36	30	5	14	35
Fuel Used (gal)	0.0	0.5	3.4	0.0	0.0	0.0	4.0
Fuel Eff. (mpg)	15.2	22.3	16.2	17.5	7.9	16.0	16.9
HC Emissions (g)	0	2	12	0	0	0	14
CO Emissions (g)	1	71	629	7	2	2	712
NOx Emissions (g)	0	5	45	1	0	0	51
Vehicles Entered	5	220	302	4	6	7	544
Vehicles Exited	5	220	300	4	6	7	542
Hourly Exit Rate	20	880	1200	16	24	28	2168
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

29: Ramon & Via Campanile Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.0	0.3	0.0	0.0	0.4	0.0	0.1	0.0	0.0	0.0	0.9
Delay / Veh (s)	21.8	4.7	3.1	20.5	4.4	0.5	24.7	3.0	22.6	5.7	5.2
Stop Delay (hr)	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.3
St Del/Veh (s)	19.3	1.1	0.8	17.5	0.9	0.3	22.6	2.9	21.0	6.0	1.9
Total Stops	4	32	4	6	41	1	12	5	4	5	114
Stop/Veh	1.00	0.15	0.31	0.86	0.11	0.25	1.00	0.83	1.00	1.00	0.18
Travel Dist (mi)	0.8	38.1	2.3	1.4	65.4	0.8	0.6	0.3	0.2	0.3	110.1
Travel Time (hr)	0.0	1.1	0.1	0.1	1.8	0.0	0.1	0.0	0.0	0.0	3.4
Avg Speed (mph)	17	33	29	18	36	39	6	15	7	13	33
Fuel Used (gal)	0.0	1.8	0.1	0.1	2.9	0.0	0.1	0.0	0.0	0.0	5.1
Fuel Eff. (mpg)	18.0	21.0	23.9	18.7	22.4	25.4	7.2	15.9	8.3	15.0	21.5
HC Emissions (g)	0	6	0	0	10	0	0	0	0	0	17
CO Emissions (g)	4	253	8	6	376	5	4	2	2	2	660
NOx Emissions (g)	0	19	1	1	32	0	1	0	0	0	54
Vehicles Entered	4	208	13	7	361	4	12	6	4	5	624
Vehicles Exited	4	207	13	7	360	4	12	6	4	5	622
Hourly Exit Rate	16	828	52	28	1440	16	48	24	16	20	2488
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0

30: Ramon & Charter Hospital Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Total Delay (hr)	0.0	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Delay / Veh (s)	8.6	2.2	1.8	11.6	4.1	4.3	44.7		2.7	35.9	5.4	3.8
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	6.9	0.1	0.1	7.3	0.3	1.3	42.8		3.0	34.9	6.0	0.6
Total Stops	1	1	0	3	2	0	2	0	2	2	2	15
Stop/Veh	1.00	0.00	0.00	0.60	0.01	0.00	1.00		1.00	1.00	1.00	0.03
Travel Dist (mi)	0.2	41.7	1.8	1.0	67.2	0.4	0.1	0.0	0.1	0.0	0.1	112.5
Travel Time (hr)	0.0	1.0	0.1	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	3.1
Avg Speed (mph)	25	41	34	24	35	31	4	4	13	2	8	36
Fuel Used (gal)	0.0	2.9	0.2	0.1	6.8	0.0	0.0	0.0	0.0	0.0	0.0	10.1
Fuel Eff. (mpg)	15.1	14.2	10.9	10.5	9.9	9.5	5.2	6.5	16.8	2.5	11.5	11.2
HC Emissions (g)	0	11	1	0	28	0	0	0	0	0	0	41
CO Emissions (g)	2	735	57	19	1822	14	1	0	0	1	0	2650
NOx Emissions (g)	0	44	3	1	114	1	0	0	0	0	0	164
Vehicles Entered	1	206	9	5	367	2	2	0	2	2	2	598
Vehicles Exited	1	206	9	5	366	2	2	0	2	2	2	597
Hourly Exit Rate	4	824	36	20	1464	8	8	0	8	8	8	2388
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

32: Ramon & Da Vall Dr. Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.3	1.1	0.1	0.2	1.5	0.3	0.5	0.7	0.0	0.3	0.4	0.0
Delay / Veh (s)	43.4	19.6	8.5	40.0	24.4	14.6	36.2	31.9	4.5	38.3	30.6	17.8
Stop Delay (hr)	0.2	0.7	0.0	0.1	1.2	0.2	0.4	0.6	0.0	0.3	0.3	0.0
St Del/Veh (s)	38.3	12.4	6.1	35.6	19.0	12.5	31.9	27.4	4.3	34.2	26.7	16.1
Total Stops	22	116	18	14	174	60	48	68	7	31	41	7
Stop/Veh	1.05	0.60	0.67	1.00	0.79	0.86	0.98	0.92	0.70	1.00	0.91	0.88
Travel Dist (mi)	4.2	37.9	5.3	0.9	14.5	4.7	2.6	3.9	0.5	1.6	2.4	0.4
Travel Time (hr)	0.4	1.9	0.2	0.2	2.0	0.5	0.6	0.8	0.0	0.4	0.5	0.1
Avg Speed (mph)	12	20	25	5	7	9	5	5	16	5	5	7
Fuel Used (gal)	0.3	2.0	0.2	0.2	2.1	0.5	0.6	0.7	0.0	0.4	0.4	0.1
Fuel Eff. (mpg)	14.0	18.9	21.3	4.9	7.0	9.1	4.7	5.7	15.9	4.6	5.8	7.4
HC Emissions (g)	1	7	1	1	7	2	2	2	0	1	1	0
CO Emissions (g)	20	215	33	18	221	53	37	43	3	25	28	4
NOx Emissions (g)	3	19	2	2	22	5	5	6	0	4	4	0
Vehicles Entered	22	195	27	14	221	70	48	74	10	31	45	8
Vehicles Exited	21	193	27	14	219	70	48	74	10	31	45	8
Hourly Exit Rate	84	772	108	56	876	280	192	296	40	124	180	32
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

32: Ramon & Da Vall Dr. Performance by movement

Movement	All
Total Delay (hr)	5.2
Delay / Veh (s)	24.6
Stop Delay (hr)	4.2
St Del/Veh (s)	19.6
Total Stops	606
Stop/Veh	0.80
Travel Dist (mi)	78.9
Travel Time (hr)	7.5
Avg Speed (mph)	11
Fuel Used (gal)	7.4
Fuel Eff. (mpg)	10.6
HC Emissions (g)	24
CO Emissions (g)	701
NOx Emissions (g)	72
Vehicles Entered	765
Vehicles Exited	760
Hourly Exit Rate	3040
Denied Entry Before	0
Denied Entry After	0

Total Network Performance

Total Delay (hr)	37.1
Delay / Veh (s)	51.2
Stop Delay (hr)	25.0
St Del/Veh (s)	34.5
Total Stops	3871
Stop/Veh	1.48
Travel Dist (mi)	1516.0
Travel Time (hr)	80.4
Avg Speed (mph)	19
Fuel Used (gal)	132.7
Fuel Eff. (mpg)	11.4
HC Emissions (g)	480
CO Emissions (g)	23787
NOx Emissions (g)	1698
Vehicles Entered	2643
Vehicles Exited	2584
Hourly Exit Rate	10336
Denied Entry Before	2
Denied Entry After	2

Arterial Level of Service: EB Ramon

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Landau	8.9	19.2	0.1	25
Candlewood	1.8	13.3	0.1	34
Shift Sands	0.7	5.8	0.1	36
Wh. Palms	5.5	11.3	0.1	21
Sky Blue Water	1.9	7.3	0.1	32
Roundup	0.6	4.2	0.0	33
Pueblo	2.0	8.7	0.1	30
Cathedral Canyon	34.5	40.8	0.1	6
Ximino	5.2	14.0	0.1	26
Cyn Vista	1.6	6.9	0.1	30
Juarez	2.0	7.8	0.1	31
Yermo	2.2	7.9	0.1	29
Desert Vista	1.1	3.0	0.0	26
Cielo Vista	1.3	5.6	0.1	36
Rancho Vista	1.6	8.5	0.1	31
Date Palm	24.1	30.4	0.1	9
	18.4	27.1	0.1	15
San Eljay Ave.	3.9	13.6	0.1	32
El Toro Rd.	0.4	4.3	0.0	39
Victor Rd.	0.5	4.9	0.1	40
Neuma Dr.	0.5	4.9	0.1	39
Outdoor Resorts	4.7	19.8	0.2	33
Desert Shadows	2.3	17.5	0.2	42
	19.5	34.4	0.2	22
Total	145.6	321.2	2.1	24

Arterial Level of Service: WB Ramon

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Da Vall Dr.	24.4	32.3	0.1	8
Charter Hospital	4.7	18.1	0.2	43
Via Campanile	4.4	18.0	0.2	41
Neuma Dr.	2.9	17.7	0.2	37
Victor Rd.	0.6	5.0	0.1	38
El Toro Rd.	0.7	5.1	0.1	39
San Eljay Ave.	0.8	4.7	0.0	37
Cathedral Village	16.5	26.2	0.1	16
Date Palm	20.7	27.9	0.1	14
Rancho Vista	2.7	9.1	0.1	31
Cielo Vista	0.6	7.4	0.1	36
Desert Vista	1.2	5.7	0.1	32
Yermo	0.4	2.4	0.0	32
Juarez	1.0	6.4	0.1	36
Alvera	0.7	6.5	0.1	36
Ximino	0.7	5.8	0.1	36
Maravilla	26.1	35.1	0.1	10
Pueblo	3.3	10.1	0.1	26
Roundup	1.1	7.6	0.1	34
Sky Blue Water	0.9	4.3	0.0	32
Wh. Palms	8.6	13.9	0.1	17
Shift Sands	2.2	7.9	0.1	30
Candlewood	0.7	5.8	0.1	35
Landau	24.0	34.8	0.1	13
Total	149.7	317.8	2.1	23

Intersection: 1: Ramon & Landau

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	L	T	T	T	T	R	L	L	R
Maximum Queue (ft)	158	302	225	270	276	104	95	105	205
Average Queue (ft)	136	147	99	184	183	58	57	68	124
95th Queue (ft)	177	335	232	283	290	108	100	113	217
Link Distance (ft)		532	532	583	583	583		756	756
Upstream Blk Time (%)		0	0						
Queuing Penalty (veh)		0	0						
Storage Bay Dist (ft)	125						200		
Storage Blk Time (%)	18	0							
Queuing Penalty (veh)	90	1							

Intersection: 2: Ramon & Candlewood

Movement	EB	WB	WB	WB	NB
Directions Served	TR	L	T	T	R
Maximum Queue (ft)	5	61	1	1	52
Average Queue (ft)	1	32	0	0	31
95th Queue (ft)	7	66	8	8	58
Link Distance (ft)	583		243	243	232
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		60			
Storage Blk Time (%)		1			
Queuing Penalty (veh)		5			

Intersection: 4: Ramon & Shift Sands

Movement	EB	NB
Directions Served	T	R
Maximum Queue (ft)	1	44
Average Queue (ft)	0	22
95th Queue (ft)	4	51
Link Distance (ft)	243	240
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Ramon & Wh. Palms

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	76	108	104	108	99	183	198	163	79	65	54	55
Average Queue (ft)	43	65	63	65	50	110	124	90	51	30	26	28
95th Queue (ft)	80	111	109	113	102	195	212	171	86	72	59	61
Link Distance (ft)		287	287	287		268	268	268		451		385
Upstream Blk Time (%)						0	0	0				
Queuing Penalty (veh)						0	0	0				
Storage Bay Dist (ft)	150				150				60		100	
Storage Blk Time (%)		0			0	2			5	1	0	0
Queuing Penalty (veh)		0			1	1			2	0	0	0

Intersection: 7: Ramon & Sky Blue Water

Movement	EB	EB	EB	WB	NB	SB
Directions Served	T	T	TR	TR	R	R
Maximum Queue (ft)	2	2	2	1	42	43
Average Queue (ft)	0	0	0	0	20	22
95th Queue (ft)	0	0	2	5	48	50
Link Distance (ft)	268	268	268	138	230	332
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 8: Ramon & Roundup

Movement	EB	EB	EB	WB	WB	NB
Directions Served	T	T	TR	L	T	R
Maximum Queue (ft)	2	2	6	54	1	38
Average Queue (ft)	0	0	1	24	0	17
95th Queue (ft)	11	10	12	58	8	44
Link Distance (ft)	138	138	138		325	242
Upstream Blk Time (%)	0	0	0			
Queuing Penalty (veh)	0	0	0			
Storage Bay Dist (ft)				60		
Storage Blk Time (%)				1		
Queuing Penalty (veh)				3		

Intersection: 10: Ramon & Pueblo

Movement	EB	EB	EB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	14	8	4	1	40
Average Queue (ft)	2	1	1	0	18
95th Queue (ft)	31	25	22	3	46
Link Distance (ft)	325	325	325	306	354
Upstream Blk Time (%)	0	0	0		
Queuing Penalty (veh)	1	1	0		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 11: Ramon & Maravilla

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	LT	R	LT
Maximum Queue (ft)	136	318	287	274	190	255	248	225	168	163	90	189
Average Queue (ft)	73	232	206	192	122	175	175	157	115	109	52	119
95th Queue (ft)	148	349	312	301	213	277	264	241	180	176	94	219
Link Distance (ft)		306	306	306		441	441	441		220	220	351
Upstream Blk Time (%)		3	1	1		0			0	0	0	0
Queuing Penalty (veh)		12	5	4		1			0	0	0	0
Storage Bay Dist (ft)	120				190				280			
Storage Blk Time (%)	2	32			4	3			0	0		6
Queuing Penalty (veh)	8	25			15	6			0	0		3

Intersection: 11: Ramon & Maravilla

Movement	SB
Directions Served	R
Maximum Queue (ft)	91
Average Queue (ft)	37
95th Queue (ft)	107
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	175
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 13: Ramon & Ximino

Movement	EB	EB	EB	EB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	TR	L	R
Maximum Queue (ft)	69	4	4	5	2	1	36	40
Average Queue (ft)	35	3	2	2	0	0	13	19
95th Queue (ft)	73	58	56	56	9	3	41	48
Link Distance (ft)		441	441	441	244	244	309	309
Upstream Blk Time (%)		0	0	0				
Queuing Penalty (veh)		2	2	2				
Storage Bay Dist (ft)	100							
Storage Blk Time (%)	0	1						
Queuing Penalty (veh)	1	0						

Intersection: 14: Ramon & Alvera

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	T	T	TR	L	T	T	R	R
Maximum Queue (ft)	2	2	5	57	5	0	48	44
Average Queue (ft)	2	2	2	27	1	0	25	22
95th Queue (ft)	37	34	34	62	16	2	55	50
Link Distance (ft)	244	244	244		287	287	222	304
Upstream Blk Time (%)	1	1	1					
Queuing Penalty (veh)	2	2	2					
Storage Bay Dist (ft)				60				
Storage Blk Time (%)				1				
Queuing Penalty (veh)				4				

Intersection: 16: Ramon & Juarez

Movement	EB	EB	EB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	3	4	3	0	42
Average Queue (ft)	3	2	2	0	20
95th Queue (ft)	47	45	43	1	49
Link Distance (ft)	287	287	287	273	314
Upstream Blk Time (%)	1	1	1		
Queuing Penalty (veh)	3	2	2		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 18: Ramon & Yermo

Movement	EB	EB	EB	EB	WB	SB
Directions Served	L	T	T	T	TR	R
Maximum Queue (ft)	51	56	36	14	1	48
Average Queue (ft)	21	14	9	5	0	27
95th Queue (ft)	54	79	69	56	5	55
Link Distance (ft)		273	273	273	53	299
Upstream Blk Time (%)		1	1	1		
Queuing Penalty (veh)		3	3	3		
Storage Bay Dist (ft)	100					
Storage Blk Time (%)	0	1				
Queuing Penalty (veh)	0	0				

Intersection: 19: Ramon & Desert Vista

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	56	54	38	51	68	56	62	45	44
Average Queue (ft)	18	16	10	22	18	15	18	21	24
95th Queue (ft)	61	56	40	56	67	56	63	53	51
Link Distance (ft)	53	53	53		208	208	208	504	504
Upstream Blk Time (%)	2	2	0						
Queuing Penalty (veh)	8	7	1						
Storage Bay Dist (ft)				150					
Storage Blk Time (%)					0				
Queuing Penalty (veh)					0				

Intersection: 20: Ramon & Cielo Vista

Movement	EB	EB	NB
Directions Served	T	T	R
Maximum Queue (ft)	2	0	36
Average Queue (ft)	0	0	13
95th Queue (ft)	7	3	40
Link Distance (ft)	208	208	234
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 22: Ramon & Rancho Vista

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	T	T	T	R
Maximum Queue (ft)	86	18	4	1	0	0	32	46
Average Queue (ft)	48	3	1	0	0	0	9	24
95th Queue (ft)	92	37	15	5	1	2	34	54
Link Distance (ft)		330	330	306	306	306	248	248
Upstream Blk Time (%)		0						
Queuing Penalty (veh)		0						
Storage Bay Dist (ft)	125							
Storage Blk Time (%)	0	0						
Queuing Penalty (veh)	1	0						

Intersection: 23: Ramon & Date Palm

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	TR	L	L	T	T
Maximum Queue (ft)	163	262	219	116	139	154	149	162	116	121	158	150
Average Queue (ft)	122	164	142	59	84	101	98	104	71	79	110	96
95th Queue (ft)	187	288	236	121	148	164	158	174	121	126	168	160
Link Distance (ft)		306	306	306		468	468	468		466	466	466
Upstream Blk Time (%)		1	0									
Queuing Penalty (veh)		5	1									
Storage Bay Dist (ft)	135				235				235			
Storage Blk Time (%)	10	8			0	0						3
Queuing Penalty (veh)	32	19			0	0						3

Intersection: 23: Ramon & Date Palm

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (ft)	91	180	190	179	90
Average Queue (ft)	36	124	125	114	54
95th Queue (ft)	90	205	216	194	92
Link Distance (ft)			492	492	492
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	120	200			
Storage Blk Time (%)		4	0		
Queuing Penalty (veh)		9	1		

Intersection: 24: Ramon & Cathedral Village

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	TR	L	LT	R	L
Maximum Queue (ft)	135	232	227	118	120	198	165	142	43	91	76	92
Average Queue (ft)	69	141	134	53	64	130	107	88	16	46	39	57
95th Queue (ft)	137	250	242	122	124	209	174	152	46	99	78	98
Link Distance (ft)		468	468			545	545	545		276		
Upstream Blk Time (%)										0		
Queuing Penalty (veh)										0		
Storage Bay Dist (ft)	150			100	190				75		75	75
Storage Blk Time (%)	0	7	12	0	0	1			0	2	1	5
Queuing Penalty (veh)	1	7	15	0	0	1			0	4	1	3

Intersection: 24: Ramon & Cathedral Village

Movement	SB
Directions Served	TR
Maximum Queue (ft)	81
Average Queue (ft)	36
95th Queue (ft)	82
Link Distance (ft)	298
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	1
Queuing Penalty (veh)	1

Intersection: 25: Ramon & San Eljay Ave.

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	TR	L	R
Maximum Queue (ft)	102	11	8	8	7	13	80	72
Average Queue (ft)	58	2	1	1	1	2	40	44
95th Queue (ft)	108	25	19	14	11	13	89	74
Link Distance (ft)		545	545	183	183	183	290	290
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	150							
Storage Blk Time (%)	0							
Queuing Penalty (veh)	1							

Intersection: 26: Ramon & El Toro Rd.

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	TR	L	R
Maximum Queue (ft)	32	2	2	5	4	2	36	35
Average Queue (ft)	8	0	0	1	0	0	11	13
95th Queue (ft)	32	7	6	10	8	6	40	39
Link Distance (ft)		183	183	220	220	220	291	291
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	75							
Storage Blk Time (%)	0							
Queuing Penalty (veh)	0							

Intersection: 27: Ramon & Victor Rd.

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	TR	L	R
Maximum Queue (ft)	35	8	10	13	11	5	39	34
Average Queue (ft)	11	1	1	2	2	1	12	9
95th Queue (ft)	37	15	17	17	16	9	42	33
Link Distance (ft)		220	220	213	213	213	283	283
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	75							
Storage Blk Time (%)	0	0						
Queuing Penalty (veh)	0	0						

Intersection: 28: Ramon & Neuma Dr.

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	TR	L	R
Maximum Queue (ft)	37	6	6	17	14	4	48	40
Average Queue (ft)	12	1	1	3	2	1	21	20
95th Queue (ft)	39	12	10	22	19	9	54	48
Link Distance (ft)		213	213	900	900		273	273
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	75					75		
Storage Blk Time (%)	0	0			0			
Queuing Penalty (veh)	0	0			0			

Intersection: 29: Ramon & Via Campanile

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	R	L	TR	L
Maximum Queue (ft)	39	91	79	52	36	50	120	120	12	58	32	31
Average Queue (ft)	14	40	39	15	11	20	56	52	2	31	13	11
95th Queue (ft)	42	94	85	53	37	51	126	122	13	62	35	33
Link Distance (ft)		900	900				1002	1002	1002		242	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	150			100	100	150				50		50
Storage Blk Time (%)		0	0	0			0			3	0	0
Queuing Penalty (veh)		0	0	0			0			1	0	0

Intersection: 29: Ramon & Via Campanile

Movement	SB
Directions Served	TR
Maximum Queue (ft)	24
Average Queue (ft)	8
95th Queue (ft)	26
Link Distance (ft)	288
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 30: Ramon & Charter Hospital

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	T	L	TR	L
Maximum Queue (ft)	13	11	8	4	2	34	21	13	6	31	19	26
Average Queue (ft)	2	2	1	0	0	11	3	2	1	9	5	7
95th Queue (ft)	15	17	14	10	4	36	23	18	11	32	19	28
Link Distance (ft)		1002	1002	1002			1050	1050	1050		216	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100				100	100				50		50
Storage Blk Time (%)		0								1	0	0
Queuing Penalty (veh)		0								0	0	0

Intersection: 30: Ramon & Charter Hospital

Movement	SB
Directions Served	TR
Maximum Queue (ft)	28
Average Queue (ft)	7
95th Queue (ft)	28
Link Distance (ft)	114
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 32: Ramon & Da Vall Dr.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	T	R	L
Maximum Queue (ft)	111	156	147	144	83	212	196	210	186	247	50	137
Average Queue (ft)	61	107	100	88	37	148	131	130	116	156	22	82
95th Queue (ft)	117	165	156	151	90	225	210	225	195	270	63	146
Link Distance (ft)		1050	1050	1050		335	335	335		280	280	
Upstream Blk Time (%)						0		0		2	0	
Queuing Penalty (veh)						0		0		0	0	
Storage Bay Dist (ft)	175				200				175			150
Storage Blk Time (%)	0	0				2			1	7		1
Queuing Penalty (veh)	0	0				1			4	13		2

Intersection: 32: Ramon & Da Vall Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	187
Average Queue (ft)	113
95th Queue (ft)	199
Link Distance (ft)	274
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	3
Queuing Penalty (veh)	4

Network Summary

Network wide Queuing Penalty: 366

Intersection: 1: Ramon & Landau

Phase	2	3	5	6
Movement(s) Served	EBT	SBL	EBL	WBT
Maximum Green (s)	41.0	8.0	17.0	19.0
Minimum Green (s)	10.0	8.0	4.0	10.0
Recall	Min	None	None	Min
Avg. Green (s)	41.1	8.3	15.0	19.2
g/C Ratio	0.68	0.14	0.25	0.32
Cycles Skipped (%)	0	0	0	0
Cycles @ Minimum (%)	0	100	0	0
Cycles Maxed Out (%)	29	100	53	87
Cycles with Peds (%)	0	0	0	0

Controller Summary

Average Cycle Length (s): 60.1

Number of Complete Cycles : 14

Intersection: 6: Ramon & Wh. Palms

Phase	1	2	4	5	6	8
Movement(s) Served	WBL	EBT	SBTL	EBL	WBT	NBTL
Maximum Green (s)	4.0	14.5	6.0	4.0	14.5	6.0
Minimum Green (s)	3.0	10.0	4.0	3.0	10.0	4.0
Recall	None	Min	None	None	Min	None
Avg. Green (s)	4.2	22.4	5.6	4.3	22.7	5.6
g/C Ratio	0.06	0.52	0.12	0.06	0.53	0.12
Cycles Skipped (%)	43	5	10	48	5	10
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	57	86	57	52	86	57
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 40.8

Number of Complete Cycles : 21

Intersection: 11: Ramon & Maravilla

Phase	1	2	3	4	5	6
Movement(s) Served	WBL	EBT	SBTL	NBTL	EBL	WBT
Maximum Green (s)	10.0	24.0	9.0	12.0	6.0	28.0
Minimum Green (s)	4.0	10.0	4.0	4.0	4.0	10.0
Recall	None	Min	None	None	None	Min
Avg. Green (s)	9.4	24.4	9.3	11.3	5.6	29.1
g/C Ratio	0.10	0.27	0.10	0.12	0.06	0.32
Cycles Skipped (%)	0	0	0	0	10	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	70	90	78	60	60	80
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 90.9

Number of Complete Cycles : 9

Intersection: 19: Ramon & Desert Vista

Phase	2	4	6
Movement(s) Served	EBT	NBL	WBTL
Maximum Green (s)	19.0	14.0	19.0
Minimum Green (s)	8.0	8.0	8.0
Recall	Min	None	Min
Avg. Green (s)	113.4	9.5	113.4
g/C Ratio	0.89	0.07	0.89
Cycles Skipped (%)	0	0	0
Cycles @ Minimum (%)	0	80	0
Cycles Maxed Out (%)	40	0	40
Cycles with Peds (%)	0	0	0

Controller Summary

Average Cycle Length (s): 127.1

Number of Complete Cycles : 5

Intersection: 23: Ramon & Date Palm

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	EBL	WBT	SBL	NBT	WBL	EBT	NBL	SBT
Maximum Green (s)	11.0	13.5	10.0	12.5	9.0	15.5	10.0	12.5
Minimum Green (s)	4.0	10.0	4.0	10.0	4.0	10.0	4.0	10.0
Recall	None	None	None	Min	None	None	None	Min
Avg. Green (s)	10.6	14.6	9.9	13.8	8.0	17.2	9.5	13.2
g/C Ratio	0.15	0.21	0.14	0.20	0.11	0.25	0.14	0.19
Cycles Skipped (%)	0	0	0	0	8	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0	0	0
Cycles Maxed Out (%)	67	92	67	92	54	92	69	92
Cycles with Peds (%)	0	0	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 69.2

Number of Complete Cycles : 12

Intersection: 24: Ramon & Cathedral Village

Phase	1	2	5	6	7	8
Movement(s) Served	WBL	EBT	EBL	WBT	SBTL	NBTL
Maximum Green (s)	8.0	20.5	8.0	20.5	9.0	7.0
Minimum Green (s)	4.0	8.0	4.0	8.0	6.0	6.0
Recall	None	Min	None	Min	None	None
Avg. Green (s)	7.1	24.4	7.6	24.7	8.4	7.1
g/C Ratio	0.10	0.40	0.10	0.41	0.12	0.10
Cycles Skipped (%)	14	0	21	0	14	14
Cycles @ Minimum (%)	0	0	0	0	21	21
Cycles Maxed Out (%)	43	79	43	86	36	64
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 60.3

Number of Complete Cycles : 14

Intersection: 29: Ramon & Via Campanile

Phase	1	2	4	5	6	8
Movement(s) Served	WBL	EBT	NBTL	EBL	WBT	SBTL
Maximum Green (s)	4.0	15.5	4.0	4.0	15.5	4.0
Minimum Green (s)	4.0	10.0	4.0	4.0	10.0	4.0
Recall	None	Min	None	None	Min	None
Avg. Green (s)	4.6	41.7	4.3	5.2	45.8	4.4
g/C Ratio	0.03	0.71	0.05	0.02	0.77	0.02
Cycles Skipped (%)	67	7	40	79	7	73
Cycles @ Minimum (%)	33	0	60	21	0	27
Cycles Maxed Out (%)	33	47	60	21	50	27
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 54.9

Number of Complete Cycles : 15

Intersection: 32: Ramon & Da Vall Dr.

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBT
Maximum Green (s)	5.5	15.5	11.5	10.5	5.5	15.5	8.5	13.5
Minimum Green (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Recall	None	Min	None	None	None	Min	None	None
Avg. Green (s)	5.7	20.2	10.9	12.8	5.8	18.3	7.8	15.4
g/C Ratio	0.05	0.31	0.17	0.18	0.07	0.28	0.11	0.24
Cycles Skipped (%)	38	0	0	8	23	0	8	0
Cycles @ Minimum (%)	23	0	8	8	15	0	15	0
Cycles Maxed Out (%)	31	100	46	85	62	100	38	85
Cycles with Peds (%)	0	0	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 64.7

Number of Complete Cycles : 13

Summary of All Intervals

Run Number	1	10	100	11	12	13	14	15
Start Time	4:55	4:55	4:55	4:55	4:55	4:55	4:55	4:55
End Time	5:15	5:15	5:15	5:15	5:15	5:15	5:15	5:15
Total Time (min)	20	20	20	20	20	20	20	20
Time Recorded (min)	15	15	15	15	15	15	15	15
# of Intervals	2	2	2	2	2	2	2	2
# of Recorded Intvls	1	1	1	1	1	1	1	1
Vehs Entered	2631	2595	2540	2628	2735	2657	2588	2695
Vehs Exited	2563	2480	2342	2530	2565	2503	2483	2599
Starting Vehs	397	387	362	387	325	358	410	354
Ending Vehs	465	502	560	485	495	512	515	450
Denied Entry Before	13	2	2	9	3	7	16	2
Denied Entry After	73	107	165	123	16	58	126	44
Travel Distance (mi)	1582	1561	1398	1553	1586	1599	1564	1603
Travel Time (hr)	120.6	128.2	126.0	124.9	112.5	116.7	125.9	110.0
Total Delay (hr)	74.2	82.1	84.1	79.3	65.5	69.4	80.2	62.6
Total Stops	4801	4993	4423	4876	5170	4849	4800	4823
Fuel Used (gal)	158.7	160.8	150.5	159.1	154.0	155.7	160.1	152.7

Interval #0 Information Seeding

Start Time	4:55
End Time	5:00
Total Time (min)	5
Volumes adjusted by PHF, Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	10	100	11	12	13	14	15
Vehs Entered	2631	2595	2540	2628	2735	2657	2588	2695
Vehs Exited	2563	2480	2342	2530	2565	2503	2483	2599
Starting Vehs	397	387	362	387	325	358	410	354
Ending Vehs	465	502	560	485	495	512	515	450
Denied Entry Before	13	2	2	9	3	7	16	2
Denied Entry After	73	107	165	123	16	58	126	44
Travel Distance (mi)	1582	1561	1398	1553	1586	1599	1564	1603
Travel Time (hr)	120.6	128.2	126.0	124.9	112.5	116.7	125.9	110.0
Total Delay (hr)	74.2	82.1	84.1	79.3	65.5	69.4	80.2	62.6
Total Stops	4801	4993	4423	4876	5170	4849	4800	4823
Fuel Used (gal)	158.7	160.8	150.5	159.1	154.0	155.7	160.1	152.7

1: Ramon & Landau Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	1.8	0.9	1.9	0.2	0.7	0.6	6.2
Delay / Veh (s)	51.0	11.7	30.2	8.0	32.1	17.8	23.4
Stop Delay (hr)	1.5	0.5	1.4	0.1	0.6	0.5	4.6
St Del/Veh (s)	43.4	6.3	21.8	4.5	29.0	14.3	17.6
Total Stops	146	107	186	72	66	129	706
Stop/Veh	1.17	0.38	0.81	0.67	0.86	1.02	0.74
Travel Dist (mi)	8.6	19.5	26.6	12.5	11.2	18.4	96.7
Travel Time (hr)	2.1	1.4	2.6	0.7	1.1	1.4	9.3
Avg Speed (mph)	4	14	10	18	10	14	10
Fuel Used (gal)	1.5	2.3	2.2	0.6	1.0	1.3	8.9
Fuel Eff. (mpg)	5.7	8.5	12.3	19.8	10.9	14.5	10.9
HC Emissions (g)	4	8	6	2	3	4	26
CO Emissions (g)	54	356	112	47	104	123	796
NOx Emissions (g)	9	29	14	4	9	8	73
Vehicles Entered	127	286	230	107	77	127	954
Vehicles Exited	124	283	227	107	77	126	944
Hourly Exit Rate	496	1132	908	428	308	504	3776
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

2: Ramon & Candlewood Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Total Delay (hr)	0.3	0.0	0.0	0.1	0.1	0.5
Delay / Veh (s)	3.1	2.7	13.2	0.7	11.6	2.4
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.1	0.2
St Del/Veh (s)	1.4	1.4	11.4	0.0	11.5	1.2
Total Stops	2	0	9	0	17	28
Stop/Veh	0.01	0.00	0.82	0.00	1.00	0.04
Travel Dist (mi)	45.0	0.9	0.6	18.2	0.8	65.5
Travel Time (hr)	1.5	0.0	0.1	0.5	0.1	2.3
Avg Speed (mph)	29	24	10	34	8	29
Fuel Used (gal)	4.0	0.1	0.0	0.9	0.1	5.1
Fuel Eff. (mpg)	11.3	12.1	13.5	19.3	10.3	12.8
HC Emissions (g)	16	0	0	3	0	20
CO Emissions (g)	972	16	3	140	5	1137
NOx Emissions (g)	58	1	0	10	1	71
Vehicles Entered	354	7	11	324	17	713
Vehicles Exited	352	7	11	324	17	711
Hourly Exit Rate	1408	28	44	1296	68	2844
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0

4: Ramon & Shift Sands Performance by movement

Movement	EBT	EBR	WBT	NBR	All
Total Delay (hr)	0.2	0.0	0.2	0.1	0.5
Delay / Veh (s)	1.8	0.8	2.4	13.6	2.4
Stop Delay (hr)	0.1	0.0	0.0	0.1	0.2
St Del/Veh (s)	0.8	0.5	0.1	13.4	0.8
Total Stops	1	0	0	17	18
Stop/Veh	0.00	0.00	0.00	1.00	0.02
Travel Dist (mi)	19.7	0.8	23.3	0.8	44.5
Travel Time (hr)	0.7	0.0	0.9	0.1	1.7
Avg Speed (mph)	28	20	26	8	26
Fuel Used (gal)	0.9	0.0	3.4	0.1	4.5
Fuel Eff. (mpg)	20.9	23.8	6.8	9.8	9.9
HC Emissions (g)	4	0	14	0	18
CO Emissions (g)	142	3	847	5	998
NOx Emissions (g)	9	0	58	1	69
Vehicles Entered	351	14	351	17	733
Vehicles Exited	351	14	350	17	732
Hourly Exit Rate	1404	56	1400	68	2928
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

6: Ramon & Wh. Palms Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.2	1.1	0.1	0.2	1.2	0.0	0.5	0.2	0.1	0.2	0.1	0.1
Delay / Veh (s)	23.0	12.9	10.9	25.5	14.0	8.9	48.0	32.6	23.6	37.0	22.4	12.9
Stop Delay (hr)	0.2	0.7	0.0	0.2	0.7	0.0	0.4	0.2	0.1	0.2	0.1	0.0
St Del/Veh (s)	19.4	8.1	8.5	21.5	8.5	6.4	43.7	27.7	21.1	33.9	18.8	11.8
Total Stops	33	152	11	27	177	8	41	26	14	18	13	12
Stop/Veh	0.92	0.50	0.58	0.96	0.58	0.62	1.14	1.00	1.00	0.95	0.81	0.80
Travel Dist (mi)	2.3	19.6	1.2	1.7	18.9	0.8	3.1	2.2	1.2	1.4	1.2	1.1
Travel Time (hr)	0.3	1.6	0.1	0.3	1.7	0.1	0.6	0.3	0.1	0.2	0.1	0.1
Avg Speed (mph)	7	12	11	7	11	12	6	7	9	6	8	11
Fuel Used (gal)	0.2	1.6	0.1	0.2	1.7	0.1	0.5	0.3	0.1	0.2	0.1	0.1
Fuel Eff. (mpg)	9.4	12.1	13.5	8.7	11.2	13.9	6.0	8.0	9.1	6.4	8.9	10.8
HC Emissions (g)	1	5	0	1	5	0	2	1	0	1	0	0
CO Emissions (g)	13	137	5	10	121	3	45	26	13	19	14	11
NOx Emissions (g)	2	14	1	2	14	0	4	3	1	2	1	1
Vehicles Entered	35	305	20	28	307	13	36	26	14	19	16	16
Vehicles Exited	36	304	19	28	307	13	36	26	14	19	16	15
Hourly Exit Rate	144	1216	76	112	1228	52	144	104	56	76	64	60
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	1	0	0	0	0	0

6: Ramon & Wh. Palms Performance by movement

Movement	All
Total Delay (hr)	4.0
Delay / Veh (s)	17.1
Stop Delay (hr)	2.9
St Del/Veh (s)	12.4
Total Stops	532
Stop/Veh	0.64
Travel Dist (mi)	54.7
Travel Time (hr)	5.6
Avg Speed (mph)	10
Fuel Used (gal)	5.3
Fuel Eff. (mpg)	10.4
HC Emissions (g)	16
CO Emissions (g)	417
NOx Emissions (g)	46
Vehicles Entered	835
Vehicles Exited	833
Hourly Exit Rate	3332
Denied Entry Before	0
Denied Entry After	1

7: Ramon & Sky Blue Water Performance by movement

Movement	EBT	EBR	WBT	WBR	NBR	SBR	All
Total Delay (hr)	0.4	0.0	0.1	0.0	0.1	0.0	0.6
Delay / Veh (s)	4.5	3.9	1.1	0.0	15.9	10.2	3.2
Stop Delay (hr)	0.2	0.0	0.0	0.0	0.1	0.0	0.3
St Del/Veh (s)	1.9	2.2	0.0	0.0	15.7	10.0	1.4
Total Stops	5	0	0	0	15	11	31
Stop/Veh	0.01	0.00	0.00	0.00	1.07	1.00	0.04
Travel Dist (mi)	21.3	0.6	12.7	0.0	0.6	0.7	35.9
Travel Time (hr)	1.0	0.0	0.4	0.0	0.1	0.1	1.6
Avg Speed (mph)	22	16	29	19	7	11	22
Fuel Used (gal)	3.0	0.1	0.5	0.0	0.1	0.1	3.6
Fuel Eff. (mpg)	7.2	9.9	27.3	28.0	9.2	12.8	10.0
HC Emissions (g)	12	0	2	0	0	0	14
CO Emissions (g)	679	8	48	0	4	5	743
NOx Emissions (g)	48	1	3	0	1	0	53
Vehicles Entered	338	10	343	1	15	11	718
Vehicles Exited	336	10	343	1	14	11	715
Hourly Exit Rate	1344	40	1372	4	56	44	2860
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

8: Ramon & Roundup Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Total Delay (hr)	0.3	0.0	0.1	0.1	0.0	0.5
Delay / Veh (s)	2.8	1.7	18.2	1.5	7.5	2.6
Stop Delay (hr)	0.2	0.0	0.1	0.0	0.0	0.3
St Del/Veh (s)	1.7	1.3	15.7	0.3	7.4	1.4
Total Stops	7	1	15	1	4	28
Stop/Veh	0.02	0.07	0.75	0.00	1.00	0.04
Travel Dist (mi)	12.6	0.5	1.5	25.3	0.2	40.0
Travel Time (hr)	0.6	0.0	0.2	0.8	0.0	1.6
Avg Speed (mph)	21	15	9	32	10	25
Fuel Used (gal)	0.9	0.0	0.1	1.4	0.0	2.4
Fuel Eff. (mpg)	13.6	17.9	13.0	18.5	13.9	16.3
HC Emissions (g)	3	0	0	5	0	9
CO Emissions (g)	159	2	6	219	1	387
NOx Emissions (g)	11	0	1	16	0	28
Vehicles Entered	339	14	20	355	4	732
Vehicles Exited	335	14	20	355	4	728
Hourly Exit Rate	1340	56	80	1420	16	2912
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0

10: Ramon & Pueblo Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Total Delay (hr)	1.1	0.3	0.0	0.0	1.4
Delay / Veh (s)	12.1	2.6	1.7	7.5	7.0
Stop Delay (hr)	0.7	0.0	0.0	0.0	0.8
St Del/Veh (s)	7.7	0.4	0.1	7.4	3.8
Total Stops	79	1	0	3	83
Stop/Veh	0.23	0.00	0.00	1.00	0.12
Travel Dist (mi)	24.2	28.4	0.4	0.2	53.2
Travel Time (hr)	1.8	1.2	0.0	0.0	3.0
Avg Speed (mph)	14	24	19	14	18
Fuel Used (gal)	1.7	3.7	0.0	0.0	5.5
Fuel Eff. (mpg)	14.3	7.6	10.7	16.5	9.7
HC Emissions (g)	6	14	0	0	20
CO Emissions (g)	178	854	5	1	1037
NOx Emissions (g)	14	61	0	0	75
Vehicles Entered	339	376	5	3	723
Vehicles Exited	334	377	5	3	719
Hourly Exit Rate	1336	1508	20	12	2876
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

11: Ramon & Maravilla Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.9	4.4	0.7	3.1	2.8	0.1	7.8	1.8	2.6	1.3	2.1	0.9
Delay / Veh (s)	116.9	60.1	56.8	155.6	39.6	35.0	243.2	244.3	118.2	210.4	221.4	134.5
Stop Delay (hr)	0.9	3.7	0.6	2.8	2.2	0.1	7.5	1.8	2.6	1.3	2.0	0.8
St Del/Veh (s)	109.4	51.1	50.9	143.2	31.7	31.1	234.2	233.9	116.2	200.9	210.0	125.5
Total Stops	42	211	35	113	175	7	169	39	60	40	62	45
Stop/Veh	1.50	0.81	0.81	1.59	0.69	0.70	1.46	1.44	0.76	1.74	1.82	1.88
Travel Dist (mi)	1.9	17.9	3.0	7.0	24.8	1.0	10.7	2.5	7.3	2.5	3.7	2.6
Travel Time (hr)	1.0	4.8	0.8	3.3	3.4	0.1	8.3	1.9	2.9	1.4	2.2	1.0
Avg Speed (mph)	2	4	4	2	7	7	2	2	8	2	2	3
Fuel Used (gal)	0.6	3.3	0.5	1.9	2.8	0.1	5.1	1.2	2.0	0.9	1.3	0.7
Fuel Eff. (mpg)	3.3	5.3	6.0	3.6	8.7	10.0	2.1	2.1	3.7	2.8	2.8	3.7
HC Emissions (g)	2	9	1	5	8	0	19	4	9	3	4	2
CO Emissions (g)	21	142	17	65	220	6	166	37	88	35	53	38
NOx Emissions (g)	3	21	2	9	23	1	21	5	7	4	6	4
Vehicles Entered	29	262	42	74	254	10	118	28	79	24	36	26
Vehicles Exited	28	260	42	67	251	10	114	27	78	22	32	24
Hourly Exit Rate	112	1040	168	268	1004	40	456	108	312	88	128	96
Denied Entry Before	0	0	0	0	0	0	1	0	1	0	0	0
Denied Entry After	0	0	0	0	0	0	19	4	12	2	3	2

11: Ramon & Maravilla Performance by movement

Movement	All
Total Delay (hr)	28.5
Delay / Veh (s)	106.0
Stop Delay (hr)	26.3
St Del/Veh (s)	97.7
Total Stops	998
Stop/Veh	1.03
Travel Dist (mi)	84.9
Travel Time (hr)	31.2
Avg Speed (mph)	3
Fuel Used (gal)	20.5
Fuel Eff. (mpg)	4.1
HC Emissions (g)	67
CO Emissions (g)	888
NOx Emissions (g)	107
Vehicles Entered	982
Vehicles Exited	955
Hourly Exit Rate	3820
Denied Entry Before	2
Denied Entry After	42

13: Ramon & Ximino Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.5	0.4	1.3	0.0	0.3	0.2	2.6
Delay / Veh (s)	74.4	4.6	11.8	0.6	204.3	138.0	12.4
Stop Delay (hr)	0.4	0.1	1.0	0.0	0.3	0.2	2.0
St Del/Veh (s)	69.2	1.1	9.2	0.1	203.4	138.0	9.4
Total Stops	22	5	62	0	6	6	101
Stop/Veh	1.00	0.02	0.16	0.00	1.20	1.20	0.13
Travel Dist (mi)	2.3	33.6	20.9	0.5	0.3	0.3	58.1
Travel Time (hr)	0.5	1.4	1.8	0.0	0.3	0.2	4.3
Avg Speed (mph)	4	24	11	21	1	2	13
Fuel Used (gal)	0.4	4.3	2.0	0.0	0.2	0.1	7.0
Fuel Eff. (mpg)	5.5	7.9	10.7	20.6	1.7	2.8	8.3
HC Emissions (g)	1	16	7	0	1	0	25
CO Emissions (g)	32	976	281	3	10	6	1307
NOx Emissions (g)	4	67	19	0	2	1	93
Vehicles Entered	24	333	393	9	5	6	770
Vehicles Exited	20	333	388	9	4	4	758
Hourly Exit Rate	80	1332	1552	36	16	16	3032
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

14: Ramon & Alvera Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBR	SBR	All
Total Delay (hr)	0.1	0.0	0.2	1.1	0.0	0.0	0.1	1.5
Delay / Veh (s)	0.8	0.3	36.2	10.3	2.9	8.2	30.4	6.9
Stop Delay (hr)	0.0	0.0	0.2	0.9	0.0	0.0	0.1	1.1
St Del/Veh (s)	0.0	0.0	32.4	7.8	2.2	8.2	30.4	5.2
Total Stops	0	0	21	44	0	12	6	83
Stop/Veh	0.00	0.00	1.00	0.11	0.00	1.00	1.00	0.10
Travel Dist (mi)	19.0	0.4	1.3	25.0	1.3	0.5	0.4	47.8
Travel Time (hr)	0.6	0.0	0.3	1.8	0.1	0.1	0.1	2.8
Avg Speed (mph)	34	22	6	17	21	9	5	19
Fuel Used (gal)	1.1	0.0	0.2	2.3	0.1	0.0	0.0	3.7
Fuel Eff. (mpg)	17.8	27.5	7.1	10.8	18.3	12.1	7.8	12.8
HC Emissions (g)	4	0	1	9	0	0	0	13
CO Emissions (g)	168	1	8	340	6	3	3	528
NOx Emissions (g)	12	0	1	24	0	0	0	39
Vehicles Entered	329	7	22	400	20	12	7	797
Vehicles Exited	330	7	21	396	20	12	6	792
Hourly Exit Rate	1320	28	84	1584	80	48	24	3168
Denied Entry Before	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	4	0	0	0	4

16: Ramon & Juarez Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Total Delay (hr)	0.1	0.3	0.0	0.1	0.6
Delay / Veh (s)	1.2	3.0	0.7	24.7	2.6
Stop Delay (hr)	0.0	0.2	0.0	0.1	0.3
St Del/Veh (s)	0.3	1.4	0.3	24.5	1.4
Total Stops	0	15	0	16	31
Stop/Veh	0.00	0.04	0.00	1.00	0.04
Travel Dist (mi)	21.8	24.4	0.6	1.0	47.8
Travel Time (hr)	0.7	1.0	0.0	0.2	1.9
Avg Speed (mph)	33	25	21	6	26
Fuel Used (gal)	1.3	1.8	0.0	0.1	3.3
Fuel Eff. (mpg)	16.9	13.3	18.7	8.5	14.6
HC Emissions (g)	5	7	0	0	12
CO Emissions (g)	228	349	3	9	590
NOx Emissions (g)	14	23	0	1	39
Vehicles Entered	352	404	10	16	782
Vehicles Exited	353	401	10	15	779
Hourly Exit Rate	1412	1604	40	60	3116
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

18: Ramon & Yermo Performance by movement

Movement	EBL	EBT	WBT	WBR	SBR	All
Total Delay (hr)	0.1	0.1	0.1	0.0	0.1	0.4
Delay / Veh (s)	15.0	1.6	0.7	0.2	12.3	2.0
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.1	0.2
St Del/Veh (s)	12.4	0.1	0.1	0.1	11.9	1.0
Total Stops	19	8	1	0	31	59
Stop/Veh	0.83	0.02	0.00	0.00	1.00	0.08
Travel Dist (mi)	1.5	20.3	8.2	0.2	1.7	31.9
Travel Time (hr)	0.2	0.7	0.3	0.0	0.2	1.3
Avg Speed (mph)	10	31	28	15	9	24
Fuel Used (gal)	0.1	1.1	0.7	0.0	0.2	2.1
Fuel Eff. (mpg)	12.7	17.8	12.6	19.4	10.1	15.3
HC Emissions (g)	0	4	2	0	1	7
CO Emissions (g)	6	175	121	0	17	319
NOx Emissions (g)	1	12	9	0	2	24
Vehicles Entered	24	330	372	8	30	764
Vehicles Exited	23	329	372	8	30	762
Hourly Exit Rate	92	1316	1488	32	120	3048
Denied Entry Before	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0

19: Ramon & Desert Vista Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Total Delay (hr)	0.1	0.0	0.1	0.3	0.0	0.0	0.5
Delay / Veh (s)	0.9	0.3	16.3	2.6	21.4	7.1	2.3
Stop Delay (hr)	0.0	0.0	0.1	0.1	0.0	0.0	0.3
St Del/Veh (s)	0.3	0.2	14.0	1.2	19.8	6.8	1.3
Total Stops	14	1	12	23	5	9	64
Stop/Veh	0.04	0.12	0.75	0.06	0.83	1.00	0.09
Travel Dist (mi)	6.4	0.2	0.8	18.0	0.6	0.9	26.9
Travel Time (hr)	0.2	0.0	0.1	0.7	0.1	0.1	1.2
Avg Speed (mph)	27	15	7	26	10	16	23
Fuel Used (gal)	0.4	0.0	0.1	1.1	0.0	0.1	1.8
Fuel Eff. (mpg)	14.7	20.6	10.0	15.8	12.3	17.6	15.2
HC Emissions (g)	1	0	0	4	0	0	6
CO Emissions (g)	69	0	4	160	3	4	241
NOx Emissions (g)	5	0	1	12	0	0	18
Vehicles Entered	316	8	16	377	6	9	732
Vehicles Exited	316	8	16	375	6	9	730
Hourly Exit Rate	1264	32	64	1500	24	36	2920
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

20: Ramon & Cielo Vista Performance by movement

Movement	EBT	EBR	WBT	NBR	All
Total Delay (hr)	0.1	0.0	0.2	0.0	0.3
Delay / Veh (s)	1.4	0.7	1.7	9.2	1.7
Stop Delay (hr)	0.0	0.0	0.1	0.0	0.1
St Del/Veh (s)	0.4	0.4	0.8	9.1	0.7
Total Stops	0	0	1	8	9
Stop/Veh	0.00	0.00	0.00	1.00	0.01
Travel Dist (mi)	16.3	0.3	27.8	0.3	44.8
Travel Time (hr)	0.6	0.0	0.9	0.0	1.5
Avg Speed (mph)	31	20	31	9	30
Fuel Used (gal)	1.3	0.0	1.4	0.0	2.7
Fuel Eff. (mpg)	12.9	19.7	20.2	11.9	16.7
HC Emissions (g)	5	0	5	0	9
CO Emissions (g)	242	2	195	2	440
NOx Emissions (g)	17	0	14	0	31
Vehicles Entered	342	7	366	8	723
Vehicles Exited	342	7	366	8	723
Hourly Exit Rate	1368	28	1464	32	2892
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

22: Ramon & Rancho Vista Performance by movement

Movement	EBL	EBT	EBR	WBT	NBT	NBR	All
Total Delay (hr)	0.1	0.3	0.0	0.3	0.0	0.1	0.8
Delay / Veh (s)	12.3	3.4	0.5	3.2		17.9	4.0
Stop Delay (hr)	0.1	0.1	0.0	0.1	0.0	0.1	0.3
St Del/Veh (s)	9.0	1.1	0.0	0.9		17.8	1.7
Total Stops	25	17	0	1	0	15	58
Stop/Veh	0.71	0.06	0.00	0.00		1.07	0.08
Travel Dist (mi)	2.6	23.4	0.6	26.5	0.0	0.7	53.9
Travel Time (hr)	0.2	0.9	0.0	1.2	0.0	0.1	2.4
Avg Speed (mph)	12	26	24	23	2	6	23
Fuel Used (gal)	0.2	1.3	0.0	4.2	0.0	0.1	5.8
Fuel Eff. (mpg)	14.1	17.6	20.1	6.3	4.1	8.6	9.3
HC Emissions (g)	1	5	0	17	0	0	23
CO Emissions (g)	13	229	5	1022	0	6	1274
NOx Emissions (g)	2	14	0	71	0	1	88
Vehicles Entered	35	309	8	362	0	14	728
Vehicles Exited	35	308	8	362	0	14	727
Hourly Exit Rate	140	1232	32	1448	0	56	2908
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

23: Ramon & Date Palm Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	1.0	1.5	0.1	0.7	2.6	0.3	0.8	1.8	0.1	0.8	1.1	0.1
Delay / Veh (s)	61.3	26.6	5.3	51.9	42.4	31.6	40.4	40.3	17.2	55.7	34.2	8.6
Stop Delay (hr)	0.9	1.2	0.1	0.6	2.0	0.3	0.7	1.5	0.1	0.7	1.0	0.1
St Del/Veh (s)	54.8	20.7	4.1	45.4	33.3	26.6	37.2	34.4	14.0	50.5	29.7	7.7
Total Stops	77	128	31	48	191	37	58	144	26	53	96	38
Stop/Veh	1.26	0.64	0.53	1.04	0.87	0.95	0.85	0.90	0.96	1.04	0.81	0.76
Travel Dist (mi)	4.2	12.6	4.1	4.2	20.1	3.6	10.5	24.6	4.1	4.8	11.1	4.7
Travel Time (hr)	1.2	1.8	0.3	0.8	3.1	0.5	1.2	2.7	0.3	1.0	1.5	0.3
Avg Speed (mph)	3	7	15	5	7	7	9	9	16	5	7	15
Fuel Used (gal)	0.8	1.5	0.2	0.7	3.0	0.5	1.0	2.4	0.3	0.8	1.4	0.3
Fuel Eff. (mpg)	5.2	8.1	18.0	6.0	6.7	7.5	10.3	10.4	11.7	5.9	7.8	13.7
HC Emissions (g)	2	4	1	2	9	2	3	7	1	2	5	1
CO Emissions (g)	31	111	20	49	278	47	97	210	46	68	147	43
NOx Emissions (g)	5	13	2	7	30	4	9	19	3	7	14	3
Vehicles Entered	62	202	59	46	220	39	68	161	27	51	119	50
Vehicles Exited	60	201	59	46	217	39	68	160	27	51	120	50
Hourly Exit Rate	240	804	236	184	868	156	272	640	108	204	480	200
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

23: Ramon & Date Palm Performance by movement

Movement	All
Total Delay (hr)	10.9
Delay / Veh (s)	35.7
Stop Delay (hr)	9.2
St Del/Veh (s)	30.0
Total Stops	927
Stop/Veh	0.84
Travel Dist (mi)	108.4
Travel Time (hr)	14.7
Avg Speed (mph)	8
Fuel Used (gal)	13.1
Fuel Eff. (mpg)	8.3
HC Emissions (g)	39
CO Emissions (g)	1146
NOx Emissions (g)	114
Vehicles Entered	1104
Vehicles Exited	1098
Hourly Exit Rate	4392
Denied Entry Before	0
Denied Entry After	0

24: Ramon & Cathedral Village Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.3	1.3	0.1	0.4	0.8	0.0	0.4	0.0	0.1	0.2	0.0	0.0
Delay / Veh (s)	35.7	25.0	11.9	33.9	16.9	6.8	28.2	28.5	12.4	33.4	29.7	8.0
Stop Delay (hr)	0.2	0.9	0.0	0.3	0.6	0.0	0.3	0.0	0.1	0.2	0.0	0.0
St Del/Veh (s)	28.9	16.2	6.6	29.4	11.3	5.5	25.5	24.6	10.7	30.7	26.8	7.3
Total Stops	32	138	18	36	99	12	42	5	28	17	5	8
Stop/Veh	1.07	0.71	0.86	0.95	0.56	0.60	0.86	0.83	0.88	0.89	1.00	0.89
Travel Dist (mi)	3.2	20.5	2.3	4.2	19.5	2.2	2.6	0.3	1.8	1.0	0.3	0.5
Travel Time (hr)	0.4	1.9	0.2	0.5	1.3	0.1	0.5	0.1	0.2	0.2	0.1	0.0
Avg Speed (mph)	8	11	14	9	15	19	6	6	11	5	6	12
Fuel Used (gal)	0.4	2.5	0.2	0.4	1.4	0.1	0.4	0.1	0.2	0.2	0.0	0.0
Fuel Eff. (mpg)	7.4	8.2	9.7	10.3	14.1	17.2	6.1	6.5	7.3	5.9	7.5	12.0
HC Emissions (g)	1	8	1	1	5	0	1	0	1	0	0	0
CO Emissions (g)	39	303	29	28	181	18	31	4	24	11	3	4
NOx Emissions (g)	5	30	3	4	14	1	4	0	3	2	0	0
Vehicles Entered	30	195	22	38	176	21	49	6	32	19	5	9
Vehicles Exited	29	193	21	38	176	20	49	6	32	19	5	9
Hourly Exit Rate	116	772	84	152	704	80	196	24	128	76	20	36
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

24: Ramon & Cathedral Village Performance by movement

Movement	All
Total Delay (hr)	3.7
Delay / Veh (s)	22.4
Stop Delay (hr)	2.7
St Del/Veh (s)	16.5
Total Stops	440
Stop/Veh	0.73
Travel Dist (mi)	58.4
Travel Time (hr)	5.5
Avg Speed (mph)	11
Fuel Used (gal)	6.1
Fuel Eff. (mpg)	9.6
HC Emissions (g)	20
CO Emissions (g)	675
NOx Emissions (g)	66
Vehicles Entered	602
Vehicles Exited	597
Hourly Exit Rate	2388
Denied Entry Before	0
Denied Entry After	0

25: Ramon & San Eljay Ave. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.2	0.0	0.0	0.0	0.0	0.3
Delay / Veh (s)	8.6	3.3	0.5	0.1	19.3	4.4	2.5
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	4.5	0.2	0.0	0.0	18.1	4.2	0.6
Total Stops	10	0	0	0	5	17	32
Stop/Veh	0.59	0.00	0.00	0.00	1.00	1.00	0.07
Travel Dist (mi)	2.1	26.1	9.1	0.2	0.3	0.9	38.7
Travel Time (hr)	0.1	0.9	0.2	0.0	0.0	0.1	1.3
Avg Speed (mph)	19	30	38	21	7	14	29
Fuel Used (gal)	0.2	3.3	0.5	0.0	0.0	0.1	4.1
Fuel Eff. (mpg)	9.1	7.8	19.4	28.1	9.7	15.1	9.4
HC Emissions (g)	1	13	2	0	0	0	16
CO Emissions (g)	45	858	95	1	2	6	1007
NOx Emissions (g)	3	58	6	0	0	0	67
Vehicles Entered	18	225	192	5	5	17	462
Vehicles Exited	17	224	192	5	5	17	460
Hourly Exit Rate	68	896	768	20	20	68	1840
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

26: Ramon & El Toro Rd. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Delay / Veh (s)	5.5	0.5	0.4	0.1	23.9	4.1	0.6
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	3.9	0.1	0.0	0.0	22.2	4.0	0.2
Total Stops	1	0	0	0	1	5	7
Stop/Veh	0.50	0.00	0.00	0.00	1.00	1.00	0.02
Travel Dist (mi)	0.1	10.4	11.7	0.1	0.1	0.3	22.6
Travel Time (hr)	0.0	0.3	0.3	0.0	0.0	0.0	0.6
Avg Speed (mph)	13	39	40	23	8	15	37
Fuel Used (gal)	0.0	0.5	0.6	0.0	0.0	0.0	1.2
Fuel Eff. (mpg)	15.8	19.2	19.1	31.8	11.3	17.3	19.1
HC Emissions (g)	0	2	2	0	0	0	4
CO Emissions (g)	0	84	133	0	0	2	219
NOx Emissions (g)	0	6	7	0	0	0	14
Vehicles Entered	2	222	228	1	1	5	459
Vehicles Exited	2	222	228	1	1	5	459
Hourly Exit Rate	8	888	912	4	4	20	1836
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

27: Ramon & Victor Rd. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Delay / Veh (s)	5.5	0.4	0.4	0.2	15.4	3.2	0.5
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	4.3	0.0	0.0	0.0	14.2	3.2	0.1
Total Stops	2	0	0	0	2	3	7
Stop/Veh	0.67	0.00	0.00	0.00	1.00	1.00	0.02
Travel Dist (mi)	0.1	11.7	11.8	0.1	0.1	0.1	24.0
Travel Time (hr)	0.0	0.3	0.3	0.0	0.0	0.0	0.6
Avg Speed (mph)	14	40	39	22	8	15	38
Fuel Used (gal)	0.0	0.6	0.6	0.0	0.0	0.0	1.1
Fuel Eff. (mpg)	17.6	21.1	21.4	16.8	11.7	17.9	21.1
HC Emissions (g)	0	2	2	0	0	0	4
CO Emissions (g)	1	95	90	1	0	1	187
NOx Emissions (g)	0	6	6	0	0	0	12
Vehicles Entered	3	221	227	1	2	3	457
Vehicles Exited	3	220	227	1	2	3	456
Hourly Exit Rate	12	880	908	4	8	12	1824
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

28: Ramon & Neuma Dr. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.2
Delay / Veh (s)	5.3	0.4	2.1	1.5	24.3	3.1	1.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	4.0	0.0	0.1	0.1	22.4	3.0	0.2
Total Stops	2	0	0	0	1	5	8
Stop/Veh	0.50	0.00	0.00	0.00	1.00	1.00	0.02
Travel Dist (mi)	0.2	10.8	39.3	0.4	0.1	0.2	51.0
Travel Time (hr)	0.0	0.3	1.1	0.0	0.0	0.0	1.4
Avg Speed (mph)	15	40	37	31	8	15	37
Fuel Used (gal)	0.0	0.5	2.6	0.0	0.0	0.0	3.1
Fuel Eff. (mpg)	18.1	24.0	15.1	16.6	11.3	17.0	16.4
HC Emissions (g)	0	1	10	0	0	0	11
CO Emissions (g)	1	57	570	5	0	2	634
NOx Emissions (g)	0	4	36	0	0	0	41
Vehicles Entered	4	204	218	2	1	5	434
Vehicles Exited	4	204	217	2	1	5	433
Hourly Exit Rate	16	816	868	8	4	20	1732
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0

29: Ramon & Outdoor Resorts Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.0	0.3	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.8
Delay / Veh (s)	21.2	5.5	3.5	19.4	4.8	0.5	23.4	3.2	21.1	4.1	6.3
Stop Delay (hr)	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.4
St Del/Veh (s)	18.7	1.5	1.0	16.7	1.3	0.4	21.2	3.0	19.4	4.4	2.9
Total Stops	6	38	3	6	35	1	17	9	6	5	126
Stop/Veh	1.00	0.20	0.30	0.86	0.17	0.25	1.00	0.90	0.86	0.83	0.27
Travel Dist (mi)	1.1	34.8	1.8	1.4	39.5	0.7	0.8	0.5	0.4	0.3	81.4
Travel Time (hr)	0.1	1.1	0.1	0.1	1.1	0.0	0.1	0.0	0.1	0.0	2.7
Avg Speed (mph)	17	32	28	18	36	39	7	15	8	14	31
Fuel Used (gal)	0.1	1.6	0.1	0.1	1.8	0.0	0.1	0.0	0.0	0.0	3.8
Fuel Eff. (mpg)	19.1	21.6	24.6	19.5	22.6	26.7	7.1	15.1	8.4	15.8	21.4
HC Emissions (g)	0	5	0	0	6	0	0	0	0	0	13
CO Emissions (g)	4	196	5	6	239	3	6	3	3	2	467
NOx Emissions (g)	1	16	1	1	19	0	1	0	0	0	39
Vehicles Entered	6	193	10	7	201	4	17	10	7	6	461
Vehicles Exited	6	193	10	7	202	4	17	10	7	6	462
Hourly Exit Rate	24	772	40	28	808	16	68	40	28	24	1848
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0

30: Ramon & Charter Hospital Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.4
Delay / Veh (s)	6.3	2.2	2.2	7.5	3.3		21.2	2.5	17.0	3.5	3.1
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	4.1	0.1	0.2	4.0	0.2		19.6	2.8	15.8	3.7	0.6
Total Stops	2	0	0	3	0	0	6	2	1	3	17
Stop/Veh	0.67	0.00	0.00	0.43	0.00		1.00	1.00	1.00	1.00	0.04
Travel Dist (mi)	0.6	38.4	1.3	1.5	42.0	0.1	0.3	0.1	0.0	0.1	84.4
Travel Time (hr)	0.0	0.9	0.0	0.1	1.1	0.0	0.0	0.0	0.0	0.0	2.3
Avg Speed (mph)	28	40	34	27	37	32	6	15	5	12	37
Fuel Used (gal)	0.0	3.1	0.1	0.1	4.3	0.0	0.0	0.0	0.0	0.0	7.8
Fuel Eff. (mpg)	13.2	12.3	10.0	10.6	9.8	10.7	7.3	17.1	6.3	16.4	10.9
HC Emissions (g)	0	13	1	1	18	0	0	0	0	0	33
CO Emissions (g)	11	855	47	37	1255	3	2	0	0	0	2210
NOx Emissions (g)	1	50	2	2	72	0	0	0	0	0	128
Vehicles Entered	3	201	6	7	204	0	6	2	1	3	433
Vehicles Exited	3	200	6	7	203	0	6	2	1	3	431
Hourly Exit Rate	12	800	24	28	812	0	24	8	4	12	1724
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0

32: Ramon & Da Vall Dr. Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.1	0.8	0.1	0.1	0.5	0.0	0.4	0.2	0.0	0.1	0.2	0.0
Delay / Veh (s)	29.1	15.7	6.3	26.0	13.1	2.8	33.8	21.8	3.4	24.6	22.7	10.7
Stop Delay (hr)	0.1	0.5	0.0	0.1	0.4	0.0	0.3	0.1	0.0	0.1	0.2	0.0
St Del/Veh (s)	25.5	9.4	4.5	23.9	8.9	2.7	30.2	18.9	3.3	23.0	19.8	9.7
Total Stops	8	99	18	9	80	11	39	21	6	16	26	7
Stop/Veh	0.89	0.56	0.60	0.90	0.54	0.61	0.95	0.75	0.86	0.94	0.84	0.88
Travel Dist (mi)	1.7	34.6	5.7	0.7	10.2	1.3	2.2	1.5	0.4	0.9	1.6	0.4
Travel Time (hr)	0.1	1.5	0.2	0.1	0.8	0.1	0.5	0.2	0.0	0.2	0.3	0.0
Avg Speed (mph)	15	23	27	7	13	19	5	7	16	6	6	9
Fuel Used (gal)	0.1	1.8	0.3	0.1	0.9	0.1	0.5	0.2	0.0	0.1	0.2	0.0
Fuel Eff. (mpg)	16.4	19.7	21.8	9.2	11.2	17.8	4.9	7.3	17.3	7.1	6.9	9.3
HC Emissions (g)	0	6	1	0	3	0	1	1	0	0	1	0
CO Emissions (g)	9	201	37	6	141	13	37	19	2	9	19	5
NOx Emissions (g)	1	17	3	1	10	1	5	2	0	1	2	0
Vehicles Entered	9	178	29	10	147	18	41	28	7	17	31	8
Vehicles Exited	9	178	29	10	148	18	41	28	7	17	31	8
Hourly Exit Rate	36	712	116	40	592	72	164	112	28	68	124	32
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0

32: Ramon & Da Vall Dr. Performance by movement

Movement	All
Total Delay (hr)	2.4
Delay / Veh (s)	16.6
Stop Delay (hr)	1.8
St Del/Veh (s)	12.4
Total Stops	340
Stop/Veh	0.65
Travel Dist (mi)	61.1
Travel Time (hr)	4.0
Avg Speed (mph)	16
Fuel Used (gal)	4.3
Fuel Eff. (mpg)	14.3
HC Emissions (g)	14
CO Emissions (g)	498
NOx Emissions (g)	44
Vehicles Entered	523
Vehicles Exited	524
Hourly Exit Rate	2096
Denied Entry Before	0
Denied Entry After	0

Total Network Performance

Total Delay (hr)	72.7
Delay / Veh (s)	101.3
Stop Delay (hr)	57.9
St Del/Veh (s)	80.7
Total Stops	4823
Stop/Veh	1.87
Travel Dist (mi)	1577.9
Travel Time (hr)	119.2
Avg Speed (mph)	15
Fuel Used (gal)	157.4
Fuel Eff. (mpg)	10.0
HC Emissions (g)	563
CO Emissions (g)	24553
NOx Emissions (g)	1806
Vehicles Entered	2631
Vehicles Exited	2539
Hourly Exit Rate	10156
Denied Entry Before	4
Denied Entry After	71

Arterial Level of Service: EB Ramon

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	34.0	37.8	0.0	12
Landau	11.7	18.2	0.1	14
Candlewood	3.2	14.8	0.1	30
Shift Sands	1.8	6.9	0.1	30
Wh. Palms	13.0	19.0	0.1	13
Sky Blue Water	4.5	10.3	0.1	22
Roundup	2.8	6.3	0.0	22
Pueblo	12.1	18.7	0.1	14
Cathedral Canyon	60.1	66.4	0.1	4
Ximino	5.6	15.0	0.1	24
Cyn Vista	0.8	6.1	0.1	34
Juarez	1.3	7.0	0.1	35
Yermo	1.6	7.3	0.1	31
Desert Vista	0.9	2.8	0.0	28
Cielo Vista	1.4	5.9	0.1	33
Rancho Vista	3.4	10.5	0.1	26
Date Palm	26.6	32.4	0.1	8
Cathedral Village	24.5	33.5	0.1	12
San Eljay Ave.	4.0	13.5	0.1	32
El Toro Rd.	0.5	4.3	0.0	40
Victor Rd.	0.4	4.8	0.1	41
Neuma Dr.	0.4	4.8	0.1	40
Outdorr Resorts	5.5	20.3	0.2	33
Desert Shadows	2.3	16.7	0.2	44
Da Vall	15.7	30.5	0.2	25
	3.1	8.5	0.1	30
Total	241.2	422.3	2.2	20

Arterial Level of Service: WB Ramon

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	0.3	4.1	0.0	35
Da Vall Dr.	13.1	19.6	0.1	13
Charter Hospital	4.0	19.3	0.2	40
Outdoor Resorts	4.8	19.4	0.2	37
Neuma Dr.	2.3	17.0	0.2	39
Victor Rd.	0.4	4.7	0.1	41
El Toro Rd.	0.4	4.6	0.1	43
San Eljay Ave.	0.5	4.4	0.0	39
Cathedral Village	16.9	26.2	0.1	17
Date Palm	42.7	50.5	0.1	8
Rancho Vista	4.1	10.9	0.1	25
Cielo Vista	1.7	8.8	0.1	31
Desert Vista	2.6	7.0	0.1	27
Yermo	0.7	2.8	0.0	28
Juarez	3.0	8.7	0.1	26
Alvera	10.4	16.2	0.1	17
Ximino	11.8	16.8	0.1	12
Maravilla	39.6	48.6	0.1	8
Pueblo	3.4	10.3	0.1	25
Roundup	1.5	8.0	0.1	32
Sky Blue Water	1.1	4.5	0.0	30
Wh. Palms	14.0	19.7	0.1	12
Shift Sands	2.7	8.8	0.1	27
Candlewood	0.7	5.9	0.1	35
Landau	30.2	41.0	0.1	11
	3.3	10.2	0.1	25
Total	216.2	397.9	2.2	20

Intersection: 1: Ramon & Landau

Movement	EB	EB	EB	B3	B3	WB	WB	WB	SB	SB	SB
Directions Served	L	T	T	T	T	T	T	R	L	L	R
Maximum Queue (ft)	161	380	363	190	175	298	299	168	118	139	282
Average Queue (ft)	152	357	234	136	91	215	213	94	74	86	166
95th Queue (ft)	168	442	420	263	236	322	327	175	125	150	296
Link Distance (ft)		306	306	170	170	583	583	583		756	756
Upstream Blk Time (%)		40	4	24	3						
Queuing Penalty (veh)		0	0	0	0						
Storage Bay Dist (ft)	125								200		
Storage Blk Time (%)	51	1							0	0	
Queuing Penalty (veh)	311	5							0	0	

Intersection: 2: Ramon & Candlewood

Movement	EB	EB	EB	WB	WB	NB
Directions Served	T	T	TR	L	T	R
Maximum Queue (ft)	12	12	12	57	1	63
Average Queue (ft)	5	5	5	26	0	37
95th Queue (ft)	87	86	85	62	8	73
Link Distance (ft)	583	583	583		243	232
Upstream Blk Time (%)	1	1	1			0
Queuing Penalty (veh)	3	3	3			0
Storage Bay Dist (ft)				60		
Storage Blk Time (%)				1		
Queuing Penalty (veh)				5		

Intersection: 4: Ramon & Shift Sands

Movement	EB	EB	EB	NB
Directions Served	T	T	TR	R
Maximum Queue (ft)	5	5	6	64
Average Queue (ft)	3	3	3	38
95th Queue (ft)	45	46	51	76
Link Distance (ft)	243	243	243	240
Upstream Blk Time (%)	1	1	1	0
Queuing Penalty (veh)	5	5	5	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Ramon & Wh. Palms

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	127	177	166	179	138	224	244	213	104	198	84	108
Average Queue (ft)	75	109	108	114	76	137	161	131	79	108	50	60
95th Queue (ft)	132	191	183	196	145	236	262	230	120	238	92	127
Link Distance (ft)		287	287	287		268	268	268		451		385
Upstream Blk Time (%)		1	1	1		0	0	0		1		1
Queuing Penalty (veh)		6	4	6		2	2	1		0		0
Storage Bay Dist (ft)	150				150				75		75	
Storage Blk Time (%)	0	2			1	3			21	12	5	4
Queuing Penalty (veh)	1	4			3	4			34	17	6	3

Intersection: 7: Ramon & Sky Blue Water

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	T	T	TR	T	T	TR	R	R
Maximum Queue (ft)	26	24	23	1	1	1	62	54
Average Queue (ft)	6	7	7	0	0	0	34	28
95th Queue (ft)	72	76	74	6	3	3	74	59
Link Distance (ft)	268	268	268	138	138	138	230	332
Upstream Blk Time (%)	1	1	2	0			0	
Queuing Penalty (veh)	5	6	8	0			0	
Storage Bay Dist (ft)								
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 8: Ramon & Roundup

Movement	EB	EB	EB	WB	WB	WB	NB
Directions Served	T	T	TR	L	T	T	R
Maximum Queue (ft)	50	42	45	76	48	14	35
Average Queue (ft)	12	9	11	41	11	2	13
95th Queue (ft)	79	67	74	84	94	40	40
Link Distance (ft)	138	138	138		325	325	242
Upstream Blk Time (%)	3	2	2		1		
Queuing Penalty (veh)	13	11	10		5		
Storage Bay Dist (ft)				60			
Storage Blk Time (%)				5	0		
Queuing Penalty (veh)				26	0		

Intersection: 10: Ramon & Pueblo

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	T	T	T	T	T	TR	R
Maximum Queue (ft)	249	225	187	5	6	3	34
Average Queue (ft)	123	88	64	2	2	0	12
95th Queue (ft)	304	263	220	38	42	19	37
Link Distance (ft)	325	325	325	300	300	300	354
Upstream Blk Time (%)	3	2	1	0	0	0	
Queuing Penalty (veh)	14	8	7	2	2	0	
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 11: Ramon & Maravilla

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	LT	R	LT
Maximum Queue (ft)	148	372	369	367	224	510	433	372	312	511	373	554
Average Queue (ft)	113	347	322	313	214	458	288	232	294	495	200	462
95th Queue (ft)	180	431	429	429	242	567	480	381	329	564	402	709
Link Distance (ft)		300	300	300		451	451	451		488	488	574
Upstream Blk Time (%)		36	21	19		48	3	0		48	3	25
Queuing Penalty (veh)		173	103	90		229	13	1		0	0	0
Storage Bay Dist (ft)	120				190				280			
Storage Blk Time (%)	22	48			67	4			42	55		67
Queuing Penalty (veh)	81	59			232	13			167	150		72

Intersection: 11: Ramon & Maravilla

Movement	SB
Directions Served	R
Maximum Queue (ft)	200
Average Queue (ft)	108
95th Queue (ft)	233
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	175
Storage Blk Time (%)	0
Queuing Penalty (veh)	1

Intersection: 13: Ramon & Ximino

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	R
Maximum Queue (ft)	143	120	86	25	255	211	100	83	77
Average Queue (ft)	79	28	13	4	183	75	20	40	34
95th Queue (ft)	162	198	132	78	348	239	120	101	94
Link Distance (ft)		451	451	451	244	244	244	309	309
Upstream Blk Time (%)		3	0	0	26	1	0		
Queuing Penalty (veh)		15	2	0	145	7	1		
Storage Bay Dist (ft)	160								
Storage Blk Time (%)	8								
Queuing Penalty (veh)	41								

Intersection: 14: Ramon & Alvera

Movement	EB	WB	WB	WB	WB	NB	SB
Directions Served	TR	L	T	T	TR	R	R
Maximum Queue (ft)	3	83	286	183	76	51	51
Average Queue (ft)	0	48	133	53	12	29	22
95th Queue (ft)	7	94	370	214	95	57	58
Link Distance (ft)	244		287	287	287	222	304
Upstream Blk Time (%)			11	1	0		
Queuing Penalty (veh)			65	3	0		
Storage Bay Dist (ft)		60					
Storage Blk Time (%)		7	22				
Queuing Penalty (veh)		40	21				

Intersection: 16: Ramon & Juarez

Movement	EB	WB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	0	121	79	38	79
Average Queue (ft)	0	32	14	5	41
95th Queue (ft)	3	157	99	55	93
Link Distance (ft)	287	273	273	273	314
Upstream Blk Time (%)		2	0	0	0
Queuing Penalty (veh)		10	2	0	0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 18: Ramon & Yermo

Movement	EB	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	T	TR	R
Maximum Queue (ft)	93	79	55	24	15	5	9	93
Average Queue (ft)	48	17	11	4	3	0	1	52
95th Queue (ft)	96	83	62	31	23	8	13	96
Link Distance (ft)		273	273	273	53	53	53	299
Upstream Blk Time (%)		0			1	0	0	0
Queuing Penalty (veh)		0			7	1	0	0
Storage Bay Dist (ft)	100							
Storage Blk Time (%)	1	0						
Queuing Penalty (veh)	4	0						

Intersection: 19: Ramon & Desert Vista

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	58	57	46	76	116	82	75	46	46
Average Queue (ft)	22	19	13	36	35	22	22	21	24
95th Queue (ft)	65	61	47	81	121	88	83	52	53
Link Distance (ft)	53	53	53		208	208	208	504	504
Upstream Blk Time (%)	2	1	1		1	1	1		
Queuing Penalty (veh)	7	7	2		5	4	3		
Storage Bay Dist (ft)				135					
Storage Blk Time (%)					1				
Queuing Penalty (veh)					1				

Intersection: 20: Ramon & Cielo Vista

Movement	EB	EB	WB	WB	WB	NB
Directions Served	T	T	T	T	T	R
Maximum Queue (ft)	4	0	8	6	4	44
Average Queue (ft)	1	0	3	2	2	22
95th Queue (ft)	12	1	52	51	47	52
Link Distance (ft)	208	208	345	345	345	234
Upstream Blk Time (%)			1	1	1	
Queuing Penalty (veh)			3	3	3	
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 22: Ramon & Rancho Vista

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	T	T	TR	T	T	T	T	R
Maximum Queue (ft)	106	141	63	2	3	3	3	10	67
Average Queue (ft)	53	47	13	0	2	2	2	2	36
95th Queue (ft)	108	181	83	9	38	37	38	14	71
Link Distance (ft)		345	345	345	291	291	291	248	248
Upstream Blk Time (%)		0			1	0	0		
Queuing Penalty (veh)		2			2	0	2		
Storage Bay Dist (ft)	125								
Storage Blk Time (%)	0	3							
Queuing Penalty (veh)	2	4							

Intersection: 23: Ramon & Date Palm

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	TR	L	L	T	T
Maximum Queue (ft)	168	318	290	141	223	290	259	265	131	137	276	274
Average Queue (ft)	149	245	198	59	134	202	185	188	80	86	195	186
95th Queue (ft)	193	370	317	140	232	309	286	291	138	163	295	296
Link Distance (ft)		291	291	291		468	468	468		800	800	800
Upstream Blk Time (%)		11	2	0		0	0	0		0		
Queuing Penalty (veh)		54	8	0		1	1	1		0		
Storage Bay Dist (ft)	135				235				235			
Storage Blk Time (%)	29	12			1	5			0	0		24
Queuing Penalty (veh)	100	32			3	9			1	1		25

Intersection: 23: Ramon & Date Palm

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (ft)	143	214	233	210	107
Average Queue (ft)	64	149	148	138	60
95th Queue (ft)	155	232	248	219	120
Link Distance (ft)			492	492	492
Upstream Blk Time (%)			0	0	0
Queuing Penalty (veh)			0	0	0
Storage Bay Dist (ft)	120	200			
Storage Blk Time (%)	0	5	1		
Queuing Penalty (veh)	0	12	2		

Intersection: 24: Ramon & Cathedral Village

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	TR	L	LT	R	L
Maximum Queue (ft)	162	295	292	114	142	155	123	113	87	151	85	86
Average Queue (ft)	92	180	182	47	84	98	67	60	44	80	40	51
95th Queue (ft)	169	311	312	119	149	167	129	120	92	159	87	92
Link Distance (ft)		468	468			545	545	545		276		
Upstream Blk Time (%)						0	0	0		0		
Queuing Penalty (veh)						0	0	0		0		
Storage Bay Dist (ft)	150			100	190				75		75	75
Storage Blk Time (%)	1	10	20	0	0	0			2	8	0	4
Queuing Penalty (veh)	4	13	18	0	1	1			4	19	1	2

Intersection: 24: Ramon & Cathedral Village

Movement	SB
Directions Served	TR
Maximum Queue (ft)	74
Average Queue (ft)	36
95th Queue (ft)	81
Link Distance (ft)	298
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	1
Queuing Penalty (veh)	1

Intersection: 25: Ramon & San Eljay Ave.

Movement	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	TR	L	R
Maximum Queue (ft)	57	2	1	2	43	51
Average Queue (ft)	28	0	0	0	17	32
95th Queue (ft)	61	2	2	4	48	56
Link Distance (ft)		183	183	183	290	290
Upstream Blk Time (%)		0				
Queuing Penalty (veh)		0				
Storage Bay Dist (ft)	150					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 26: Ramon & El Toro Rd.

Movement	EB	WB	SB	SB
Directions Served	L	T	L	R
Maximum Queue (ft)	22	1	26	38
Average Queue (ft)	4	0	6	17
95th Queue (ft)	22	0	26	45
Link Distance (ft)		220	291	291
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	75			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 27: Ramon & Victor Rd.

Movement	EB	WB	SB	SB
Directions Served	L	T	L	R
Maximum Queue (ft)	27	0	30	31
Average Queue (ft)	6	0	7	9
95th Queue (ft)	27	1	30	33
Link Distance (ft)		213	283	283
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	75			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 28: Ramon & Neuma Dr.

Movement	EB	WB	SB	SB
Directions Served	L	TR	L	R
Maximum Queue (ft)	32	0	27	36
Average Queue (ft)	8	0	6	15
95th Queue (ft)	32	2	29	42
Link Distance (ft)			273	273
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	75	75		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 29: Ramon & Outdoor Resorts

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	R	L	TR	L
Maximum Queue (ft)	47	96	84	57	32	47	92	89	15	64	41	40
Average Queue (ft)	20	46	45	19	10	20	48	42	3	38	20	17
95th Queue (ft)	51	101	90	60	35	51	99	93	16	68	47	44
Link Distance (ft)		900	900				998	998	998		242	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	125			100	100	150				50		50
Storage Blk Time (%)		0	0	0			0			5	0	1
Queuing Penalty (veh)		0	1	0			0			2	0	0

Intersection: 29: Ramon & Outdoor Resorts

Movement	SB
Directions Served	TR
Maximum Queue (ft)	25
Average Queue (ft)	10
95th Queue (ft)	27
Link Distance (ft)	288
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 30: Ramon & Charter Hospital

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	R	L	L	TR	L	TR
Maximum Queue (ft)	24	1	34	40	20	16	30
Average Queue (ft)	6	0	11	18	5	3	10
95th Queue (ft)	24	4	36	45	20	17	33
Link Distance (ft)					232		188
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	100	100	100	60		60	
Storage Blk Time (%)				0			0
Queuing Penalty (veh)				0			0

Intersection: 32: Ramon & Da Vall Dr.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	T	R	L
Maximum Queue (ft)	57	135	126	118	54	123	95	62	145	107	38	81
Average Queue (ft)	28	90	82	70	25	80	56	30	88	60	17	45
95th Queue (ft)	62	141	133	124	58	129	100	63	155	113	44	86
Link Distance (ft)		1054	1054	1054		296	296	296		280	280	273
Upstream Blk Time (%)										0		
Queuing Penalty (veh)										0		
Storage Bay Dist (ft)	200				250				220			
Storage Blk Time (%)		0							0			
Queuing Penalty (veh)		0							0			

Intersection: 32: Ramon & Da Vall Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	128
Average Queue (ft)	75
95th Queue (ft)	133
Link Distance (ft)	273
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 2666

Intersection: 1: Ramon & Landau

Phase	2	3	5	6
Movement(s) Served	EBT	SBL	EBL	WBT
Maximum Green (s)	53.0	11.0	25.0	23.0
Minimum Green (s)	10.0	8.0	4.0	10.0
Recall	Min	None	None	Min
Avg. Green (s)	54.4	11.1	25.8	24.6
g/C Ratio	0.72	0.15	0.34	0.33
Cycles Skipped (%)	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0
Cycles Maxed Out (%)	45	92	82	82
Cycles with Peds (%)	0	0	0	0

Controller Summary

Average Cycle Length (s): 75.1

Number of Complete Cycles : 11

Intersection: 6: Ramon & Wh. Palms

Phase	1	2	4	5	6	8
Movement(s) Served	WBL	EBT	SBTL	EBL	WBT	NBTL
Maximum Green (s)	10.0	16.5	8.0	10.0	16.5	8.0
Minimum Green (s)	3.0	10.0	4.0	3.0	10.0	4.0
Recall	None	Min	None	None	Min	None
Avg. Green (s)	8.0	21.2	8.1	7.9	19.3	8.1
g/C Ratio	0.11	0.45	0.17	0.14	0.41	0.17
Cycles Skipped (%)	33	0	0	17	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	17	94	89	28	89	89
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 47.3

Number of Complete Cycles : 18

Intersection: 11: Ramon & Maravilla

Phase	1	2	3	4	5	6
Movement(s) Served	WBL	EBT	SBTL	NBTL	EBL	WBT
Maximum Green (s)	25.0	40.0	20.0	25.0	18.0	47.0
Minimum Green (s)	4.0	10.0	4.0	4.0	4.0	10.0
Recall	None	C-Min	None	None	None	C-Min
Avg. Green (s)	29.8	41.9	19.9	25.0	16.3	53.2
g/C Ratio	0.21	0.29	0.14	0.17	0.11	0.37
Cycles Skipped (%)	0	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	100	100	83	100	20	100
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 145.0

Number of Complete Cycles : 5

Intersection: 19: Ramon & Desert Vista

Phase	2	4	6
Movement(s) Served	EBT	NBL	WBTL
Maximum Green (s)	25.0	8.0	25.0
Minimum Green (s)	8.0	8.0	8.0
Recall	Min	None	Min
Avg. Green (s)	146.4	8.9	146.4
g/C Ratio	0.90	0.05	0.90
Cycles Skipped (%)	0	0	0
Cycles @ Minimum (%)	0	100	0
Cycles Maxed Out (%)	50	100	50
Cycles with Peds (%)	0	0	0

Controller Summary

Average Cycle Length (s): 161.8

Number of Complete Cycles : 4

Intersection: 23: Ramon & Date Palm

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	EBL	WBT	SBL	NBT	WBL	EBT	NBL	SBT
Maximum Green (s)	17.0	21.5	15.0	20.5	14.0	24.5	11.0	24.5
Minimum Green (s)	4.0	10.0	4.0	10.0	4.0	10.0	4.0	10.0
Recall	None	None	None	Min	None	None	None	Min
Avg. Green (s)	16.0	23.2	14.1	22.2	12.8	26.4	15.9	20.5
g/C Ratio	0.16	0.23	0.14	0.22	0.13	0.26	0.16	0.20
Cycles Skipped (%)	0	0	0	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0	0	0
Cycles Maxed Out (%)	56	89	56	89	56	78	100	22
Cycles with Peds (%)	0	0	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 100.9

Number of Complete Cycles : 8

Intersection: 24: Ramon & Cathedral Village

Phase	1	2	5	6	7	8
Movement(s) Served	WBL	EBT	EBL	WBT	SBTL	NBTL
Maximum Green (s)	10.0	19.5	10.0	19.5	8.0	12.0
Minimum Green (s)	4.0	7.5	4.0	7.5	6.0	6.0
Recall	None	Min	None	Min	None	None
Avg. Green (s)	8.7	20.7	8.1	22.2	7.4	11.0
g/C Ratio	0.13	0.32	0.11	0.35	0.10	0.17
Cycles Skipped (%)	8	0	15	0	15	0
Cycles @ Minimum (%)	0	0	0	0	23	8
Cycles Maxed Out (%)	38	71	23	71	46	54
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 64.2

Number of Complete Cycles : 13

Intersection: 29: Ramon & Outdoor Resorts

Phase	1	2	4	5	6	8
Movement(s) Served	WBL	EBT	NBTL	EBL	WBT	SBTL
Maximum Green (s)	4.0	14.5	5.0	4.0	14.5	5.0
Minimum Green (s)	4.0	10.0	4.0	4.0	10.0	4.0
Recall	None	Min	None	None	Min	None
Avg. Green (s)	4.5	32.5	5.1	4.4	32.6	5.2
g/C Ratio	0.03	0.65	0.08	0.03	0.65	0.04
Cycles Skipped (%)	71	6	29	71	6	67
Cycles @ Minimum (%)	29	0	0	29	0	0
Cycles Maxed Out (%)	29	44	35	29	44	17
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 47.1

Number of Complete Cycles : 18

Intersection: 32: Ramon & Da Vall Dr.

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBT
Maximum Green (s)	5.0	14.0	7.5	10.5	5.0	14.0	5.5	12.5
Minimum Green (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Recall	None	Min	None	None	None	Min	None	None
Avg. Green (s)	5.1	17.4	8.9	11.6	5.5	17.8	8.7	15.1
g/C Ratio	0.04	0.31	0.15	0.16	0.04	0.31	0.10	0.20
Cycles Skipped (%)	56	0	7	20	60	0	38	27
Cycles @ Minimum (%)	44	0	13	27	40	0	19	13
Cycles Maxed Out (%)	44	94	67	47	40	94	38	40
Cycles with Peds (%)	0	0	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 56.7

Number of Complete Cycles : 15

Summary of All Intervals

Run Number	1	10	100	11	12	13	14	15
Start Time	4:55	4:55	4:55	4:55	4:55	4:55	4:55	4:55
End Time	5:15	5:15	5:15	5:15	5:15	5:15	5:15	5:15
Total Time (min)	20	20	20	20	20	20	20	20
Time Recorded (min)	15	15	15	15	15	15	15	15
# of Intervals	2	2	2	2	2	2	2	2
# of Recorded Intvls	1	1	1	1	1	1	1	1
Vehs Entered	2566	2622	2568	2634	2620	2652	2565	2597
Vehs Exited	2540	2480	2457	2492	2457	2498	2437	2499
Starting Vehs	428	385	380	374	380	361	413	390
Ending Vehs	454	527	491	516	543	515	541	488
Denied Entry Before	4	8	6	4	2	4	3	2
Denied Entry After	28	32	18	24	30	26	48	6
Travel Distance (mi)	1731	1707	1693	1754	1758	1739	1740	1727
Travel Time (hr)	118.2	123.4	113.2	123.6	126.0	115.1	129.2	118.2
Total Delay (hr)	68.0	73.5	63.7	72.6	74.8	64.3	78.6	67.7
Total Stops	5195	5344	4830	5491	5377	4969	5458	5061
Fuel Used (gal)	161.7	162.5	156.6	165.5	165.1	159.3	167.1	160.4

Interval #0 Information Seeding

Start Time	4:55
End Time	5:00
Total Time (min)	5
Volumes adjusted by PHF, Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	10	100	11	12	13	14	15
Vehs Entered	2566	2622	2568	2634	2620	2652	2565	2597
Vehs Exited	2540	2480	2457	2492	2457	2498	2437	2499
Starting Vehs	428	385	380	374	380	361	413	390
Ending Vehs	454	527	491	516	543	515	541	488
Denied Entry Before	4	8	6	4	2	4	3	2
Denied Entry After	28	32	18	24	30	26	48	6
Travel Distance (mi)	1731	1707	1693	1754	1758	1739	1740	1727
Travel Time (hr)	118.2	123.4	113.2	123.6	126.0	115.1	129.2	118.2
Total Delay (hr)	68.0	73.5	63.7	72.6	74.8	64.3	78.6	67.7
Total Stops	5195	5344	4830	5491	5377	4969	5458	5061
Fuel Used (gal)	161.7	162.5	156.6	165.5	165.1	159.3	167.1	160.4

1: Ramon & Landau Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	1.9	0.7	2.5	0.2	0.9	0.4	6.7
Delay / Veh (s)	49.6	9.2	34.9	8.0	39.2	14.0	24.7
Stop Delay (hr)	1.6	0.4	1.8	0.1	0.9	0.4	5.1
St Del/Veh (s)	42.3	4.5	25.2	4.6	35.5	11.7	18.9
Total Stops	148	80	224	63	82	68	665
Stop/Veh	1.06	0.28	0.88	0.67	0.94	0.59	0.68
Travel Dist (mi)	9.2	19.2	30.6	11.1	12.6	16.7	99.4
Travel Time (hr)	2.3	1.2	3.3	0.6	1.4	1.1	9.9
Avg Speed (mph)	4	16	9	19	9	15	10
Fuel Used (gal)	1.6	2.0	2.6	0.6	1.3	1.1	9.1
Fuel Eff. (mpg)	5.7	9.7	11.7	19.6	10.0	15.6	10.9
HC Emissions (g)	4	7	7	2	4	3	27
CO Emissions (g)	57	308	123	52	123	111	774
NOx Emissions (g)	9	24	16	4	11	7	71
Vehicles Entered	140	290	256	94	87	116	983
Vehicles Exited	137	288	254	94	88	115	976
Hourly Exit Rate	548	1152	1016	376	352	460	3904

2: Ramon & Candlewood Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Total Delay (hr)	0.2	0.0	0.1	0.1	0.0	0.4
Delay / Veh (s)	1.8	1.1	15.7	0.9	7.1	1.7
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	0.1	0.1	13.8	0.0	7.1	0.4
Total Stops	1	0	10	0	12	23
Stop/Veh	0.00	0.00	0.77	0.00	1.00	0.03
Travel Dist (mi)	47.2	1.0	0.7	19.5	0.5	69.0
Travel Time (hr)	1.5	0.0	0.1	0.6	0.1	2.2
Avg Speed (mph)	32	26	8	33	10	31
Fuel Used (gal)	4.0	0.1	0.1	1.0	0.0	5.2
Fuel Eff. (mpg)	11.9	12.8	11.9	19.2	12.7	13.3
HC Emissions (g)	16	0	0	4	0	20
CO Emissions (g)	1006	18	4	155	3	1186
NOx Emissions (g)	58	1	1	11	0	71
Vehicles Entered	370	8	13	343	12	746
Vehicles Exited	370	8	13	343	12	746
Hourly Exit Rate	1480	32	52	1372	48	2984

4: Ramon & Shift Sands Performance by movement

Movement	EBT	EBR	WBT	NBR	All
Total Delay (hr)	0.1	0.0	0.3	0.1	0.5
Delay / Veh (s)	1.3	0.3	2.7	10.3	2.2
Stop Delay (hr)	0.0	0.0	0.0	0.1	0.1
St Del/Veh (s)	0.0	0.0	0.1	10.2	0.3
Total Stops	0	0	1	20	21
Stop/Veh	0.00	0.00	0.00	1.00	0.03
Travel Dist (mi)	21.0	0.8	26.3	0.9	49.0
Travel Time (hr)	0.7	0.0	1.0	0.1	1.9
Avg Speed (mph)	31	22	25	9	26
Fuel Used (gal)	0.9	0.0	3.9	0.1	5.0
Fuel Eff. (mpg)	22.5	24.8	6.7	10.3	9.8
HC Emissions (g)	4	0	15	0	20
CO Emissions (g)	144	3	943	7	1096
NOx Emissions (g)	9	0	66	1	76
Vehicles Entered	367	14	413	20	814
Vehicles Exited	368	14	413	20	815
Hourly Exit Rate	1472	56	1652	80	3260

6: Ramon & Wh. Palms Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.3	1.3	0.0	0.3	2.2	0.1	0.4	0.2	0.1	0.2	0.1	0.0
Delay / Veh (s)	26.3	13.3	8.5	33.6	21.5	17.2	41.6	28.3	18.3	33.7	21.4	10.7
Stop Delay (hr)	0.2	0.8	0.0	0.2	1.4	0.0	0.4	0.2	0.1	0.2	0.1	0.0
St Del/Veh (s)	22.1	8.0	6.2	27.5	13.4	12.3	37.4	23.6	16.0	30.5	17.9	9.4
Total Stops	38	189	10	34	261	11	41	23	16	21	13	11
Stop/Veh	0.95	0.53	0.56	1.10	0.72	0.79	1.08	0.96	0.94	0.95	0.81	0.79
Travel Dist (mi)	2.5	22.4	1.1	2.9	34.6	1.4	3.2	2.1	1.4	1.6	1.1	1.0
Travel Time (hr)	0.4	1.9	0.1	0.4	3.1	0.1	0.6	0.3	0.1	0.3	0.1	0.1
Avg Speed (mph)	6	12	12	8	12	12	6	8	10	7	8	12
Fuel Used (gal)	0.3	2.0	0.1	0.3	2.8	0.1	0.5	0.2	0.1	0.2	0.1	0.1
Fuel Eff. (mpg)	8.3	11.3	13.8	9.6	12.3	13.5	6.5	8.4	10.0	6.7	8.8	11.4
HC Emissions (g)	1	6	0	1	8	0	2	1	0	1	0	0
CO Emissions (g)	16	162	5	16	168	6	48	25	15	22	15	10
NOx Emissions (g)	3	17	1	2	20	1	5	2	1	2	1	1
Vehicles Entered	40	357	18	32	366	14	37	24	17	22	16	14
Vehicles Exited	40	360	18	31	361	14	37	24	17	22	16	14
Hourly Exit Rate	160	1440	72	124	1444	56	148	96	68	88	64	56

6: Ramon & Wh. Palms Performance by movement

Movement	All
Total Delay (hr)	5.3
Delay / Veh (s)	19.8
Stop Delay (hr)	3.6
St Del/Veh (s)	13.7
Total Stops	668
Stop/Veh	0.70
Travel Dist (mi)	75.4
Travel Time (hr)	7.5
Avg Speed (mph)	10
Fuel Used (gal)	6.9
Fuel Eff. (mpg)	10.9
HC Emissions (g)	20
CO Emissions (g)	507
NOx Emissions (g)	57
Vehicles Entered	957
Vehicles Exited	954
Hourly Exit Rate	3816

8: Ramon & Roundup Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Total Delay (hr)	0.6	0.0	0.1	0.5	0.0	1.2
Delay / Veh (s)	6.1	3.9	16.3	4.1	12.9	5.3
Stop Delay (hr)	0.2	0.0	0.1	0.0	0.0	0.3
St Del/Veh (s)	1.8	0.8	12.1	0.1	12.9	1.2
Total Stops	24	1	11	1	4	41
Stop/Veh	0.06	0.06	0.69	0.00	1.33	0.05
Travel Dist (mi)	37.8	1.7	2.4	58.9	0.2	101.0
Travel Time (hr)	1.7	0.1	0.2	2.2	0.0	4.1
Avg Speed (mph)	23	21	16	27	8	25
Fuel Used (gal)	4.1	0.2	0.2	5.5	0.0	10.0
Fuel Eff. (mpg)	9.3	10.1	10.5	10.7	11.7	10.1
HC Emissions (g)	16	1	1	21	0	38
CO Emissions (g)	847	33	40	1136	1	2057
NOx Emissions (g)	61	2	3	82	0	149
Vehicles Entered	382	16	17	413	3	831
Vehicles Exited	379	16	16	405	3	819
Hourly Exit Rate	1516	64	64	1620	12	3276

11: Ramon & Maravilla Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	1.1	7.9	1.3	3.1	4.5	0.1	5.2	1.3	0.7	1.1	1.6	0.7
Delay / Veh (s)	133.7	107.2	101.8	150.7	58.6	52.5	139.7	140.7	25.9	166.3	166.5	91.5
Stop Delay (hr)	0.9	6.6	1.1	2.9	3.8	0.1	4.8	1.2	0.6	1.0	1.5	0.6
St Del/Veh (s)	117.2	90.2	89.0	140.2	49.4	47.7	127.4	127.3	23.3	156.2	154.9	83.4
Total Stops	53	373	63	110	232	5	219	55	68	44	64	49
Stop/Veh	1.83	1.41	1.37	1.47	0.84	0.83	1.62	1.62	0.72	1.91	1.88	1.88
Travel Dist (mi)	4.1	37.4	6.6	7.3	27.0	0.6	21.3	5.3	15.0	3.6	5.3	4.1
Travel Time (hr)	1.2	8.8	1.5	3.4	5.2	0.1	6.0	1.5	1.3	1.2	1.8	0.8
Avg Speed (mph)	3	4	4	2	6	6	4	4	15	3	3	5
Fuel Used (gal)	0.8	5.8	1.0	2.1	4.0	0.1	4.0	1.0	1.1	0.8	1.1	0.7
Fuel Eff. (mpg)	5.4	6.4	6.8	3.4	6.8	7.4	5.3	5.4	13.5	4.7	4.7	6.3
HC Emissions (g)	2	15	3	6	12	0	11	3	4	2	3	2
CO Emissions (g)	29	242	41	67	246	4	181	43	96	41	61	56
NOx Emissions (g)	4	31	5	10	28	0	21	5	6	4	7	5
Vehicles Entered	32	283	50	77	276	6	138	35	95	25	36	29
Vehicles Exited	27	248	44	72	274	6	131	33	96	21	31	25
Hourly Exit Rate	108	992	176	288	1096	24	524	132	384	84	124	100

11: Ramon & Maravilla Performance by movement

Movement	All
Total Delay (hr)	28.5
Delay / Veh (s)	98.2
Stop Delay (hr)	25.2
St Del/Veh (s)	86.7
Total Stops	1335
Stop/Veh	1.28
Travel Dist (mi)	137.5
Travel Time (hr)	32.9
Avg Speed (mph)	4
Fuel Used (gal)	22.4
Fuel Eff. (mpg)	6.1
HC Emissions (g)	63
CO Emissions (g)	1107
NOx Emissions (g)	128
Vehicles Entered	1082
Vehicles Exited	1008
Hourly Exit Rate	4032

13: Ramon & Ximino Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.3	0.4	0.9	0.0	0.3	0.1	2.0
Delay / Veh (s)	40.0	3.9	9.0	0.6	225.0	66.8	9.4
Stop Delay (hr)	0.2	0.0	0.7	0.0	0.3	0.1	1.3
St Del/Veh (s)	34.9	0.2	6.5	0.2	223.9	66.6	6.3
Total Stops	23	3	54	0	6	5	91
Stop/Veh	0.96	0.01	0.15	0.00	1.20	1.00	0.12
Travel Dist (mi)	2.5	34.5	20.7	0.6	0.3	0.3	58.8
Travel Time (hr)	0.4	1.4	1.5	0.0	0.3	0.1	3.7
Avg Speed (mph)	7	25	14	21	1	3	16
Fuel Used (gal)	0.4	4.6	1.5	0.0	0.2	0.1	6.7
Fuel Eff. (mpg)	6.9	7.5	13.9	24.4	1.8	4.7	8.8
HC Emissions (g)	1	18	5	0	1	0	25
CO Emissions (g)	36	1135	187	2	10	4	1373
NOx Emissions (g)	4	72	13	0	2	0	92
Vehicles Entered	25	341	375	10	6	5	762
Vehicles Exited	24	341	367	10	5	4	751
Hourly Exit Rate	96	1364	1468	40	20	16	3004

14: Ramon & Alvera Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBR	SBR	All
Total Delay (hr)	0.1	0.0	0.1	0.5	0.0	0.0	0.0	0.8
Delay / Veh (s)	1.0	0.3	24.3	4.8	1.0	8.8	22.1	3.8
Stop Delay (hr)	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.4
St Del/Veh (s)	0.0	0.0	20.1	2.3	0.1	8.7	22.0	2.0
Total Stops	0	0	19	26	0	14	5	64
Stop/Veh	0.00	0.00	0.86	0.07	0.00	1.00	1.00	0.08
Travel Dist (mi)	20.1	0.4	2.7	47.5	0.7	0.6	0.3	72.4
Travel Time (hr)	0.6	0.0	0.2	1.8	0.0	0.1	0.0	2.8
Avg Speed (mph)	33	22	12	27	28	9	6	26
Fuel Used (gal)	1.2	0.0	0.2	2.8	0.0	0.1	0.0	4.3
Fuel Eff. (mpg)	17.2	27.0	13.2	16.9	18.1	11.4	9.1	16.8
HC Emissions (g)	4	0	1	10	0	0	0	15
CO Emissions (g)	187	1	17	475	7	3	2	693
NOx Emissions (g)	13	0	2	30	0	0	0	46
Vehicles Entered	343	7	22	386	6	14	5	783
Vehicles Exited	344	7	22	381	6	14	5	779
Hourly Exit Rate	1376	28	88	1524	24	56	20	3116

18: Ramon & Yermo Performance by movement

Movement	EBL	EBT	WBT	WBR	SBR	All
Total Delay (hr)	0.1	0.3	0.1	0.0	0.1	0.5
Delay / Veh (s)	15.0	2.7	0.5	0.2	8.3	2.2
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.0	0.2
St Del/Veh (s)	11.2	0.2	0.0	0.0	8.1	0.7
Total Stops	21	8	0	0	22	51
Stop/Veh	0.78	0.02	0.00	0.00	1.00	0.06
Travel Dist (mi)	3.3	43.4	8.5	0.2	1.3	56.6
Travel Time (hr)	0.2	1.4	0.3	0.0	0.1	2.0
Avg Speed (mph)	15	32	31	15	11	28
Fuel Used (gal)	0.2	2.4	0.6	0.0	0.1	3.3
Fuel Eff. (mpg)	16.3	18.1	14.0	19.5	12.1	17.0
HC Emissions (g)	1	8	2	0	0	11
CO Emissions (g)	15	379	111	0	10	517
NOx Emissions (g)	2	25	8	0	1	36
Vehicles Entered	26	346	390	9	21	792
Vehicles Exited	27	350	390	9	22	798
Hourly Exit Rate	108	1400	1560	36	88	3192

19: Ramon & Desert Vista Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Total Delay (hr)	0.1	0.0	0.1	0.2	0.0	0.0	0.4
Delay / Veh (s)	0.8	0.3	17.4	2.3	21.5	6.7	2.0
Stop Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.2
St Del/Veh (s)	0.3	0.2	14.2	0.4	19.8	6.4	0.8
Total Stops	13	1	10	17	5	10	56
Stop/Veh	0.04	0.12	0.77	0.04	1.00	1.00	0.07
Travel Dist (mi)	6.9	0.2	1.5	45.0	0.5	1.0	55.0
Travel Time (hr)	0.3	0.0	0.1	1.4	0.0	0.1	1.9
Avg Speed (mph)	27	15	14	32	10	16	29
Fuel Used (gal)	0.5	0.0	0.1	2.3	0.0	0.1	3.0
Fuel Eff. (mpg)	14.5	20.9	15.1	19.6	12.6	17.8	18.5
HC Emissions (g)	2	0	0	8	0	0	10
CO Emissions (g)	81	0	7	336	3	5	432
NOx Emissions (g)	6	0	1	23	0	0	30
Vehicles Entered	343	8	13	394	5	10	773
Vehicles Exited	343	8	13	393	5	10	772
Hourly Exit Rate	1372	32	52	1572	20	40	3088

22: Ramon & Performance by movement

Movement	EBL	EBT	EBR	WBT	NBR	All
Total Delay (hr)	0.1	0.3	0.0	0.3	0.1	0.7
Delay / Veh (s)	13.3	3.0	1.0	2.6	12.3	3.5
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.1	0.2
St Del/Veh (s)	9.6	0.4	0.1	0.3	12.2	1.0
Total Stops	27	5	0	0	15	47
Stop/Veh	0.73	0.02	0.00	0.00	1.00	0.06
Travel Dist (mi)	4.4	35.5	1.2	31.3	0.7	73.0
Travel Time (hr)	0.3	1.2	0.0	1.2	0.1	2.8
Avg Speed (mph)	16	31	27	26	8	26
Fuel Used (gal)	0.3	1.9	0.1	4.6	0.1	7.0
Fuel Eff. (mpg)	15.6	18.2	18.1	6.8	10.0	10.4
HC Emissions (g)	1	7	0	19	0	28
CO Emissions (g)	23	327	12	1221	6	1589
NOx Emissions (g)	2	22	1	78	1	103
Vehicles Entered	37	300	10	379	15	741
Vehicles Exited	37	302	10	379	15	743
Hourly Exit Rate	148	1208	40	1516	60	2972

23: Ramon & Date Palm Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	1.1	1.8	0.1	0.6	2.3	0.3	0.8	2.5	0.2	0.8	1.2	0.1
Delay / Veh (s)	60.5	35.6	8.2	45.7	38.1	28.3	41.2	52.3	25.7	58.4	33.0	8.1
Stop Delay (hr)	1.0	1.5	0.1	0.6	1.7	0.3	0.8	2.2	0.2	0.8	1.1	0.1
St Del/Veh (s)	53.6	28.2	6.9	39.5	29.4	24.0	37.8	45.2	21.4	52.9	28.3	7.1
Total Stops	81	152	45	50	182	40	67	193	36	58	110	43
Stop/Veh	1.25	0.82	0.71	0.98	0.85	0.93	0.91	1.11	1.24	1.12	0.81	0.77
Travel Dist (mi)	5.2	14.4	5.1	4.4	18.5	3.8	11.3	26.8	4.4	4.9	12.7	5.2
Travel Time (hr)	1.3	2.2	0.4	0.8	2.7	0.5	1.3	3.5	0.4	1.0	1.7	0.4
Avg Speed (mph)	4	6	14	5	7	8	9	8	13	5	8	15
Fuel Used (gal)	0.9	1.8	0.3	0.7	2.7	0.5	1.1	2.9	0.4	0.9	1.6	0.4
Fuel Eff. (mpg)	6.1	8.1	16.3	6.3	6.9	7.9	10.2	9.1	10.2	5.7	7.9	13.5
HC Emissions (g)	2	5	1	2	8	2	3	9	1	3	5	1
CO Emissions (g)	33	106	30	50	260	49	107	246	56	72	167	54
NOx Emissions (g)	5	14	2	7	27	4	9	22	4	7	15	4
Vehicles Entered	66	188	62	51	214	43	74	175	29	53	135	56
Vehicles Exited	63	185	63	51	212	43	74	172	28	52	135	56
Hourly Exit Rate	252	740	252	204	848	172	296	688	112	208	540	224

23: Ramon & Date Palm Performance by movement

Movement	All
Total Delay (hr)	12.1
Delay / Veh (s)	38.2
Stop Delay (hr)	10.2
St Del/Veh (s)	32.2
Total Stops	1057
Stop/Veh	0.93
Travel Dist (mi)	116.7
Travel Time (hr)	16.1
Avg Speed (mph)	7
Fuel Used (gal)	14.1
Fuel Eff. (mpg)	8.3
HC Emissions (g)	43
CO Emissions (g)	1230
NOx Emissions (g)	121
Vehicles Entered	1146
Vehicles Exited	1134
Hourly Exit Rate	4536

24: Ramon & Cathedral Village Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.3	1.1	0.1	0.3	0.7	0.0	0.3	0.0	0.1	0.1	0.0	0.0
Delay / Veh (s)	32.2	19.7	9.6	25.5	12.7	4.3	27.6	27.6	12.1	31.2	24.6	6.1
Stop Delay (hr)	0.2	0.6	0.0	0.2	0.4	0.0	0.2	0.0	0.1	0.1	0.0	0.0
St Del/Veh (s)	25.6	11.3	4.8	21.4	7.4	3.3	25.1	24.2	10.8	28.6	21.7	5.6
Total Stops	31	118	16	33	91	8	30	5	32	11	4	8
Stop/Veh	1.00	0.61	0.76	0.85	0.48	0.53	0.91	0.83	0.91	0.92	1.00	0.89
Travel Dist (mi)	3.2	20.1	2.2	4.4	22.0	1.8	1.8	0.3	1.9	0.7	0.2	0.5
Travel Time (hr)	0.4	1.6	0.1	0.4	1.2	0.1	0.3	0.1	0.2	0.1	0.0	0.0
Avg Speed (mph)	8	12	15	11	18	22	6	6	11	6	7	13
Fuel Used (gal)	0.4	2.4	0.2	0.4	1.4	0.1	0.3	0.0	0.3	0.1	0.0	0.0
Fuel Eff. (mpg)	7.7	8.3	9.9	12.5	15.8	18.8	6.3	6.6	7.6	6.6	8.6	13.5
HC Emissions (g)	1	8	1	1	5	0	1	0	1	0	0	0
CO Emissions (g)	42	346	32	28	207	16	22	4	26	8	2	4
NOx Emissions (g)	5	31	3	3	15	1	3	0	3	1	0	0
Vehicles Entered	32	194	22	39	192	15	33	6	35	12	4	9
Vehicles Exited	31	191	21	39	191	15	33	6	35	12	4	9
Hourly Exit Rate	124	764	84	156	764	60	132	24	140	48	16	36

24: Ramon & Cathedral Village Performance by movement

Movement	All
Total Delay (hr)	2.9
Delay / Veh (s)	17.8
Stop Delay (hr)	2.0
St Del/Veh (s)	12.2
Total Stops	387
Stop/Veh	0.66
Travel Dist (mi)	59.2
Travel Time (hr)	4.7
Avg Speed (mph)	13
Fuel Used (gal)	5.7
Fuel Eff. (mpg)	10.5
HC Emissions (g)	19
CO Emissions (g)	738
NOx Emissions (g)	65
Vehicles Entered	593
Vehicles Exited	587
Hourly Exit Rate	2348

25: Ramon & San Eljay Ave. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.2	0.0	0.0	0.0	0.0	0.3
Delay / Veh (s)	9.4	3.0	0.5	0.1	27.6	4.7	2.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	5.6	0.2	0.0	0.0	26.2	4.5	0.7
Total Stops	12	0	0	0	6	18	36
Stop/Veh	0.67	0.00	0.00	0.00	1.20	1.00	0.08
Travel Dist (mi)	2.1	25.2	10.3	0.2	0.3	1.0	39.1
Travel Time (hr)	0.1	0.8	0.3	0.0	0.1	0.1	1.3
Avg Speed (mph)	18	31	38	21	6	14	29
Fuel Used (gal)	0.2	3.2	0.5	0.0	0.0	0.1	4.1
Fuel Eff. (mpg)	9.0	7.9	19.3	28.4	8.5	14.8	9.6
HC Emissions (g)	1	13	2	0	0	0	17
CO Emissions (g)	49	887	105	0	2	7	1051
NOx Emissions (g)	4	55	6	0	0	1	66
Vehicles Entered	18	216	217	5	5	18	479
Vehicles Exited	18	216	217	5	5	18	479
Hourly Exit Rate	72	864	868	20	20	72	1916

26: Ramon & El Toro Rd. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Delay / Veh (s)	5.7	0.4	0.5	0.0	20.6	3.9	0.5
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	4.0	0.0	0.0	0.0	18.9	3.8	0.1
Total Stops	1	0	0	0	1	5	7
Stop/Veh	1.00	0.00	0.00	0.00	1.00	1.00	0.02
Travel Dist (mi)	0.1	10.1	12.4	0.1	0.1	0.3	23.0
Travel Time (hr)	0.0	0.3	0.3	0.0	0.0	0.0	0.6
Avg Speed (mph)	14	39	39	24	8	15	38
Fuel Used (gal)	0.0	0.5	0.6	0.0	0.0	0.0	1.1
Fuel Eff. (mpg)	15.9	20.7	19.8	34.9	11.6	17.0	20.1
HC Emissions (g)	0	2	2	0	0	0	4
CO Emissions (g)	0	77	127	0	0	2	206
NOx Emissions (g)	0	5	7	0	0	0	13
Vehicles Entered	1	213	235	1	1	5	456
Vehicles Exited	1	213	235	1	1	5	456
Hourly Exit Rate	4	852	940	4	4	20	1824

27: Ramon & Victor Rd. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Delay / Veh (s)	5.4	0.5	0.4	0.1	24.8	3.1	0.5
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	4.3	0.0	0.0	0.0	23.2	3.0	0.1
Total Stops	1	0	0	0	1	3	5
Stop/Veh	0.50	0.00	0.00	0.00	1.00	1.00	0.01
Travel Dist (mi)	0.1	11.7	12.3	0.1	0.1	0.2	24.4
Travel Time (hr)	0.0	0.3	0.3	0.0	0.0	0.0	0.6
Avg Speed (mph)	14	40	39	22	7	16	38
Fuel Used (gal)	0.0	0.5	0.6	0.0	0.0	0.0	1.1
Fuel Eff. (mpg)	17.7	23.8	21.6	17.5	11.3	18.0	22.4
HC Emissions (g)	0	1	2	0	0	0	3
CO Emissions (g)	0	62	94	1	0	1	159
NOx Emissions (g)	0	5	6	0	0	0	11
Vehicles Entered	2	216	234	2	1	3	458
Vehicles Exited	2	216	234	2	1	3	458
Hourly Exit Rate	8	864	936	8	4	12	1832

28: Ramon & Neuma Dr. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.0	0.2
Delay / Veh (s)	6.3	0.4	2.2	1.3	25.5	3.6	1.5
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	5.0	0.0	0.1	0.1	23.8	3.4	0.2
Total Stops	3	0	0	0	1	5	9
Stop/Veh	0.75	0.00	0.00	0.00	1.00	1.00	0.02
Travel Dist (mi)	0.2	11.3	42.3	0.3	0.1	0.3	54.5
Travel Time (hr)	0.0	0.3	1.1	0.0	0.0	0.0	1.5
Avg Speed (mph)	14	40	37	31	7	15	37
Fuel Used (gal)	0.0	0.5	2.7	0.0	0.0	0.0	3.2
Fuel Eff. (mpg)	17.9	24.7	15.5	15.7	10.5	17.4	16.8
HC Emissions (g)	0	1	10	0	0	0	12
CO Emissions (g)	1	57	591	5	0	2	656
NOx Emissions (g)	0	4	37	0	0	0	41
Vehicles Entered	4	213	231	2	1	5	456
Vehicles Exited	4	213	232	2	1	5	457
Hourly Exit Rate	16	852	928	8	4	20	1828

29: Ramon & Via Campanile Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.0	0.3	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.8
Delay / Veh (s)	21.9	5.1	3.2	21.3	4.9	0.6	21.7	2.9	35.8	4.7	6.0
Stop Delay (hr)	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.3
St Del/Veh (s)	19.1	1.4	0.9	18.1	1.2	0.5	19.5	2.8	33.3	5.1	2.5
Total Stops	4	35	3	8	33	1	15	9	2	7	117
Stop/Veh	1.00	0.18	0.27	1.00	0.16	0.25	0.88	0.90	2.00	1.00	0.25
Travel Dist (mi)	0.8	35.6	1.9	1.7	42.1	0.8	0.8	0.5	0.1	0.4	84.7
Travel Time (hr)	0.0	1.1	0.1	0.1	1.2	0.0	0.1	0.0	0.0	0.0	2.7
Avg Speed (mph)	17	33	28	18	36	39	7	15	7	14	32
Fuel Used (gal)	0.0	1.6	0.1	0.1	1.9	0.0	0.1	0.0	0.0	0.0	3.9
Fuel Eff. (mpg)	19.6	21.7	24.8	19.4	22.6	24.4	7.2	14.8	8.3	15.9	21.6
HC Emissions (g)	0	5	0	0	6	0	0	0	0	0	13
CO Emissions (g)	3	212	5	7	255	5	6	3	1	3	500
NOx Emissions (g)	0	16	1	1	20	0	1	0	0	0	40
Vehicles Entered	4	197	11	8	210	4	16	10	1	7	468
Vehicles Exited	4	197	11	8	210	4	17	10	1	7	469
Hourly Exit Rate	16	788	44	32	840	16	68	40	4	28	1876

30: Ramon & Charter Hospital Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.4
Delay / Veh (s)	6.5	2.2	1.9	7.8	3.9	1.3	25.7	2.6		2.6	3.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	4.3	0.1	0.1	3.9	0.2	0.1	23.9	2.8		2.7	0.5
Total Stops	2	0	0	2	0	0	5	1	0	4	14
Stop/Veh	0.67	0.00	0.00	0.40	0.00	0.00	1.00	1.00		1.00	0.03
Travel Dist (mi)	0.6	38.6	1.4	1.0	45.1	0.1	0.2	0.0	0.0	0.1	87.2
Travel Time (hr)	0.0	0.9	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	2.3
Avg Speed (mph)	29	41	34	26	37	35	6	14	6	13	37
Fuel Used (gal)	0.0	2.9	0.1	0.1	4.7	0.0	0.0	0.0	0.0	0.0	7.9
Fuel Eff. (mpg)	14.4	13.2	10.2	10.3	9.6	10.0	7.2	17.1	6.7	17.7	11.0
HC Emissions (g)	0	12	1	0	20	0	0	0	0	0	34
CO Emissions (g)	10	800	50	24	1406	4	2	0	0	0	2296
NOx Emissions (g)	1	45	2	2	79	0	0	0	0	0	129
Vehicles Entered	3	192	7	5	212	1	5	1	0	4	430
Vehicles Exited	3	191	7	5	211	1	5	1	0	4	428
Hourly Exit Rate	12	764	28	20	844	4	20	4	0	16	1712

32: Ramon & Da Vall Dr. Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.1	0.8	0.1	0.1	0.7	0.0	0.4	0.2	0.0	0.1	0.2	0.0
Delay / Veh (s)	29.0	17.5	6.8	26.7	15.2	3.0	35.0	18.8	3.2	21.4	18.8	9.8
Stop Delay (hr)	0.1	0.5	0.0	0.1	0.5	0.0	0.4	0.1	0.0	0.1	0.2	0.0
St Del/Veh (s)	25.5	10.6	4.9	24.0	9.7	2.8	31.5	16.0	3.0	19.9	16.0	8.8
Total Stops	7	100	19	9	99	13	41	23	4	16	26	6
Stop/Veh	0.88	0.62	0.70	1.00	0.59	0.65	1.00	0.72	0.67	0.84	0.76	0.86
Travel Dist (mi)	1.6	33.9	5.7	1.1	19.3	2.4	2.2	1.7	0.3	1.0	1.8	0.4
Travel Time (hr)	0.1	1.5	0.2	0.1	1.2	0.1	0.5	0.2	0.0	0.2	0.2	0.0
Avg Speed (mph)	15	23	27	10	17	24	5	8	16	6	7	10
Fuel Used (gal)	0.1	1.6	0.2	0.1	1.3	0.1	0.5	0.2	0.0	0.1	0.2	0.0
Fuel Eff. (mpg)	18.3	21.0	23.3	12.9	14.9	17.3	4.9	7.7	17.4	7.6	7.5	9.6
HC Emissions (g)	0	5	1	0	5	1	1	1	0	0	1	0
CO Emissions (g)	6	153	32	10	212	36	37	21	2	10	21	4
NOx Emissions (g)	1	15	2	1	15	2	5	2	0	1	3	0
Vehicles Entered	8	163	27	9	167	21	42	32	6	19	34	7
Vehicles Exited	8	161	27	9	167	21	41	32	6	19	34	7
Hourly Exit Rate	32	644	108	36	668	84	164	128	24	76	136	28

32: Ramon & Da Vall Dr. Performance by movement

Movement	All
Total Delay (hr)	2.6
Delay / Veh (s)	17.4
Stop Delay (hr)	1.9
St Del/Veh (s)	12.7
Total Stops	363
Stop/Veh	0.68
Travel Dist (mi)	71.2
Travel Time (hr)	4.4
Avg Speed (mph)	17
Fuel Used (gal)	4.5
Fuel Eff. (mpg)	15.7
HC Emissions (g)	16
CO Emissions (g)	543
NOx Emissions (g)	46
Vehicles Entered	535
Vehicles Exited	532
Hourly Exit Rate	2128

Total Network Performance

Total Delay (hr)	71.9
Delay / Veh (s)	102.4
Stop Delay (hr)	55.0
St Del/Veh (s)	78.4
Total Stops	5220
Stop/Veh	2.07
Travel Dist (mi)	1724.8
Travel Time (hr)	122.2
Avg Speed (mph)	15
Fuel Used (gal)	162.9
Fuel Eff. (mpg)	10.6
HC Emissions (g)	574
CO Emissions (g)	25897
NOx Emissions (g)	1853
Vehicles Entered	2595
Vehicles Exited	2460
Hourly Exit Rate	9840

Arterial Level of Service: EB Ramon

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	35.6	42.2	0.1	12
Landau	9.2	15.4	0.1	16
Candlewood	1.9	13.5	0.1	33
Shift Sands	1.3	6.6	0.1	32
Wh. Palms	13.3	19.1	0.1	13
Roundup	6.5	15.6	0.1	23
Cathedral Canyon	106.9	119.8	0.1	4
Ximino	5.3	14.8	0.1	25
Cyn Vista	1.0	6.3	0.1	33
Yermo	2.7	14.2	0.1	33
Desert Vista	0.8	2.7	0.0	29
Rancho Vista	3.0	13.9	0.1	31
Date Palm	35.5	42.6	0.1	7
	22.0	30.9	0.1	12
San Eljay Ave.	3.6	13.2	0.1	33
El Toro Rd.	0.4	4.3	0.0	40
Victor Rd.	0.5	4.9	0.1	41
Neuma Dr.	0.4	4.8	0.1	40
Outdoor Resorts	5.1	19.8	0.2	33
Desert Shadows	2.3	17.4	0.2	42
	17.5	33.2	0.2	23
	3.6	12.4	0.1	34
Total	278.4	467.5	2.2	18

Arterial Level of Service: WB Ramon

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	0.3	4.3	0.0	39
Da Vall Dr.	15.2	25.0	0.1	17
Charter Hospital	4.7	20.5	0.2	37
Via Campanile	4.9	19.9	0.2	37
Neuma Dr.	2.3	17.2	0.2	38
Victor Rd.	0.4	4.8	0.1	40
El Toro Rd.	0.5	4.8	0.1	41
San Eljay Ave.	0.5	4.4	0.0	39
Cathedral Village	12.7	22.3	0.1	19
Date Palm	38.3	45.7	0.1	8
	3.5	11.1	0.1	28
Desert Vista	2.3	12.8	0.1	34
Yermo	0.5	2.5	0.0	31
Alvera	4.9	16.3	0.1	28
Ximino	9.0	14.1	0.1	15
Maravilla	58.6	67.6	0.1	6
Roundup	5.6	18.7	0.1	28
Wh. Palms	21.5	30.3	0.1	12
Shift Sands	3.0	8.8	0.1	27
Candlewood	0.9	6.2	0.1	34
Landau	34.9	46.0	0.1	10
	3.3	10.0	0.1	25
Total	227.9	413.4	2.2	20

Intersection: 1: Ramon & Landau

Movement	EB	EB	EB	B5	B5	WB	WB	WB	SB	SB	SB
Directions Served	L	T	T	T	T	T	T	R	L	L	R
Maximum Queue (ft)	158	372	329	355	335	367	374	169	142	143	222
Average Queue (ft)	151	355	164	260	188	254	257	89	93	99	131
95th Queue (ft)	160	424	352	474	452	390	396	174	152	153	231
Link Distance (ft)		295	295	338	338	583	583	583		756	756
Upstream Blk Time (%)		44	2	20	3						
Queuing Penalty (veh)		0	0	0	0						
Storage Bay Dist (ft)	125								200		
Storage Blk Time (%)	52	0							0	0	
Queuing Penalty (veh)	318	1							0	0	

Intersection: 2: Ramon & Candlewood

Movement	EB	WB	WB	WB	NB
Directions Served	TR	L	T	T	R
Maximum Queue (ft)	2	58	9	2	49
Average Queue (ft)	0	30	1	0	28
95th Queue (ft)	4	66	23	11	55
Link Distance (ft)	583		243	243	232
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		60			
Storage Blk Time (%)		2			
Queuing Penalty (veh)		8			

Intersection: 4: Ramon & Shift Sands

Movement	EB	EB	NB
Directions Served	T	TR	R
Maximum Queue (ft)	2	1	69
Average Queue (ft)	0	0	39
95th Queue (ft)	5	4	75
Link Distance (ft)	243	243	240
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Ramon & Wh. Palms

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	158	236	201	185	165	331	348	319	103	184	88	107
Average Queue (ft)	91	151	131	121	91	219	241	209	78	99	53	56
95th Queue (ft)	162	243	208	194	174	353	369	341	117	205	95	110
Link Distance (ft)		287	287	287		470	470	470		451		385
Upstream Blk Time (%)		0	0									
Queuing Penalty (veh)		1	0									
Storage Bay Dist (ft)	150				150				75		75	
Storage Blk Time (%)	1	5			1	11			21	11	6	4
Queuing Penalty (veh)	3	9			4	15			33	16	7	3

Intersection: 8: Ramon & Roundup

Movement	EB	EB	EB	WB	WB	WB	WB	NB
Directions Served	T	T	TR	L	T	T	T	R
Maximum Queue (ft)	136	95	60	67	26	14	2	34
Average Queue (ft)	40	23	13	33	5	2	0	12
95th Queue (ft)	179	130	94	73	52	34	12	38
Link Distance (ft)	470	470	470		679	679	679	241
Upstream Blk Time (%)	0	0						
Queuing Penalty (veh)	0	0						
Storage Bay Dist (ft)				60				
Storage Blk Time (%)				2				
Queuing Penalty (veh)				13				

Intersection: 11: Ramon & Maravilla

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	LT	R	LT
Maximum Queue (ft)	144	663	639	612	206	483	460	417	309	800	429	589
Average Queue (ft)	83	554	498	465	199	439	347	290	291	615	178	413
95th Queue (ft)	168	754	721	693	213	535	503	442	335	983	485	742
Link Distance (ft)		679	679	679		448	448	448		835	835	810
Upstream Blk Time (%)		9	3	3		37	3	1		14	1	3
Queuing Penalty (veh)		45	15	14		183	16	4		0	0	0
Storage Bay Dist (ft)	120				175				280			
Storage Blk Time (%)	5	65			67	13			33	41		58
Queuing Penalty (veh)	20	89			256	48			142	116		67

Intersection: 11: Ramon & Maravilla

Movement	SB
Directions Served	R
Maximum Queue (ft)	200
Average Queue (ft)	112
95th Queue (ft)	235
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	175
Storage Blk Time (%)	1
Queuing Penalty (veh)	1

Intersection: 13: Ramon & Ximino

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	R
Maximum Queue (ft)	119	39	22	8	242	195	97	85	55
Average Queue (ft)	66	5	2	1	134	56	16	44	22
95th Queue (ft)	128	74	53	27	306	203	99	110	63
Link Distance (ft)		448	448	448	244	244	244	309	309
Upstream Blk Time (%)		0			13	1	0		
Queuing Penalty (veh)		1			69	3	1		
Storage Bay Dist (ft)	150								
Storage Blk Time (%)	2								
Queuing Penalty (veh)	12								

Intersection: 14: Ramon & Alvera

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	T	T	TR	L	T	T	TR	R	R
Maximum Queue (ft)	0	0	2	78	229	139	35	55	43
Average Queue (ft)	0	0	0	45	68	26	4	32	17
95th Queue (ft)	2	2	5	85	269	162	56	60	50
Link Distance (ft)	244	244	244		617	617	617	222	305
Upstream Blk Time (%)					0				
Queuing Penalty (veh)					1				
Storage Bay Dist (ft)				60					
Storage Blk Time (%)				6	10				
Queuing Penalty (veh)				30	9				

Intersection: 18: Ramon & Yermo

Movement	EB	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	T	TR	R
Maximum Queue (ft)	89	78	52	21	5	2	5	64
Average Queue (ft)	49	16	10	3	1	0	1	39
95th Queue (ft)	91	78	52	26	9	5	8	68
Link Distance (ft)		617	617	617	53	53	53	299
Upstream Blk Time (%)					0	0		
Queuing Penalty (veh)					1	0		
Storage Bay Dist (ft)	100							
Storage Blk Time (%)	1	0						
Queuing Penalty (veh)	4	0						

Intersection: 19: Ramon & Desert Vista

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	57	54	44	58	89	60	61	44	44
Average Queue (ft)	19	17	12	29	25	15	17	18	24
95th Queue (ft)	61	57	44	64	91	57	60	48	51
Link Distance (ft)	53	53	53		568	568	568	504	504
Upstream Blk Time (%)	2	1	0						
Queuing Penalty (veh)	8	6	2						
Storage Bay Dist (ft)				135					
Storage Blk Time (%)				0	0				
Queuing Penalty (veh)				0	0				

Intersection: 22: Ramon &

Movement	EB	EB	EB	EB	NB
Directions Served	L	T	T	TR	R
Maximum Queue (ft)	99	56	10	1	65
Average Queue (ft)	52	12	1	0	34
95th Queue (ft)	101	74	17	5	68
Link Distance (ft)		568	568	568	248
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	125				
Storage Blk Time (%)	0	1			
Queuing Penalty (veh)	1	1			

Intersection: 23: Ramon & Date Palm

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	TR	L	L	T	T
Maximum Queue (ft)	164	354	322	141	210	270	244	246	135	151	333	326
Average Queue (ft)	147	258	217	64	135	187	169	168	88	90	238	232
95th Queue (ft)	187	399	345	140	235	288	263	266	141	168	372	365
Link Distance (ft)		352	352	352		447	447	447		800	800	800
Upstream Blk Time (%)		4	1			0						
Queuing Penalty (veh)		17	2			0						
Storage Bay Dist (ft)	135				235				235			
Storage Blk Time (%)	29	17			1	3						37
Queuing Penalty (veh)	107	50			3	6						43

Intersection: 23: Ramon & Date Palm

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (ft)	143	204	237	220	102
Average Queue (ft)	73	144	159	149	62
95th Queue (ft)	164	230	265	235	107
Link Distance (ft)			492	492	492
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	120	200			
Storage Blk Time (%)	0	6	1		
Queuing Penalty (veh)	1	16	3		

Intersection: 24: Ramon & Cathedral Village

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	TR	L	LT	R	L
Maximum Queue (ft)	150	258	270	116	122	143	98	85	69	98	74	66
Average Queue (ft)	84	151	156	49	71	88	55	44	33	50	35	35
95th Queue (ft)	158	273	283	122	126	152	103	89	72	106	77	72
Link Distance (ft)		447	447			545	545	545		276		
Upstream Blk Time (%)										0		
Queuing Penalty (veh)										0		
Storage Bay Dist (ft)	150			100	190				75		75	75
Storage Blk Time (%)	1	6	13	0	0	0			1	3	1	1
Queuing Penalty (veh)	3	8	12	0	0	0			2	6	1	1

Intersection: 24: Ramon & Cathedral Village

Movement	SB
Directions Served	TR
Maximum Queue (ft)	56
Average Queue (ft)	30
95th Queue (ft)	63
Link Distance (ft)	298
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 25: Ramon & San Eljay Ave.

Movement	EB	WB	SB	SB
Directions Served	L	TR	L	R
Maximum Queue (ft)	60	3	45	52
Average Queue (ft)	29	0	19	33
95th Queue (ft)	65	6	50	56
Link Distance (ft)		183	290	290
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	150			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 26: Ramon & El Toro Rd.

Movement	EB	SB	SB
Directions Served	L	L	R
Maximum Queue (ft)	15	24	37
Average Queue (ft)	3	5	15
95th Queue (ft)	17	25	41
Link Distance (ft)		291	291
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	75		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 27: Ramon & Victor Rd.

Movement	EB	SB	SB
Directions Served	L	L	R
Maximum Queue (ft)	21	22	33
Average Queue (ft)	4	5	10
95th Queue (ft)	21	24	35
Link Distance (ft)		283	283
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	75		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 28: Ramon & Neuma Dr.

Movement	EB	WB	SB	SB
Directions Served	L	TR	L	R
Maximum Queue (ft)	30	0	24	37
Average Queue (ft)	9	0	6	16
95th Queue (ft)	32	1	25	43
Link Distance (ft)			273	273
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	75	75		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 29: Ramon & Via Campanile

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	R	L	TR	L
Maximum Queue (ft)	38	87	75	53	32	49	102	97	15	61	38	19
Average Queue (ft)	14	41	40	16	9	24	48	42	3	36	18	5
95th Queue (ft)	41	94	85	55	33	54	109	101	16	65	46	21
Link Distance (ft)		900	900				998	998	998		242	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	125			100	100	150				50		50
Storage Blk Time (%)		0	0	0			0			4	0	0
Queuing Penalty (veh)		0	1	0			0			2	0	0

Intersection: 29: Ramon & Via Campanile

Movement	SB
Directions Served	TR
Maximum Queue (ft)	26
Average Queue (ft)	11
95th Queue (ft)	28
Link Distance (ft)	288
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 30: Ramon & Charter Hospital

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	R	L	L	TR	L	TR
Maximum Queue (ft)	22	0	29	38	13	12	33
Average Queue (ft)	5	0	8	16	2	2	11
95th Queue (ft)	22	2	31	42	13	15	36
Link Distance (ft)					232		197
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	100	100	100	60		60	
Storage Blk Time (%)			0	0			0
Queuing Penalty (veh)			0	0			0

Intersection: 32: Ramon & Da Vall Dr.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	T	R	L
Maximum Queue (ft)	55	128	121	114	46	124	105	70	140	106	36	80
Average Queue (ft)	26	83	80	68	21	81	63	31	86	60	14	44
95th Queue (ft)	59	135	130	122	50	130	109	71	154	114	41	84
Link Distance (ft)		1054	1054	1054		543	543	543		280	280	273
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200				250				220			
Storage Blk Time (%)		0							0			
Queuing Penalty (veh)		0							0			

Intersection: 32: Ramon & Da Vall Dr.

Movement	SB
Directions Served	TR
Maximum Queue (ft)	115
Average Queue (ft)	70
95th Queue (ft)	121
Link Distance (ft)	273
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 1884

Intersection: 1: Ramon & Landau

Phase	2	5	6	8
Movement(s) Served	EBT EBL	WBT SBL		
Maximum Green (s)	60.0	29.0	26.0	10.0
Minimum Green (s)	10.0	4.0	10.0	4.0
Recall	Min	None	Min	None
Avg. Green (s)	63.4	28.8	25.4	10.2
g/C Ratio	0.77	0.35	0.31	0.12
Cycles Skipped (%)	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0
Cycles Maxed Out (%)	30	82	73	91
Cycles with Peds (%)	0	0	0	0

Controller Summary

Average Cycle Length (s): 82.3

Number of Complete Cycles : 10

Intersection: 6: Ramon & Wh. Palms

Phase	1	2	4	5	6	8
Movement(s) Served	WBL	EBT	SBTL	EBL	WBT	NBTL
Maximum Green (s)	7.0	22.5	10.0	8.0	21.5	10.0
Minimum Green (s)	3.0	10.0	4.0	3.0	10.0	4.0
Recall	None	Min	None	None	Min	None
Avg. Green (s)	8.3	24.7	10.1	8.6	22.4	10.1
g/C Ratio	0.11	0.44	0.18	0.13	0.40	0.18
Cycles Skipped (%)	27	0	0	13	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	60	69	88	63	69	88
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 56.4

Number of Complete Cycles : 15

Intersection: 11: Ramon & Maravilla

Phase	1	2	3	4	5	6
Movement(s) Served	WBL	EBT	SBTL	NBTL	EBL	WBT
Maximum Green (s)	25.0	37.0	17.0	26.0	18.0	44.0
Minimum Green (s)	4.0	10.0	4.0	4.0	4.0	10.0
Recall	None	Min	None	None	None	Min
Avg. Green (s)	26.0	37.6	17.6	28.0	24.5	43.3
g/C Ratio	0.16	0.24	0.11	0.18	0.15	0.27
Cycles Skipped (%)	0	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	83	100	100	100	100	50
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 159.4

Number of Complete Cycles : 5

Intersection: 19: Ramon & Desert Vista

Phase	2	4	6
Movement(s) Served	EBT	NBL	WBTL
Maximum Green (s)	25.0	8.0	25.0
Minimum Green (s)	8.0	8.0	8.0
Recall	Min	None	Min
Avg. Green (s)	138.1	9.7	138.1
g/C Ratio	0.92	0.06	0.92
Cycles Skipped (%)	0	0	0
Cycles @ Minimum (%)	0	100	0
Cycles Maxed Out (%)	50	100	50
Cycles with Peds (%)	0	0	0

Controller Summary

Average Cycle Length (s): 149.5

Number of Complete Cycles : 4

Intersection: 23: Ramon & Date Palm

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	EBL	WBT	SBL	NBT	WBL	EBT	NBL	SBT
Maximum Green (s)	17.0	20.5	13.0	18.5	14.0	23.5	10.0	21.5
Minimum Green (s)	4.0	10.0	4.0	10.0	4.0	10.0	4.0	10.0
Recall	None	None	None	Min	None	None	None	Min
Avg. Green (s)	16.6	23.7	13.9	18.6	16.4	24.0	11.9	19.1
g/C Ratio	0.18	0.26	0.15	0.21	0.18	0.27	0.13	0.21
Cycles Skipped (%)	0	0	0	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0	0	0
Cycles Maxed Out (%)	56	100	78	90	89	67	90	40
Cycles with Peds (%)	0	0	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 90.2

Number of Complete Cycles : 9

Intersection: 24: Ramon & Cathedral Village

Phase	1	2	5	6	7	8
Movement(s) Served	WBL	EBT	EBL	WBT	SBTL	NBTL
Maximum Green (s)	9.0	18.5	9.0	18.5	6.0	6.0
Minimum Green (s)	4.0	7.5	4.0	7.5	6.0	6.0
Recall	None	Min	None	Min	None	None
Avg. Green (s)	10.0	19.5	7.5	22.4	6.4	6.1
g/C Ratio	0.15	0.37	0.11	0.42	0.08	0.11
Cycles Skipped (%)	19	0	25	0	38	6
Cycles @ Minimum (%)	0	0	0	0	63	94
Cycles Maxed Out (%)	56	63	31	69	63	94
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 53.2

Number of Complete Cycles : 16

Intersection: 29: Ramon & Via Campanile

Phase	1	2	4	5	6	8
Movement(s) Served	WBL	EBT	NBTL	EBL	WBT	SBTL
Maximum Green (s)	4.0	13.5	6.0	4.0	13.5	6.0
Minimum Green (s)	4.0	10.0	4.0	4.0	10.0	4.0
Recall	None	Min	None	None	Min	None
Avg. Green (s)	5.6	34.8	5.6	5.3	42.0	5.7
g/C Ratio	0.04	0.63	0.07	0.02	0.70	0.01
Cycles Skipped (%)	63	6	31	81	13	88
Cycles @ Minimum (%)	19	0	0	19	0	0
Cycles Maxed Out (%)	38	47	25	19	56	0
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 52.2
Number of Complete Cycles : 16
Average All-Red Dwell (s): 0.1
Cycles with All-Red Dwell (%): 6

Intersection: 32: Ramon & Da Vall Dr.

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBT
Maximum Green (s)	5.0	10.0	6.5	10.5	5.0	10.0	5.4	11.6
Minimum Green (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Recall	None	Min	None	None	None	Min	None	None
Avg. Green (s)	5.0	13.0	8.3	10.9	5.8	13.8	8.9	14.7
g/C Ratio	0.04	0.26	0.15	0.17	0.03	0.28	0.11	0.21
Cycles Skipped (%)	61	0	12	22	71	0	39	29
Cycles @ Minimum (%)	39	72	6	33	29	61	22	12
Cycles Maxed Out (%)	39	100	76	39	29	100	33	41
Cycles with Peds (%)	0	0	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 50.1
Number of Complete Cycles : 17

Summary of All Intervals

Run Number	1	10	100	11	12	13	14	15
Start Time	4:55	4:55	4:55	4:55	4:55	4:55	4:55	4:55
End Time	5:15	5:15	5:15	5:15	5:15	5:15	5:15	5:15
Total Time (min)	20	20	20	20	20	20	20	20
Time Recorded (min)	15	15	15	15	15	15	15	15
# of Intervals	2	2	2	2	2	2	2	2
# of Recorded Intvls	1	1	1	1	1	1	1	1
Vehs Entered	3054	3203	3169	3101	3042	3132	3100	3058
Vehs Exited	2699	2800	2771	2817	2771	2818	2743	2762
Starting Vehs	549	531	477	568	593	531	538	521
Ending Vehs	904	934	875	852	864	845	895	817
Denied Entry Before	3	21	8	8	8	5	6	9
Denied Entry After	192	179	142	330	238	255	225	317
Travel Distance (mi)	2096	2093	2044	2087	2046	2061	2058	2016
Travel Time (hr)	210.4	214.4	191.0	225.8	210.3	205.2	201.6	215.8
Total Delay (hr)	150.5	154.2	132.2	165.8	151.9	146.0	142.4	158.0
Total Stops	7716	8224	7198	8052	7387	7337	7332	7358
Fuel Used (gal)	230.7	234.0	217.8	240.5	229.1	228.6	225.3	232.7

Interval #0 Information Seeding

Start Time	4:55
End Time	5:00
Total Time (min)	5
Volumes adjusted by PHF, Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	10	100	11	12	13	14	15
Vehs Entered	3054	3203	3169	3101	3042	3132	3100	3058
Vehs Exited	2699	2800	2771	2817	2771	2818	2743	2762
Starting Vehs	549	531	477	568	593	531	538	521
Ending Vehs	904	934	875	852	864	845	895	817
Denied Entry Before	3	21	8	8	8	5	6	9
Denied Entry After	192	179	142	330	238	255	225	317
Travel Distance (mi)	2096	2093	2044	2087	2046	2061	2058	2016
Travel Time (hr)	210.4	214.4	191.0	225.8	210.3	205.2	201.6	215.8
Total Delay (hr)	150.5	154.2	132.2	165.8	151.9	146.0	142.4	158.0
Total Stops	7716	8224	7198	8052	7387	7337	7332	7358
Fuel Used (gal)	230.7	234.0	217.8	240.5	229.1	228.6	225.3	232.7

1: Ramon & Landau Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	2.2	1.1	2.7	0.2	1.6	0.6	8.5
Delay / Veh (s)	60.3	12.5	34.3	8.4	59.2	19.3	29.3
Stop Delay (hr)	1.9	0.6	1.9	0.1	1.5	0.5	6.6
St Del/Veh (s)	52.2	6.6	24.5	5.0	54.3	16.3	22.7
Total Stops	130	98	223	63	110	76	700
Stop/Veh	0.98	0.32	0.78	0.64	1.11	0.63	0.67
Travel Dist (mi)	9.6	22.7	34.3	11.9	14.4	17.4	110.3
Travel Time (hr)	2.6	1.7	3.6	0.7	2.2	1.4	12.0
Avg Speed (mph)	4	14	10	18	7	13	9
Fuel Used (gal)	1.8	2.5	2.9	0.6	1.7	1.2	10.7
Fuel Eff. (mpg)	5.5	9.0	11.9	19.9	8.4	14.4	10.3
HC Emissions (g)	4	8	8	2	5	4	31
CO Emissions (g)	61	361	130	51	144	118	866
NOx Emissions (g)	9	30	17	4	13	8	82
Vehicles Entered	131	310	288	100	100	120	1049
Vehicles Exited	132	311	282	99	99	120	1043
Hourly Exit Rate	528	1244	1128	396	396	480	4172

2: Ramon & Candlewood Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Total Delay (hr)	0.2	0.0	0.1	0.1	0.0	0.5
Delay / Veh (s)	2.1	1.6	19.7	1.1	10.7	2.1
Stop Delay (hr)	0.0	0.0	0.1	0.0	0.0	0.1
St Del/Veh (s)	0.3	0.4	17.7	0.0	10.7	0.6
Total Stops	2	0	11	0	14	27
Stop/Veh	0.00	0.00	0.79	0.00	1.00	0.03
Travel Dist (mi)	51.6	1.0	0.8	21.8	0.6	75.7
Travel Time (hr)	1.7	0.0	0.1	0.7	0.1	2.6
Avg Speed (mph)	31	25	7	33	8	30
Fuel Used (gal)	4.3	0.1	0.1	1.2	0.1	5.7
Fuel Eff. (mpg)	11.9	13.0	10.6	18.8	10.6	13.2
HC Emissions (g)	18	0	0	4	0	22
CO Emissions (g)	1069	17	4	179	4	1273
NOx Emissions (g)	64	1	1	13	0	79
Vehicles Entered	404	8	14	382	14	822
Vehicles Exited	403	8	14	382	14	821
Hourly Exit Rate	1612	32	56	1528	56	3284

4: Ramon & Shift Sands Performance by movement

Movement	EBT	EBR	WBT	NBR	All
Total Delay (hr)	0.2	0.0	0.4	0.1	0.7
Delay / Veh (s)	2.2	0.9	2.9	16.2	2.9
Stop Delay (hr)	0.1	0.0	0.0	0.1	0.2
St Del/Veh (s)	0.5	0.5	0.1	16.1	0.7
Total Stops	6	0	1	22	29
Stop/Veh	0.01	0.00	0.00	1.00	0.03
Travel Dist (mi)	22.9	0.8	29.0	1.0	53.6
Travel Time (hr)	0.8	0.0	1.2	0.2	2.2
Avg Speed (mph)	27	20	25	6	24
Fuel Used (gal)	1.0	0.0	4.3	0.1	5.5
Fuel Eff. (mpg)	21.9	23.5	6.7	8.5	9.8
HC Emissions (g)	4	0	17	0	21
CO Emissions (g)	145	3	999	8	1154
NOx Emissions (g)	10	0	72	1	83
Vehicles Entered	403	14	452	21	890
Vehicles Exited	401	14	452	21	888
Hourly Exit Rate	1604	56	1808	84	3552

6: Ramon & Wh. Palms Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.4	1.9	0.1	0.3	2.6	0.1	0.8	0.4	0.3	0.4	0.1	0.1
Delay / Veh (s)	33.2	17.7	12.8	36.6	23.0	17.4	75.2	55.0	45.1	46.8	27.2	15.9
Stop Delay (hr)	0.3	1.2	0.1	0.3	1.6	0.1	0.8	0.3	0.2	0.3	0.1	0.1
St Del/Veh (s)	28.5	11.5	9.8	29.8	14.1	12.2	69.6	48.8	41.3	43.2	23.2	14.3
Total Stops	42	237	13	37	304	12	60	35	28	28	16	13
Stop/Veh	1.08	0.61	0.62	1.16	0.76	0.75	1.50	1.40	1.40	1.04	0.89	0.93
Travel Dist (mi)	2.4	24.3	1.3	3.0	38.2	1.5	3.4	2.2	1.7	2.0	1.3	1.0
Travel Time (hr)	0.5	2.5	0.1	0.4	3.5	0.1	1.0	0.5	0.3	0.4	0.2	0.1
Avg Speed (mph)	5	10	10	7	11	11	4	5	5	5	7	10
Fuel Used (gal)	0.3	2.3	0.1	0.3	3.2	0.1	0.7	0.4	0.3	0.4	0.2	0.1
Fuel Eff. (mpg)	7.1	10.3	11.7	9.1	11.9	12.8	4.6	6.0	6.6	5.6	7.9	9.7
HC Emissions (g)	1	7	0	1	9	0	2	1	1	1	1	0
CO Emissions (g)	17	151	6	17	175	6	55	26	19	29	17	11
NOx Emissions (g)	3	18	1	3	22	1	6	3	2	3	2	1
Vehicles Entered	39	389	20	32	401	17	40	26	20	27	18	15
Vehicles Exited	39	383	20	32	399	16	39	25	19	26	18	14
Hourly Exit Rate	156	1532	80	128	1596	64	156	100	76	104	72	56

6: Ramon & Wh. Palms Performance by movement

Movement	All
Total Delay (hr)	7.3
Delay / Veh (s)	25.4
Stop Delay (hr)	5.3
St Del/Veh (s)	18.5
Total Stops	825
Stop/Veh	0.80
Travel Dist (mi)	82.3
Travel Time (hr)	9.7
Avg Speed (mph)	9
Fuel Used (gal)	8.4
Fuel Eff. (mpg)	9.8
HC Emissions (g)	24
CO Emissions (g)	529
NOx Emissions (g)	64
Vehicles Entered	1044
Vehicles Exited	1030
Hourly Exit Rate	4120

8: Ramon & Roundup Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Total Delay (hr)	2.7	0.1	0.1	0.5	0.1	3.5
Delay / Veh (s)	24.4	19.9	20.7	4.5	59.9	14.3
Stop Delay (hr)	1.9	0.1	0.1	0.0	0.1	2.1
St Del/Veh (s)	16.9	14.5	16.9	0.2	60.0	8.6
Total Stops	147	5	9	2	5	168
Stop/Veh	0.37	0.36	0.60	0.00	1.25	0.19
Travel Dist (mi)	40.2	1.5	2.2	63.7	0.2	107.7
Travel Time (hr)	3.8	0.1	0.2	2.3	0.1	6.5
Avg Speed (mph)	11	11	14	27	3	17
Fuel Used (gal)	4.8	0.2	0.2	5.7	0.0	10.9
Fuel Eff. (mpg)	8.4	8.8	10.4	11.3	4.4	9.9
HC Emissions (g)	16	1	1	21	0	38
CO Emissions (g)	653	23	33	1109	3	1821
NOx Emissions (g)	56	2	3	81	0	142
Vehicles Entered	413	15	15	442	5	890
Vehicles Exited	387	14	14	441	4	860
Hourly Exit Rate	1548	56	56	1764	16	3440

11: Ramon & Maravilla Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	1.2	12.0	1.8	3.7	5.5	0.1	8.6	2.2	2.9	2.4	2.3	1.3
Delay / Veh (s)	170.2	151.6	143.7	178.0	63.3	52.6	240.7	238.9	96.3	273.2	269.4	190.0
Stop Delay (hr)	1.1	10.4	1.6	3.5	4.7	0.1	8.1	2.0	2.7	2.2	2.2	1.2
St Del/Veh (s)	151.3	131.1	127.4	166.4	53.5	46.7	225.6	222.7	91.4	259.2	254.4	178.4
Total Stops	51	444	67	114	256	6	245	62	106	73	72	59
Stop/Veh	1.96	1.55	1.52	1.52	0.81	0.75	1.90	1.88	0.98	2.35	2.32	2.36
Travel Dist (mi)	3.6	40.0	6.1	7.4	31.1	0.8	20.4	5.2	17.2	4.8	4.6	3.7
Travel Time (hr)	1.3	13.1	2.0	4.0	6.3	0.1	9.4	2.4	3.6	2.5	2.5	1.5
Avg Speed (mph)	3	3	3	2	6	6	3	3	10	2	2	3
Fuel Used (gal)	0.8	8.2	1.2	2.4	5.0	0.1	5.9	1.5	2.5	1.5	1.5	1.0
Fuel Eff. (mpg)	4.3	4.9	5.1	3.0	6.3	7.7	3.5	3.5	6.9	3.2	3.1	3.8
HC Emissions (g)	2	21	3	7	16	0	19	5	11	4	4	3
CO Emissions (g)	29	286	41	76	307	5	207	51	128	59	59	53
NOx Emissions (g)	4	38	5	11	35	1	25	6	10	7	7	5
Vehicles Entered	27	300	46	80	317	9	137	35	111	36	35	27
Vehicles Exited	25	272	42	71	312	8	122	31	105	28	27	22
Hourly Exit Rate	100	1088	168	284	1248	32	488	124	420	112	108	88

11: Ramon & Maravilla Performance by movement

Movement	All
Total Delay (hr)	44.1
Delay / Veh (s)	142.7
Stop Delay (hr)	39.8
St Del/Veh (s)	129.0
Total Stops	1555
Stop/Veh	1.40
Travel Dist (mi)	145.0
Travel Time (hr)	48.6
Avg Speed (mph)	3
Fuel Used (gal)	31.6
Fuel Eff. (mpg)	4.6
HC Emissions (g)	96
CO Emissions (g)	1302
NOx Emissions (g)	155
Vehicles Entered	1160
Vehicles Exited	1065
Hourly Exit Rate	4260

13: Ramon & Ximino Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.5	0.7	1.9	0.0	1.2	0.2	4.5
Delay / Veh (s)	94.2	6.2	15.9	2.0	487.2	185.1	18.9
Stop Delay (hr)	0.5	0.2	1.4	0.0	1.2	0.2	3.6
St Del/Veh (s)	89.0	2.2	12.2	1.2	486.1	185.3	15.2
Total Stops	21	8	95	1	12	5	142
Stop/Veh	1.05	0.02	0.23	0.09	1.33	1.25	0.17
Travel Dist (mi)	2.1	38.7	23.5	0.6	0.6	0.3	65.8
Travel Time (hr)	0.6	1.8	2.5	0.0	1.2	0.2	6.4
Avg Speed (mph)	4	21	10	18	0	1	10
Fuel Used (gal)	0.4	5.1	2.2	0.0	0.7	0.1	8.5
Fuel Eff. (mpg)	4.8	7.6	10.9	20.9	0.9	2.2	7.7
HC Emissions (g)	1	20	7	0	2	0	30
CO Emissions (g)	33	1186	199	2	27	7	1453
NOx Emissions (g)	4	79	17	0	4	1	105
Vehicles Entered	22	384	427	11	12	5	861
Vehicles Exited	18	381	418	11	6	3	837
Hourly Exit Rate	72	1524	1672	44	24	12	3348

14: Ramon & Alvera Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBR	SBR	All
Total Delay (hr)	0.2	0.0	0.4	1.8	0.0	0.1	0.1	2.5
Delay / Veh (s)	1.6	1.2	60.2	15.0	2.5	13.5	62.7	10.3
Stop Delay (hr)	0.1	0.0	0.3	1.3	0.0	0.1	0.1	1.8
St Del/Veh (s)	0.5	0.9	52.8	10.3	0.9	13.4	62.7	7.3
Total Stops	0	0	29	92	0	15	6	142
Stop/Veh	0.00	0.00	1.32	0.21	0.00	1.00	1.20	0.16
Travel Dist (mi)	22.5	0.4	2.7	54.7	0.8	0.6	0.3	82.1
Travel Time (hr)	0.8	0.0	0.5	3.3	0.0	0.1	0.1	4.7
Avg Speed (mph)	30	20	6	17	26	7	3	18
Fuel Used (gal)	1.3	0.0	0.3	4.0	0.0	0.1	0.1	5.8
Fuel Eff. (mpg)	17.1	25.0	8.3	13.8	16.7	9.4	5.0	14.1
HC Emissions (g)	5	0	1	14	0	0	0	20
CO Emissions (g)	205	1	18	536	8	4	4	777
NOx Emissions (g)	15	0	2	39	1	1	1	58
Vehicles Entered	384	7	23	444	6	15	6	885
Vehicles Exited	383	7	21	433	6	15	5	870
Hourly Exit Rate	1532	28	84	1732	24	60	20	3480

18: Ramon & Yermo Performance by movement

Movement	EBL	EBT	WBT	WBR	SBR	All
Total Delay (hr)	0.2	0.9	0.1	0.0	0.1	1.3
Delay / Veh (s)	23.6	8.2	1.0	0.2	13.5	5.0
Stop Delay (hr)	0.1	0.4	0.0	0.0	0.1	0.7
St Del/Veh (s)	18.7	3.9	0.2	0.0	13.2	2.7
Total Stops	21	60	3	0	24	108
Stop/Veh	0.88	0.15	0.01	0.00	1.04	0.12
Travel Dist (mi)	3.0	48.6	9.8	0.2	1.3	62.9
Travel Time (hr)	0.3	2.2	0.4	0.0	0.2	2.9
Avg Speed (mph)	12	23	26	15	9	22
Fuel Used (gal)	0.2	2.8	0.7	0.0	0.1	3.9
Fuel Eff. (mpg)	13.9	17.2	13.3	19.6	10.2	16.0
HC Emissions (g)	1	10	3	0	0	13
CO Emissions (g)	14	364	122	1	13	513
NOx Emissions (g)	2	27	9	0	1	39
Vehicles Entered	24	390	450	9	23	896
Vehicles Exited	24	390	449	9	23	895
Hourly Exit Rate	96	1560	1796	36	92	3580

19: Ramon & Desert Vista Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Total Delay (hr)	0.3	0.0	0.1	0.5	0.0	0.0	1.1
Delay / Veh (s)	3.0	0.9	29.7	4.3	25.7	8.8	4.4
Stop Delay (hr)	0.2	0.0	0.1	0.2	0.0	0.0	0.5
St Del/Veh (s)	1.6	0.7	25.8	1.5	23.8	8.4	2.3
Total Stops	47	1	16	40	5	12	121
Stop/Veh	0.12	0.12	1.00	0.09	1.00	0.92	0.14
Travel Dist (mi)	7.7	0.2	1.8	52.5	0.5	1.2	63.9
Travel Time (hr)	0.5	0.0	0.2	1.9	0.1	0.1	2.7
Avg Speed (mph)	15	13	10	28	9	15	24
Fuel Used (gal)	0.7	0.0	0.2	2.8	0.0	0.1	3.7
Fuel Eff. (mpg)	11.2	17.2	11.7	19.0	11.5	16.3	17.1
HC Emissions (g)	2	0	0	9	0	0	12
CO Emissions (g)	69	0	10	355	4	6	445
NOx Emissions (g)	8	0	1	26	0	1	36
Vehicles Entered	382	8	16	457	5	13	881
Vehicles Exited	382	8	16	454	5	13	878
Hourly Exit Rate	1528	32	64	1816	20	52	3512

22: Ramon & Performance by movement

Movement	EBL	EBT	EBR	WBT	NBT	NBR	All
Total Delay (hr)	0.5	3.5	0.0	0.4	0.0	0.9	5.3
Delay / Veh (s)	59.7	36.8	7.5	2.9	76.6	275.4	22.8
Stop Delay (hr)	0.4	2.6	0.0	0.0	0.0	0.9	4.1
St Del/Veh (s)	50.2	28.0	4.7	0.3	75.3	275.4	17.5
Total Stops	44	198	1	1	1	15	260
Stop/Veh	1.42	0.58	0.12	0.00	1.00	1.25	0.31
Travel Dist (mi)	3.8	40.5	1.0	37.0	0.0	0.6	83.0
Travel Time (hr)	0.6	4.5	0.1	1.5	0.0	1.0	7.7
Avg Speed (mph)	6	9	20	25	1	1	11
Fuel Used (gal)	0.5	4.3	0.1	4.9	0.0	0.5	10.3
Fuel Eff. (mpg)	7.7	9.5	12.9	7.5	2.3	1.2	8.1
HC Emissions (g)	1	13	0	19	0	1	36
CO Emissions (g)	27	420	13	1191	1	19	1670
NOx Emissions (g)	3	37	1	79	0	3	124
Vehicles Entered	33	348	8	442	1	16	848
Vehicles Exited	31	333	8	445	1	8	826
Hourly Exit Rate	124	1332	32	1780	4	32	3304

23: Ramon & Date Palm Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	2.0	4.5	0.3	2.7	4.6	0.9	3.2	11.4	4.7	3.7	3.6	0.6
Delay / Veh (s)	132.5	76.4	15.2	113.3	61.4	49.1	144.8	254.0	226.3	172.9	86.5	36.0
Stop Delay (hr)	1.8	3.9	0.3	2.5	3.8	0.8	3.1	10.7	4.4	3.5	3.3	0.6
St Del/Veh (s)	123.6	66.8	13.8	103.4	51.0	42.2	138.4	238.4	212.5	162.7	79.4	34.4
Total Stops	71	187	51	112	230	57	93	350	169	128	158	51
Stop/Veh	1.34	0.89	0.76	1.29	0.86	0.86	1.16	2.17	2.25	1.66	1.06	0.85
Travel Dist (mi)	4.2	16.5	5.5	7.5	23.8	5.9	12.1	24.0	11.3	7.2	13.7	5.6
Travel Time (hr)	2.1	4.9	0.5	3.0	5.2	1.1	3.7	12.2	5.2	4.0	4.1	0.8
Avg Speed (mph)	2	3	11	3	5	6	5	3	3	2	4	12
Fuel Used (gal)	1.2	3.3	0.4	2.0	4.3	0.9	2.6	7.7	3.3	2.5	3.1	0.7
Fuel Eff. (mpg)	3.4	4.9	13.7	3.8	5.5	6.5	4.7	3.1	3.4	2.9	4.4	8.0
HC Emissions (g)	3	9	1	5	14	3	10	26	11	7	10	3
CO Emissions (g)	42	148	31	71	316	54	151	310	128	94	182	63
NOx Emissions (g)	6	21	3	10	34	6	16	37	15	12	22	5
Vehicles Entered	56	218	68	90	272	66	81	170	80	82	147	60
Vehicles Exited	51	203	66	85	264	65	79	152	71	73	151	61
Hourly Exit Rate	204	812	264	340	1056	260	316	608	284	292	604	244

23: Ramon & Date Palm Performance by movement

Movement	All
Total Delay (hr)	42.1
Delay / Veh (s)	111.8
Stop Delay (hr)	38.6
St Del/Veh (s)	102.5
Total Stops	1657
Stop/Veh	1.22
Travel Dist (mi)	137.3
Travel Time (hr)	46.8
Avg Speed (mph)	4
Fuel Used (gal)	32.2
Fuel Eff. (mpg)	4.3
HC Emissions (g)	103
CO Emissions (g)	1590
NOx Emissions (g)	186
Vehicles Entered	1390
Vehicles Exited	1321
Hourly Exit Rate	5284

24: Ramon & Cathedral Village Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.4	1.9	0.1	0.6	2.2	0.0	0.7	0.1	0.3	0.2	0.1	0.1
Delay / Veh (s)	51.2	24.0	14.9	53.4	26.6	7.6	73.0	66.9	28.4	50.7	41.2	24.6
Stop Delay (hr)	0.3	1.2	0.0	0.5	1.5	0.0	0.7	0.1	0.3	0.2	0.1	0.1
St Del/Veh (s)	43.7	14.6	8.9	45.7	18.7	5.6	69.8	62.0	26.6	47.8	38.4	23.9
Total Stops	31	191	14	45	184	7	40	6	40	14	4	9
Stop/Veh	1.24	0.66	0.78	1.18	0.63	0.47	1.18	1.20	1.14	1.00	0.80	1.00
Travel Dist (mi)	2.5	29.9	1.9	4.4	34.2	1.7	1.9	0.3	1.9	0.8	0.3	0.5
Travel Time (hr)	0.5	2.8	0.2	0.7	3.0	0.1	0.8	0.1	0.4	0.2	0.1	0.1
Avg Speed (mph)	6	11	12	6	12	19	3	3	6	4	4	6
Fuel Used (gal)	0.4	3.6	0.2	0.5	2.7	0.1	0.5	0.1	0.4	0.2	0.0	0.1
Fuel Eff. (mpg)	6.5	8.3	9.6	8.4	12.7	17.5	3.5	4.1	5.5	4.6	5.6	7.8
HC Emissions (g)	1	11	1	2	9	0	2	0	1	0	0	0
CO Emissions (g)	30	405	22	30	274	13	30	4	27	11	3	6
NOx Emissions (g)	4	40	2	4	22	1	5	1	3	2	1	1
Vehicles Entered	25	289	17	40	297	15	35	5	36	13	5	9
Vehicles Exited	25	293	18	38	289	14	33	5	35	13	5	9
Hourly Exit Rate	100	1172	72	152	1156	56	132	20	140	52	20	36

24: Ramon & Cathedral Village Performance by movement

Movement	All
Total Delay (hr)	6.5
Delay / Veh (s)	30.0
Stop Delay (hr)	4.9
St Del/Veh (s)	22.4
Total Stops	585
Stop/Veh	0.75
Travel Dist (mi)	80.3
Travel Time (hr)	8.8
Avg Speed (mph)	9
Fuel Used (gal)	8.8
Fuel Eff. (mpg)	9.2
HC Emissions (g)	27
CO Emissions (g)	854
NOx Emissions (g)	84
Vehicles Entered	786
Vehicles Exited	777
Hourly Exit Rate	3108

25: Ramon & San Eljay Ave. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.1	0.3	0.2	0.0	0.1	0.1	0.8
Delay / Veh (s)	17.1	3.7	1.9	0.1	69.0	16.8	4.0
Stop Delay (hr)	0.1	0.0	0.1	0.0	0.1	0.1	0.3
St Del/Veh (s)	12.7	0.1	0.9	0.0	67.8	16.5	1.7
Total Stops	13	0	7	0	5	20	45
Stop/Veh	0.81	0.00	0.02	0.00	1.00	1.05	0.06
Travel Dist (mi)	1.9	38.0	15.3	0.3	0.3	1.1	56.9
Travel Time (hr)	0.1	1.3	0.5	0.0	0.1	0.1	2.2
Avg Speed (mph)	14	30	29	20	3	8	26
Fuel Used (gal)	0.2	4.3	0.8	0.0	0.1	0.1	5.5
Fuel Eff. (mpg)	9.4	8.8	18.4	27.1	4.4	9.7	10.3
HC Emissions (g)	1	16	3	0	0	0	20
CO Emissions (g)	31	945	161	1	4	10	1151
NOx Emissions (g)	3	70	10	0	1	1	84
Vehicles Entered	16	321	324	7	6	20	694
Vehicles Exited	16	323	323	7	5	19	693
Hourly Exit Rate	64	1292	1292	28	20	76	2772

26: Ramon & El Toro Rd. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.1	0.1	0.0	0.0	0.0	0.2
Delay / Veh (s)	9.5	0.6	1.3	0.0	29.1	7.0	1.1
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	8.0	0.0	0.5	0.0	28.1	6.9	0.4
Total Stops	1	0	4	0	2	5	12
Stop/Veh	0.50	0.00	0.01	0.00	1.00	1.00	0.02
Travel Dist (mi)	0.1	15.2	18.4	0.1	0.1	0.3	34.2
Travel Time (hr)	0.0	0.4	0.5	0.0	0.0	0.0	1.0
Avg Speed (mph)	9	38	34	23	4	12	34
Fuel Used (gal)	0.0	0.7	1.0	0.0	0.0	0.0	1.8
Fuel Eff. (mpg)	13.4	20.9	18.4	31.3	7.1	14.9	19.3
HC Emissions (g)	0	2	4	0	0	0	6
CO Emissions (g)	0	99	205	0	1	2	307
NOx Emissions (g)	0	8	12	0	0	0	20
Vehicles Entered	2	320	344	2	2	5	675
Vehicles Exited	2	321	343	2	2	5	675
Hourly Exit Rate	8	1284	1372	8	8	20	2700

27: Ramon & Victor Rd. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.1	0.1	0.0	0.0	0.0	0.2
Delay / Veh (s)	9.8	0.7	0.8	0.2	28.7	6.0	0.9
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	8.3	0.1	0.2	0.0	27.8	5.9	0.3
Total Stops	2	0	1	0	2	3	8
Stop/Veh	1.00	0.00	0.00	0.00	1.00	1.00	0.01
Travel Dist (mi)	0.1	17.5	18.2	0.1	0.1	0.2	36.2
Travel Time (hr)	0.0	0.5	0.5	0.0	0.0	0.0	1.0
Avg Speed (mph)	11	38	36	21	4	13	36
Fuel Used (gal)	0.0	0.7	0.9	0.0	0.0	0.0	1.7
Fuel Eff. (mpg)	15.2	23.6	19.7	15.7	6.6	15.9	21.2
HC Emissions (g)	0	2	3	0	0	0	6
CO Emissions (g)	0	83	177	2	1	1	263
NOx Emissions (g)	0	7	10	0	0	0	18
Vehicles Entered	2	324	345	3	2	3	679
Vehicles Exited	2	324	343	3	2	3	677
Hourly Exit Rate	8	1296	1372	12	8	12	2708

28: Ramon & Neuma Dr. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.1	0.4	0.0	0.0	0.0	0.5
Delay / Veh (s)	11.6	0.7	3.7	3.4	27.4	4.3	2.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St Del/Veh (s)	10.0	0.0	0.2	0.2	26.4	4.3	0.3
Total Stops	3	0	1	0	2	6	12
Stop/Veh	0.75	0.00	0.00	0.00	1.00	1.00	0.02
Travel Dist (mi)	0.2	17.1	62.0	0.6	0.1	0.3	80.3
Travel Time (hr)	0.0	0.5	1.8	0.0	0.0	0.0	2.4
Avg Speed (mph)	10	38	34	29	4	14	34
Fuel Used (gal)	0.0	0.7	4.9	0.0	0.0	0.0	5.7
Fuel Eff. (mpg)	14.1	24.5	12.7	13.2	7.4	16.4	14.2
HC Emissions (g)	0	2	18	0	0	0	20
CO Emissions (g)	1	79	1040	9	0	2	1132
NOx Emissions (g)	0	6	72	1	0	0	79
Vehicles Entered	4	322	339	3	2	6	676
Vehicles Exited	4	322	338	3	2	6	675
Hourly Exit Rate	16	1288	1352	12	8	24	2700

29: Ramon & Via Campanile Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.2	0.6	0.0	0.1	0.9	0.0	0.1	0.0	0.0	0.0	2.0
Delay / Veh (s)	26.2	8.0	5.2	26.7	10.4	1.6	28.0	3.2	21.6	7.6	10.2
Stop Delay (hr)	0.1	0.2	0.0	0.1	0.3	0.0	0.1	0.0	0.0	0.0	0.8
St Del/Veh (s)	21.5	2.0	1.1	20.9	3.2	1.0	25.7	3.1	20.0	7.8	4.2
Total Stops	24	63	4	10	95	7	17	10	2	19	251
Stop/Veh	0.96	0.22	0.36	1.00	0.30	0.35	1.00	0.91	1.00	0.90	0.35
Travel Dist (mi)	4.5	51.8	2.0	2.1	62.3	4.0	0.8	0.5	0.1	1.2	129.3
Travel Time (hr)	0.3	1.8	0.1	0.1	2.2	0.1	0.2	0.0	0.0	0.1	5.0
Avg Speed (mph)	15	28	26	16	28	35	6	14	7	11	26
Fuel Used (gal)	0.3	2.6	0.1	0.1	3.0	0.2	0.1	0.0	0.0	0.1	6.4
Fuel Eff. (mpg)	17.5	20.1	23.3	18.2	21.0	23.2	6.4	14.9	7.5	12.2	20.1
HC Emissions (g)	1	9	0	0	10	1	0	0	0	0	22
CO Emissions (g)	16	306	5	9	358	32	6	3	1	11	748
NOx Emissions (g)	2	26	1	1	30	2	1	0	0	1	64
Vehicles Entered	24	287	11	10	313	20	17	11	2	21	716
Vehicles Exited	24	284	11	10	312	20	17	11	2	21	712
Hourly Exit Rate	96	1136	44	40	1248	80	68	44	8	84	2848

30: Ramon & Charter Hospital Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.0	0.2	0.0	0.0	0.5	0.0	0.1	0.0	0.0	0.0	0.8
Delay / Veh (s)	11.1	2.8	2.4	12.1	4.9	4.0	42.9	4.8	28.7	4.2	4.5
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
St Del/Veh (s)	8.5	0.1	0.1	7.1	0.1	0.3	41.1	5.1	27.3	4.2	0.6
Total Stops	2	0	0	3	0	0	6	1	1	4	17
Stop/Veh	0.67	0.00	0.00	0.60	0.00	0.00	1.00	1.00	1.00	1.00	0.03
Travel Dist (mi)	0.6	56.5	1.1	1.1	70.7	0.3	0.3	0.0	0.0	0.1	130.7
Travel Time (hr)	0.0	1.4	0.0	0.0	2.0	0.0	0.1	0.0	0.0	0.0	3.7
Avg Speed (mph)	23	40	34	23	35	33	4	12	4	11	36
Fuel Used (gal)	0.0	4.5	0.1	0.1	7.0	0.0	0.1	0.0	0.0	0.0	11.9
Fuel Eff. (mpg)	12.3	12.4	10.0	10.8	10.2	10.3	5.2	15.4	5.2	15.9	11.0
HC Emissions (g)	0	18	1	0	28	0	0	0	0	0	48
CO Emissions (g)	10	1218	37	23	1836	8	3	0	0	0	3135
NOx Emissions (g)	1	72	2	2	115	0	0	0	0	0	192
Vehicles Entered	3	281	5	5	330	1	6	1	1	4	637
Vehicles Exited	3	278	5	5	333	1	6	1	1	4	637
Hourly Exit Rate	12	1112	20	20	1332	4	24	4	4	16	2548

32: Ramon & Da Vall Dr. Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.1	1.7	0.2	1.0	1.3	0.1	1.1	0.4	0.1	0.5	1.0	0.2
Delay / Veh (s)	43.1	24.2	15.0	96.8	17.7	6.9	65.2	38.2	7.8	43.3	70.1	54.8
Stop Delay (hr)	0.1	1.0	0.1	0.9	0.9	0.1	1.0	0.4	0.1	0.5	0.9	0.2
St Del/Veh (s)	37.6	15.0	10.6	91.2	11.8	5.5	60.3	34.2	7.4	40.7	65.0	51.9
Total Stops	12	166	30	58	153	22	76	39	35	44	73	20
Stop/Veh	1.00	0.67	0.71	1.57	0.58	0.59	1.29	0.93	0.81	1.02	1.40	1.43
Travel Dist (mi)	2.4	50.7	8.6	3.3	23.3	3.2	3.1	2.3	2.3	2.2	2.7	0.7
Travel Time (hr)	0.2	2.7	0.4	1.1	1.9	0.2	1.2	0.5	0.2	0.6	1.1	0.3
Avg Speed (mph)	12	19	20	3	12	16	3	5	13	4	2	3
Fuel Used (gal)	0.2	2.7	0.4	0.7	1.9	0.2	0.9	0.4	0.2	0.5	0.8	0.2
Fuel Eff. (mpg)	14.6	19.1	20.2	4.8	12.0	17.0	3.4	5.1	11.5	4.6	3.4	4.1
HC Emissions (g)	1	9	2	2	7	1	3	1	1	1	2	0
CO Emissions (g)	11	217	50	31	250	27	47	34	20	32	38	9
NOx Emissions (g)	2	21	4	4	19	2	7	4	2	4	6	1
Vehicles Entered	12	251	42	39	267	36	60	42	43	43	52	14
Vehicles Exited	12	247	42	36	264	36	58	42	43	44	51	14
Hourly Exit Rate	48	988	168	144	1056	144	232	168	172	176	204	56

32: Ramon & Da Vall Dr. Performance by movement

Movement	All
Total Delay (hr)	7.7
Delay / Veh (s)	31.0
Stop Delay (hr)	6.3
St Del/Veh (s)	25.2
Total Stops	728
Stop/Veh	0.81
Travel Dist (mi)	104.7
Travel Time (hr)	10.5
Avg Speed (mph)	10
Fuel Used (gal)	9.1
Fuel Eff. (mpg)	11.6
HC Emissions (g)	29
CO Emissions (g)	765
NOx Emissions (g)	75
Vehicles Entered	901
Vehicles Exited	889
Hourly Exit Rate	3556

Total Network Performance

Total Delay (hr)	152.3
Delay / Veh (s)	186.9
Stop Delay (hr)	126.3
St Del/Veh (s)	155.0
Total Stops	7564
Stop/Veh	2.58
Travel Dist (mi)	2068.8
Travel Time (hr)	211.7
Avg Speed (mph)	11
Fuel Used (gal)	231.0
Fuel Eff. (mpg)	9.0
HC Emissions (g)	811
CO Emissions (g)	30097
NOx Emissions (g)	2316
Vehicles Entered	3095
Vehicles Exited	2771
Hourly Exit Rate	11084

Arterial Level of Service: EB Ramon

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	88.3	93.8	0.1	9
Landau	12.5	19.3	0.1	14
Candlewood	2.2	13.9	0.1	32
Shift Sands	2.2	7.4	0.1	28
Wh. Palms	17.7	23.6	0.1	11
Roundup	24.8	33.9	0.1	11
Cathedral Canyon	151.7	164.6	0.1	3
Ximino	7.4	16.9	0.1	22
Cyn Vista	1.6	7.0	0.1	30
Yermo	8.3	19.7	0.1	24
Desert Vista	3.0	4.8	0.0	16
Rancho Vista	36.7	47.7	0.1	9
Date Palm	76.9	84.1	0.1	4
	27.2	36.1	0.1	10
San Eljay Ave.	4.2	13.9	0.1	31
El Toro Rd.	0.6	4.5	0.0	38
Victor Rd.	0.7	5.2	0.1	39
Neuma Dr.	0.7	5.0	0.1	38
Outdoor Resorts	8.0	22.9	0.2	29
Desert Shadows	2.9	18.1	0.2	40
	24.3	39.6	0.2	19
	3.9	10.7	0.1	30
Total	505.8	692.7	2.2	13

Arterial Level of Service: WB Ramon

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	0.7	4.4	0.0	33
Da Vall Dr.	17.7	25.6	0.1	13
Charter Hospital	5.9	21.7	0.2	35
Via Campanile	10.4	25.2	0.2	29
Neuma Dr.	4.0	19.0	0.2	35
Victor Rd.	0.8	5.2	0.1	37
El Toro Rd.	1.3	5.7	0.1	35
San Eljay Ave.	1.9	5.8	0.0	29
Cathedral Village	26.8	36.4	0.1	12
Date Palm	62.4	69.8	0.1	6
	3.8	11.5	0.1	28
Desert Vista	4.3	14.9	0.1	29
Yermo	1.0	2.9	0.0	26
Alvera	15.1	26.6	0.1	18
Ximino	15.9	21.0	0.1	10
Maravilla	63.4	72.5	0.1	6
Roundup	5.8	19.0	0.1	27
Wh. Palms	23.0	31.9	0.1	12
Shift Sands	3.2	9.1	0.1	27
Candlewood	1.1	6.3	0.1	33
Landau	34.3	45.4	0.1	10
	3.4	10.7	0.1	25
Total	306.3	490.6	2.2	17

Intersection: 1: Ramon & Landau

Movement	EB	EB	EB	B5	B5	WB	WB	WB	SB	SB	SB
Directions Served	L	T	T	T	T	T	T	R	L	L	R
Maximum Queue (ft)	157	406	388	308	303	423	425	207	188	213	283
Average Queue (ft)	151	399	243	281	224	299	297	101	135	146	170
95th Queue (ft)	158	424	455	383	414	451	456	216	211	260	297
Link Distance (ft)		330	330	284	284	583	583	583		756	756
Upstream Blk Time (%)		53	4	36	6	0	0	0			
Queuing Penalty (veh)		0	0	0	0	0	0	0			
Storage Bay Dist (ft)	125								200		
Storage Blk Time (%)	56	0							3	3	
Queuing Penalty (veh)	401	2							6	7	

Intersection: 2: Ramon & Candlewood

Movement	EB	EB	EB	WB	WB	WB	WB	NB
Directions Served	T	T	TR	L	T	T	T	R
Maximum Queue (ft)	12	11	14	62	16	8	1	58
Average Queue (ft)	1	1	1	33	3	1	0	32
95th Queue (ft)	31	24	25	69	35	23	4	62
Link Distance (ft)	583	583	583		243	243	243	232
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				60				
Storage Blk Time (%)				3				
Queuing Penalty (veh)				15				

Intersection: 4: Ramon & Shift Sands

Movement	EB	EB	EB	NB
Directions Served	T	T	TR	R
Maximum Queue (ft)	35	25	23	78
Average Queue (ft)	5	4	3	45
95th Queue (ft)	56	50	46	82
Link Distance (ft)	243	243	243	240
Upstream Blk Time (%)	0	0	0	
Queuing Penalty (veh)	3	2	2	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Ramon & Wh. Palms

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	159	270	246	239	164	377	397	363	107	300	97	155
Average Queue (ft)	96	174	158	152	92	248	274	235	89	182	67	75
95th Queue (ft)	171	289	265	258	174	399	421	384	124	386	110	160
Link Distance (ft)		287	287	287		470	470	470		451		385
Upstream Blk Time (%)		3	2	2		0	0	0		3		
Queuing Penalty (veh)		17	12	11		1	1	0		0		
Storage Bay Dist (ft)	150				150				75		75	
Storage Blk Time (%)	1	10			1	13			40	22	16	7
Queuing Penalty (veh)	8	19			7	22			73	36	20	7

Intersection: 8: Ramon & Roundup

Movement	EB	EB	EB	WB	WB	WB	WB	NB
Directions Served	T	T	TR	L	T	T	T	R
Maximum Queue (ft)	385	372	346	65	48	33	5	48
Average Queue (ft)	177	147	131	29	7	4	0	18
95th Queue (ft)	463	429	405	70	70	53	14	50
Link Distance (ft)	470	470	470		679	679	679	241
Upstream Blk Time (%)	4	3	3					
Queuing Penalty (veh)	28	17	18					
Storage Bay Dist (ft)				60				
Storage Blk Time (%)				4	0			
Queuing Penalty (veh)				24	0			

Intersection: 11: Ramon & Maravilla

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	LT	R	LT
Maximum Queue (ft)	144	709	713	706	205	514	484	456	309	855	724	788
Average Queue (ft)	81	652	635	619	199	473	403	359	295	776	375	629
95th Queue (ft)	167	783	795	799	212	524	551	510	326	1026	798	945
Link Distance (ft)		679	679	679		448	448	448		835	835	810
Upstream Blk Time (%)		34	25	23		56	11	4		35	5	21
Queuing Penalty (veh)		199	149	136		340	65	24		0	0	0
Storage Bay Dist (ft)	120				175				280			
Storage Blk Time (%)	5	68			71	14			45	56		76
Queuing Penalty (veh)	22	98			334	59			213	178		92

Intersection: 11: Ramon & Maravilla

Movement	SB
Directions Served	R
Maximum Queue (ft)	198
Average Queue (ft)	110
95th Queue (ft)	234
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	175
Storage Blk Time (%)	0
Queuing Penalty (veh)	1

Intersection: 13: Ramon & Ximino

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	R
Maximum Queue (ft)	149	180	141	56	267	259	187	217	71
Average Queue (ft)	81	41	26	12	216	119	60	130	31
95th Queue (ft)	162	240	195	132	338	301	208	261	87
Link Distance (ft)		448	448	448	244	244	244	309	309
Upstream Blk Time (%)		3	1	1	34	5	1	4	
Queuing Penalty (veh)		24	9	5	218	32	8	0	
Storage Bay Dist (ft)	150								
Storage Blk Time (%)	10	1							
Queuing Penalty (veh)	67	1							

Intersection: 14: Ramon & Alvera

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	T	T	TR	L	T	T	TR	R	R
Maximum Queue (ft)	6	3	6	85	500	412	226	61	54
Average Queue (ft)	2	2	2	55	241	138	42	35	24
95th Queue (ft)	37	36	37	100	605	466	252	69	65
Link Distance (ft)	244	244	244		617	617	617	222	305
Upstream Blk Time (%)	1	1	1		5	0	0		
Queuing Penalty (veh)	5	4	4		30	3	1		
Storage Bay Dist (ft)				60					
Storage Blk Time (%)				12	30				
Queuing Penalty (veh)				77	30				

Intersection: 18: Ramon & Yermo

Movement	EB	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	T	TR	R
Maximum Queue (ft)	101	242	198	123	28	13	10	77
Average Queue (ft)	53	95	74	36	6	2	1	44
95th Queue (ft)	106	287	240	170	34	19	13	79
Link Distance (ft)		617	617	617	53	53	53	299
Upstream Blk Time (%)		1	1	1	4	1	0	
Queuing Penalty (veh)		6	5	5	26	4	2	
Storage Bay Dist (ft)	100							
Storage Blk Time (%)	2	7						
Queuing Penalty (veh)	12	9						

Intersection: 19: Ramon & Desert Vista

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	70	74	62	87	184	142	111	45	53
Average Queue (ft)	48	48	35	45	51	32	29	18	29
95th Queue (ft)	84	86	74	91	184	134	98	49	59
Link Distance (ft)	53	53	53		568	568	568	504	504
Upstream Blk Time (%)	13	11	4		0				
Queuing Penalty (veh)	89	71	28		2				
Storage Bay Dist (ft)				135					
Storage Blk Time (%)				0	3				
Queuing Penalty (veh)				0	2				

Intersection: 22: Ramon &

Movement	EB	EB	EB	EB	WB	WB	NB	NB
Directions Served	L	T	T	TR	T	T	T	R
Maximum Queue (ft)	144	520	491	359	7	3	17	197
Average Queue (ft)	86	336	293	142	0	0	4	104
95th Queue (ft)	164	658	611	477	14	12	21	232
Link Distance (ft)		568	568	568	352	352	248	248
Upstream Blk Time (%)		6	3	1				10
Queuing Penalty (veh)		39	19	8				0
Storage Bay Dist (ft)	125							
Storage Blk Time (%)	4	36						
Queuing Penalty (veh)	24	59						

Intersection: 23: Ramon & Date Palm

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	TR	L	L	T	T
Maximum Queue (ft)	165	401	393	232	266	477	449	424	196	810	817	819
Average Queue (ft)	150	369	360	108	252	418	342	320	122	586	724	741
95th Queue (ft)	190	436	435	246	294	547	490	457	213	1015	943	953
Link Distance (ft)		352	352	352		447	447	447		800	800	800
Upstream Blk Time (%)		50	41	0		25	2	1		6	15	27
Queuing Penalty (veh)		312	252	1		115	10	6		0	0	0
Storage Bay Dist (ft)	135				235				235			
Storage Blk Time (%)	54	47			46	24			1	1		66
Queuing Penalty (veh)	297	153			171	94			1	1		249

Intersection: 23: Ramon & Date Palm

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (ft)	153	231	503	488	176
Average Queue (ft)	133	223	440	368	92
95th Queue (ft)	183	245	581	552	178
Link Distance (ft)			492	492	492
Upstream Blk Time (%)			22	2	0
Queuing Penalty (veh)			0	0	0
Storage Bay Dist (ft)	120	200			
Storage Blk Time (%)	25	62	16		
Queuing Penalty (veh)	102	195	57		

Intersection: 24: Ramon & Cathedral Village

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	TR	L	LT	R	L
Maximum Queue (ft)	153	455	458	110	193	411	322	197	91	187	98	80
Average Queue (ft)	83	308	312	36	109	241	157	101	54	95	54	44
95th Queue (ft)	159	524	531	107	211	492	361	214	106	219	109	89
Link Distance (ft)		447	447			545	545	545		276		
Upstream Blk Time (%)		3	3			5	0			4		
Queuing Penalty (veh)		23	30			22	0			0		
Storage Bay Dist (ft)	150			100	190				75		75	75
Storage Blk Time (%)	1	14	20	0	1	20			13	14	3	6
Queuing Penalty (veh)	9	20	20	0	4	32			31	30	6	4

Intersection: 24: Ramon & Cathedral Village

Movement	SB
Directions Served	TR
Maximum Queue (ft)	91
Average Queue (ft)	42
95th Queue (ft)	100
Link Distance (ft)	298
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	4
Queuing Penalty (veh)	2

Intersection: 25: Ramon & San Eljay Ave.

Movement	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	TR	L	R
Maximum Queue (ft)	66	50	27	8	55	73
Average Queue (ft)	34	14	5	1	24	39
95th Queue (ft)	71	89	47	18	61	84
Link Distance (ft)		183	183	183	290	290
Upstream Blk Time (%)		3	0			0
Queuing Penalty (veh)		12	1			0
Storage Bay Dist (ft)	150					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 26: Ramon & El Toro Rd.

Movement	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	TR	L	R
Maximum Queue (ft)	23	35	28	2	28	36
Average Queue (ft)	5	8	4	0	7	16
95th Queue (ft)	23	71	51	11	29	42
Link Distance (ft)		220	220	220	291	291
Upstream Blk Time (%)		1	0			
Queuing Penalty (veh)		4	0			
Storage Bay Dist (ft)	75					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 27: Ramon & Victor Rd.

Movement	EB	WB	WB	SB	SB
Directions Served	L	T	T	L	R
Maximum Queue (ft)	23	14	7	26	32
Average Queue (ft)	5	2	1	6	10
95th Queue (ft)	24	36	22	27	34
Link Distance (ft)		213	213	283	283
Upstream Blk Time (%)		0			
Queuing Penalty (veh)		1			
Storage Bay Dist (ft)	75				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 28: Ramon & Neuma Dr.

Movement	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	TR	L	R
Maximum Queue (ft)	34	7	1	1	28	37
Average Queue (ft)	11	0	0	0	7	17
95th Queue (ft)	36	13	5	2	28	44
Link Distance (ft)		900	900		273	273
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	75			75		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 29: Ramon & Via Campanile

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	R	L	TR	L
Maximum Queue (ft)	101	152	135	98	34	73	198	188	37	66	40	23
Average Queue (ft)	58	70	65	37	10	31	112	103	17	39	20	5
95th Queue (ft)	105	152	132	99	37	74	209	199	42	70	46	22
Link Distance (ft)		900	900				998	998	998		242	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	125			100	100	150				50		50
Storage Blk Time (%)	0	1	1	0			2			8	0	0
Queuing Penalty (veh)	2	1	6	1			1			3	0	0

Intersection: 29: Ramon & Via Campanile

Movement	SB
Directions Served	TR
Maximum Queue (ft)	52
Average Queue (ft)	26
95th Queue (ft)	53
Link Distance (ft)	288
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	1
Queuing Penalty (veh)	0

Intersection: 30: Ramon & Charter Hospital

Movement	EB	EB	WB	NB	NB	SB	SB
Directions Served	L	R	L	L	TR	L	TR
Maximum Queue (ft)	26	0	33	46	15	19	33
Average Queue (ft)	6	0	10	21	3	4	12
95th Queue (ft)	28	1	35	51	23	20	36
Link Distance (ft)					232		197
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	100	100	100	60		60	
Storage Blk Time (%)				1		0	0
Queuing Penalty (veh)				0		0	0

Intersection: 32: Ramon & Da Vall Dr.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B7	B7	B7	NB
Directions Served	L	T	T	TR	L	T	T	TR	T	T	T	L
Maximum Queue (ft)	88	232	226	222	197	231	207	155	7	3	2	221
Average Queue (ft)	42	157	154	145	134	152	127	92	2	1	0	158
95th Queue (ft)	96	246	241	236	249	271	216	163	28	22	11	255
Link Distance (ft)		1054	1054	1054		394	394	394	170	170	170	
Upstream Blk Time (%)						2	0		0	0		
Queuing Penalty (veh)						0	0		0	0		
Storage Bay Dist (ft)	200				250							220
Storage Blk Time (%)		3			5	0						9
Queuing Penalty (veh)		2			17	0						16

Intersection: 32: Ramon & Da Vall Dr.

Movement	NB	NB	SB	SB
Directions Served	T	R	L	TR
Maximum Queue (ft)	211	81	178	265
Average Queue (ft)	127	48	112	190
95th Queue (ft)	256	86	201	311
Link Distance (ft)	280	280	273	273
Upstream Blk Time (%)	5	0	0	10
Queuing Penalty (veh)	0	0	0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)	0			
Queuing Penalty (veh)	0			

Network Summary

Network wide Queuing Penalty: 5918

Intersection: 1: Ramon & Landau

Phase	2	5	6	8
Movement(s) Served	EBT EBL	WBT SBL		
Maximum Green (s)	78.0	35.0	38.0	12.0
Minimum Green (s)	10.0	4.0	10.0	4.0
Recall	Min	None	Min	None
Avg. Green (s)	79.6	33.9	35.3	12.2
g/C Ratio	0.78	0.33	0.35	0.12
Cycles Skipped (%)	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0
Cycles Maxed Out (%)	38	78	67	89
Cycles with Peds (%)	0	0	0	0

Controller Summary

Average Cycle Length (s): 101.7

Number of Complete Cycles : 8

Intersection: 6: Ramon & Wh. Palms

Phase	1	2	4	5	6	8
Movement(s) Served	WBL	EBT	SBTL	EBL	WBT	NBTL
Maximum Green (s)	7.0	23.5	9.0	7.0	23.5	9.0
Minimum Green (s)	3.0	10.0	4.0	3.0	10.0	4.0
Recall	None	Min	None	None	Min	None
Avg. Green (s)	7.6	25.3	9.4	8.3	23.8	9.4
g/C Ratio	0.10	0.45	0.17	0.12	0.42	0.17
Cycles Skipped (%)	25	0	0	19	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	63	81	94	75	75	94
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 56.2

Number of Complete Cycles : 15

Intersection: 11: Ramon & Maravilla

Phase	1	2	3	4	5	6
Movement(s) Served	WBL	EBT	SBTL	NBTL	EBL	WBT
Maximum Green (s)	27.0	41.0	20.0	27.0	15.0	53.0
Minimum Green (s)	4.0	10.0	4.0	4.0	4.0	10.0
Recall	None	Min	None	None	None	Min
Avg. Green (s)	31.7	46.7	23.1	31.8	24.6	59.0
g/C Ratio	0.21	0.31	0.15	0.21	0.16	0.39
Cycles Skipped (%)	0	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	100	100	100	100	100	60
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 149.8

Number of Complete Cycles : 5

Intersection: 19: Ramon & Desert Vista

Phase	1	2	4	6
Movement(s) Served	WBL	EBT	NBL	WBT
Maximum Green (s)	6.0	20.0	8.0	30.0
Minimum Green (s)	6.0	8.0	8.0	8.0
Recall	None	Min	None	Min
Avg. Green (s)	6.6	51.0	8.3	103.0
g/C Ratio	0.07	0.70	0.06	0.77
Cycles Skipped (%)	18	0	50	45
Cycles @ Minimum (%)	82	0	50	0
Cycles Maxed Out (%)	82	75	50	27
Cycles with Peds (%)	0	0	0	0

Controller Summary

Average Cycle Length (s): 72.9

Number of Complete Cycles : 11

Intersection: 23: Ramon & Date Palm

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	EBL	WBT	SBL	NBT	WBL	EBT	NBL	SBT
Maximum Green (s)	26.0	41.5	25.0	26.5	28.0	39.5	20.0	31.5
Minimum Green (s)	4.0	10.0	4.0	10.0	4.0	10.0	4.0	10.0
Recall	None	None	None	Min	None	None	None	Min
Avg. Green (s)	21.4	46.9	25.5	28.3	30.1	39.6	22.4	31.3
g/C Ratio	0.15	0.32	0.17	0.19	0.20	0.27	0.15	0.21
Cycles Skipped (%)	0	0	0	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0	0	0
Cycles Maxed Out (%)	33	100	83	100	100	83	100	67
Cycles with Peds (%)	0	0	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 146.7

Number of Complete Cycles : 5

Intersection: 24: Ramon & Cathedral Village

Phase	1	2	5	6	7	8
Movement(s) Served	WBL	EBT	EBL	WBT	SBTL	NBTL
Maximum Green (s)	9.0	38.5	12.0	35.5	6.0	6.0
Minimum Green (s)	4.0	7.5	4.0	7.5	6.0	6.0
Recall	None	Min	None	Min	None	None
Avg. Green (s)	13.3	35.2	8.1	40.0	6.5	6.5
g/C Ratio	0.16	0.47	0.09	0.53	0.07	0.09
Cycles Skipped (%)	9	0	17	0	18	0
Cycles @ Minimum (%)	0	0	0	0	82	100
Cycles Maxed Out (%)	73	55	8	73	82	100
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 75.3

Number of Complete Cycles : 11

Intersection: 29: Ramon & Via Campanile

Phase	1	2	4	5	6	8
Movement(s) Served	WBL	EBT	NBTL	EBL	WBT	SBTL
Maximum Green (s)	4.0	20.5	4.0	5.0	19.5	4.0
Minimum Green (s)	4.0	10.0	4.0	4.0	10.0	4.0
Recall	None	Min	None	None	Min	None
Avg. Green (s)	7.3	31.6	4.0	5.1	27.2	4.1
g/C Ratio	0.06	0.63	0.06	0.08	0.61	0.03
Cycles Skipped (%)	63	11	37	32	0	68
Cycles @ Minimum (%)	16	0	63	0	0	32
Cycles Maxed Out (%)	37	32	63	42	50	32
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 44.7
Number of Complete Cycles : 19
Average All-Red Dwell (s): 0.1
Cycles with All-Red Dwell (%): 5

Intersection: 32: Ramon & Da Vall Dr.

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBT
Maximum Green (s)	6.5	24.5	10.5	10.5	5.2	25.8	9.7	11.3
Minimum Green (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Recall	None	Min	None	None	None	Min	None	None
Avg. Green (s)	6.9	25.4	11.4	10.8	7.4	30.6	10.4	13.1
g/C Ratio	0.09	0.34	0.15	0.15	0.06	0.41	0.14	0.18
Cycles Skipped (%)	0	0	0	0	40	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0	9	0
Cycles Maxed Out (%)	100	73	91	92	60	73	64	91
Cycles with Peds (%)	0	0	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 74.4
Number of Complete Cycles : 11

Summary of All Intervals

Run Number	1	10	100	11	12	13	14	15
Start Time	4:55	4:55	4:55	4:55	4:55	4:55	4:55	4:55
End Time	5:15	5:15	5:15	5:15	5:15	5:15	5:15	5:15
Total Time (min)	20	20	20	20	20	20	20	20
Time Recorded (min)	15	15	15	15	15	15	15	15
# of Intervals	2	2	2	2	2	2	2	2
# of Recorded Intvls	1	1	1	1	1	1	1	1
Vehs Entered	3536	3502	3449	3450	3456	3475	3336	3481
Vehs Exited	3073	3105	3015	3075	3082	3207	3068	3086
Starting Vehs	635	621	598	618	544	635	643	589
Ending Vehs	1098	1018	1032	993	918	903	911	984
Denied Entry Before	54	15	32	31	58	20	29	7
Denied Entry After	337	354	364	461	348	417	480	476
Travel Distance (mi)	2338	2320	2310	2290	2295	2298	2252	2326
Travel Time (hr)	265.9	246.9	255.1	258.6	237.8	249.5	249.8	258.5
Total Delay (hr)	200.3	181.2	189.6	193.8	172.7	184.1	186.1	192.6
Total Stops	9205	8361	8761	8612	8036	8308	8361	8379
Fuel Used (gal)	278.1	264.8	267.9	270.5	261.5	267.4	264.1	273.2

Interval #0 Information Seeding

Start Time	4:55
End Time	5:00
Total Time (min)	5
Volumes adjusted by PHF, Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by PHF, Growth Factors.	

Run Number	1	10	100	11	12	13	14	15
Vehs Entered	3536	3502	3449	3450	3456	3475	3336	3481
Vehs Exited	3073	3105	3015	3075	3082	3207	3068	3086
Starting Vehs	635	621	598	618	544	635	643	589
Ending Vehs	1098	1018	1032	993	918	903	911	984
Denied Entry Before	54	15	32	31	58	20	29	7
Denied Entry After	337	354	364	461	348	417	480	476
Travel Distance (mi)	2338	2320	2310	2290	2295	2298	2252	2326
Travel Time (hr)	265.9	246.9	255.1	258.6	237.8	249.5	249.8	258.5
Total Delay (hr)	200.3	181.2	189.6	193.8	172.7	184.1	186.1	192.6
Total Stops	9205	8361	8761	8612	8036	8308	8361	8379
Fuel Used (gal)	278.1	264.8	267.9	270.5	261.5	267.4	264.1	273.2

1: Ramon & Landau Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	2.3	1.0	0.0	0.0	4.5	0.3	0.0	0.1	0.0	2.6	0.1	1.3
Delay / Veh (s)	63.0	13.9	6.4	78.2	53.0	12.2	85.7	69.3	16.9	98.8	89.9	31.4
Stop Delay (hr)	2.0	0.7	0.0	0.0	3.6	0.2	0.0	0.1	0.0	2.5	0.1	1.1
St Del/Veh (s)	56.1	9.2	4.4	68.9	42.0	8.7	83.9	66.3	16.3	92.2	82.8	26.2
Total Stops	89	76	0	3	250	66	2	3	3	123	3	107
Stop/Veh	0.69	0.29	0.00	1.50	0.82	0.66	1.00	1.00	1.00	1.28	1.00	0.74
Travel Dist (mi)	9.2	19.1	0.1	0.2	35.6	11.7	0.3	0.3	0.3	14.2	0.4	21.2
Travel Time (hr)	2.6	1.5	0.0	0.1	5.4	0.8	0.1	0.1	0.0	3.2	0.1	2.1
Avg Speed (mph)	4	13	15	5	7	17	5	5	12	5	4	10
Fuel Used (gal)	1.7	2.3	0.0	0.0	4.0	0.7	0.0	0.0	0.0	2.2	0.1	1.7
Fuel Eff. (mpg)	5.5	8.3	14.1	6.7	8.8	17.8	7.1	6.8	12.9	6.3	6.4	12.4
HC Emissions (g)	4	8	0	0	11	2	0	0	0	6	0	5
CO Emissions (g)	57	362	1	2	154	50	2	4	3	160	4	138
NOx Emissions (g)	8	28	0	0	21	4	0	1	0	16	0	10
Vehicles Entered	129	264	2	2	310	100	2	3	3	100	3	147
Vehicles Exited	129	266	2	2	301	100	2	3	3	93	3	144
Hourly Exit Rate	516	1064	8	8	1204	400	8	12	12	372	12	576

1: Ramon & Landau Performance by movement

Movement	All
Total Delay (hr)	12.3
Delay / Veh (s)	41.8
Stop Delay (hr)	10.2
St Del/Veh (s)	34.9
Total Stops	725
Stop/Veh	0.69
Travel Dist (mi)	112.7
Travel Time (hr)	15.9
Avg Speed (mph)	7
Fuel Used (gal)	12.9
Fuel Eff. (mpg)	8.8
HC Emissions (g)	37
CO Emissions (g)	936
NOx Emissions (g)	89
Vehicles Entered	1065
Vehicles Exited	1048
Hourly Exit Rate	4192

2: Ramon & Candlewood Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Total Delay (hr)	0.2	0.0	0.1	0.2	0.0	0.4
Delay / Veh (s)	1.5	0.9	13.3	1.6	7.3	1.9
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	0.0	0.1	11.1	0.2	7.2	0.5
Total Stops	1	0	11	6	13	31
Stop/Veh	0.00	0.00	0.79	0.02	1.00	0.04
Travel Dist (mi)	44.8	0.8	0.8	21.4	0.6	68.5
Travel Time (hr)	1.4	0.0	0.1	0.7	0.1	2.3
Avg Speed (mph)	32	27	10	30	10	30
Fuel Used (gal)	3.7	0.1	0.1	1.1	0.0	4.9
Fuel Eff. (mpg)	12.2	13.7	13.0	20.2	12.7	14.0
HC Emissions (g)	15	0	0	4	0	19
CO Emissions (g)	916	14	4	151	3	1088
NOx Emissions (g)	53	1	0	11	0	66
Vehicles Entered	356	7	14	376	13	766
Vehicles Exited	357	7	14	374	13	765
Hourly Exit Rate	1428	28	56	1496	52	3060

4: Ramon & Shift Sands Performance by movement

Movement	EBT	EBR	WBT	NBR	All
Total Delay (hr)	0.1	0.0	0.4	0.1	0.5
Delay / Veh (s)	1.3	0.3	2.9	10.3	2.4
Stop Delay (hr)	0.0	0.0	0.0	0.1	0.1
St Del/Veh (s)	0.0	0.0	0.1	10.2	0.3
Total Stops	0	0	2	22	24
Stop/Veh	0.00	0.00	0.00	1.00	0.03
Travel Dist (mi)	19.7	0.7	28.3	1.0	49.7
Travel Time (hr)	0.6	0.0	1.1	0.1	1.9
Avg Speed (mph)	31	22	25	9	26
Fuel Used (gal)	0.9	0.0	4.1	0.1	5.2
Fuel Eff. (mpg)	21.9	24.5	6.9	10.4	9.7
HC Emissions (g)	4	0	16	0	20
CO Emissions (g)	142	2	960	7	1112
NOx Emissions (g)	9	0	68	1	79
Vehicles Entered	346	12	440	22	820
Vehicles Exited	346	12	439	22	819
Hourly Exit Rate	1384	48	1756	88	3276

6: Ramon & Wh. Palms Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.3	1.3	0.0	0.3	2.4	0.1	0.7	0.3	0.2	0.3	0.1	0.1
Delay / Veh (s)	30.1	13.8	9.4	33.7	22.8	17.4	59.7	42.3	33.2	41.6	25.8	15.5
Stop Delay (hr)	0.3	0.8	0.0	0.2	1.5	0.1	0.6	0.3	0.2	0.3	0.1	0.1
St Del/Veh (s)	26.0	8.5	7.0	26.9	14.0	12.2	54.3	36.4	29.7	38.0	21.9	13.9
Total Stops	36	179	10	36	281	12	58	31	25	29	16	13
Stop/Veh	0.97	0.53	0.56	1.12	0.73	0.80	1.35	1.19	1.25	1.04	0.84	0.87
Travel Dist (mi)	2.3	21.1	1.1	3.0	36.9	1.5	3.7	2.2	1.7	2.0	1.4	1.1
Travel Time (hr)	0.4	1.9	0.1	0.4	3.4	0.1	0.9	0.4	0.3	0.4	0.2	0.1
Avg Speed (mph)	6	12	12	8	11	12	5	6	7	6	8	10
Fuel Used (gal)	0.3	1.9	0.1	0.3	3.1	0.1	0.7	0.3	0.2	0.3	0.2	0.1
Fuel Eff. (mpg)	7.7	11.2	13.4	9.6	12.0	13.6	5.3	7.0	7.9	5.9	8.0	9.9
HC Emissions (g)	1	6	0	1	9	0	2	1	1	1	1	0
CO Emissions (g)	16	154	5	16	174	6	57	26	18	30	18	12
NOx Emissions (g)	3	16	1	2	22	1	6	3	2	3	2	1
Vehicles Entered	37	338	18	32	384	15	44	27	20	29	19	15
Vehicles Exited	37	339	18	32	382	15	43	26	20	28	19	15
Hourly Exit Rate	148	1356	72	128	1528	60	172	104	80	112	76	60

6: Ramon & Wh. Palms Performance by movement

Movement	All
Total Delay (hr)	6.2
Delay / Veh (s)	22.8
Stop Delay (hr)	4.4
St Del/Veh (s)	16.4
Total Stops	726
Stop/Veh	0.74
Travel Dist (mi)	78.2
Travel Time (hr)	8.5
Avg Speed (mph)	9
Fuel Used (gal)	7.6
Fuel Eff. (mpg)	10.2
HC Emissions (g)	22
CO Emissions (g)	532
NOx Emissions (g)	61
Vehicles Entered	978
Vehicles Exited	974
Hourly Exit Rate	3896

8: Ramon & Roundup Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Total Delay (hr)	0.8	0.0	0.1	0.5	0.0	1.4
Delay / Veh (s)	7.5	5.0	15.3	4.4	16.1	6.1
Stop Delay (hr)	0.3	0.0	0.1	0.0	0.0	0.4
St Del/Veh (s)	3.0	1.7	11.4	0.1	16.1	1.7
Total Stops	31	1	10	1	5	48
Stop/Veh	0.08	0.07	0.62	0.00	1.00	0.06
Travel Dist (mi)	37.0	1.4	2.3	61.7	0.2	102.7
Travel Time (hr)	1.8	0.1	0.1	2.3	0.0	4.3
Avg Speed (mph)	21	19	16	27	6	24
Fuel Used (gal)	4.0	0.1	0.2	5.5	0.0	9.8
Fuel Eff. (mpg)	9.3	9.9	10.8	11.2	9.3	10.4
HC Emissions (g)	15	1	1	20	0	37
CO Emissions (g)	810	29	37	1089	2	1966
NOx Emissions (g)	59	2	3	79	0	143
Vehicles Entered	372	14	16	426	5	833
Vehicles Exited	364	14	15	425	5	823
Hourly Exit Rate	1456	56	60	1700	20	3292

11: Ramon & Maravilla Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	1.0	8.8	1.3	3.2	4.9	0.1	8.2	2.1	2.6	2.3	2.4	1.4
Delay / Veh (s)	131.0	115.0	105.1	152.0	52.8	48.6	230.6	234.3	85.0	275.3	269.1	197.9
Stop Delay (hr)	0.9	7.5	1.1	2.9	4.1	0.1	7.7	2.0	2.5	2.2	2.3	1.3
St Del/Veh (s)	115.2	97.3	91.9	140.7	43.5	43.3	215.8	218.1	80.2	261.0	253.7	185.6
Total Stops	49	375	57	111	261	6	242	63	104	72	75	64
Stop/Veh	1.75	1.36	1.30	1.48	0.77	0.75	1.89	1.91	0.95	2.40	2.34	2.46
Travel Dist (mi)	3.9	38.8	6.2	7.4	32.0	0.8	20.3	5.3	17.6	4.6	4.8	3.9
Travel Time (hr)	1.1	9.8	1.5	3.4	5.8	0.1	9.0	2.3	3.3	2.5	2.6	1.6
Avg Speed (mph)	3	4	4	2	6	5	3	3	11	2	2	3
Fuel Used (gal)	0.7	6.4	0.9	2.0	4.6	0.1	5.6	1.5	2.4	1.5	1.5	1.0
Fuel Eff. (mpg)	5.3	6.1	6.6	3.7	7.0	7.7	3.6	3.6	7.4	3.2	3.2	3.8
HC Emissions (g)	2	17	2	5	13	0	18	5	10	4	4	3
CO Emissions (g)	27	250	38	66	309	5	205	51	126	57	61	54
NOx Emissions (g)	4	33	4	10	35	1	25	6	10	7	7	6
Vehicles Entered	28	286	45	80	341	8	136	36	112	35	35	30
Vehicles Exited	27	268	43	70	334	8	121	32	109	27	29	24
Hourly Exit Rate	108	1072	172	280	1336	32	484	128	436	108	116	96

11: Ramon & Maravilla Performance by movement

Movement	All
Total Delay (hr)	38.4
Delay / Veh (s)	122.1
Stop Delay (hr)	34.5
St Del/Veh (s)	109.6
Total Stops	1479
Stop/Veh	1.31
Travel Dist (mi)	145.6
Travel Time (hr)	43.0
Avg Speed (mph)	4
Fuel Used (gal)	28.2
Fuel Eff. (mpg)	5.2
HC Emissions (g)	84
CO Emissions (g)	1248
NOx Emissions (g)	147
Vehicles Entered	1172
Vehicles Exited	1092
Hourly Exit Rate	4368

13: Ramon & Ximino Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.5	0.6	1.9	0.0	1.4	0.2	4.6
Delay / Veh (s)	93.6	5.1	15.0	1.9	647.5	140.5	18.8
Stop Delay (hr)	0.5	0.1	1.4	0.0	1.4	0.2	3.7
St Del/Veh (s)	88.4	1.3	11.3	1.0	646.5	140.3	15.1
Total Stops	23	7	96	1	12	6	145
Stop/Veh	1.10	0.02	0.22	0.10	1.50	1.20	0.16
Travel Dist (mi)	2.2	38.8	24.9	0.6	0.5	0.3	67.4
Travel Time (hr)	0.6	1.7	2.5	0.0	1.5	0.2	6.5
Avg Speed (mph)	4	23	10	18	0	2	10
Fuel Used (gal)	0.5	5.1	2.2	0.0	0.8	0.1	8.7
Fuel Eff. (mpg)	4.8	7.6	11.2	20.1	0.7	2.6	7.7
HC Emissions (g)	1	20	7	0	2	0	31
CO Emissions (g)	34	1217	199	2	29	6	1488
NOx Emissions (g)	4	79	18	0	4	1	107
Vehicles Entered	23	390	449	10	13	6	891
Vehicles Exited	19	388	441	10	5	4	867
Hourly Exit Rate	76	1552	1764	40	20	16	3468

14: Ramon & Alvera Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBR	SBR	All
Total Delay (hr)	0.1	0.0	0.3	1.8	0.0	0.0	0.1	2.4
Delay / Veh (s)	1.1	0.3	56.7	14.5	3.0	11.4	55.1	9.7
Stop Delay (hr)	0.0	0.0	0.3	1.2	0.0	0.0	0.1	1.7
St Del/Veh (s)	0.1	0.0	49.6	9.7	1.5	11.3	55.1	6.6
Total Stops	0	0	27	95	0	15	6	143
Stop/Veh	0.00	0.00	1.29	0.21	0.00	1.00	1.20	0.16
Travel Dist (mi)	22.9	0.4	2.6	57.1	0.8	0.6	0.3	84.7
Travel Time (hr)	0.7	0.0	0.4	3.3	0.0	0.1	0.1	4.7
Avg Speed (mph)	32	22	7	18	26	8	3	19
Fuel Used (gal)	1.3	0.0	0.3	4.1	0.0	0.1	0.1	5.9
Fuel Eff. (mpg)	17.4	27.6	8.5	13.9	17.0	10.2	5.5	14.3
HC Emissions (g)	4	0	1	14	0	0	0	20
CO Emissions (g)	203	1	17	563	7	4	4	798
NOx Emissions (g)	15	0	2	41	0	1	1	59
Vehicles Entered	388	7	22	465	6	15	6	909
Vehicles Exited	389	7	20	455	6	15	5	897
Hourly Exit Rate	1556	28	80	1820	24	60	20	3588

18: Ramon & Yermo Performance by movement

Movement	EBL	EBT	WBT	WBR	SBR	All
Total Delay (hr)	0.2	0.9	0.1	0.0	0.1	1.3
Delay / Veh (s)	26.9	8.6	0.9	0.2	16.5	5.3
Stop Delay (hr)	0.1	0.4	0.0	0.0	0.1	0.7
St Del/Veh (s)	21.3	3.9	0.2	0.0	16.2	2.8
Total Stops	24	78	3	0	24	129
Stop/Veh	1.00	0.20	0.01	0.00	1.00	0.14
Travel Dist (mi)	3.1	49.2	10.1	0.2	1.4	63.9
Travel Time (hr)	0.3	2.2	0.4	0.0	0.2	3.1
Avg Speed (mph)	11	22	26	15	8	21
Fuel Used (gal)	0.2	2.8	0.8	0.0	0.1	4.0
Fuel Eff. (mpg)	13.2	17.4	13.2	19.4	9.3	16.0
HC Emissions (g)	1	10	3	0	0	14
CO Emissions (g)	14	357	125	0	14	510
NOx Emissions (g)	2	26	10	0	1	39
Vehicles Entered	25	395	461	9	24	914
Vehicles Exited	24	390	460	9	24	907
Hourly Exit Rate	96	1560	1840	36	96	3628

19: Ramon & Desert Vista Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Total Delay (hr)	0.4	0.0	0.1	0.5	0.0	0.0	1.1
Delay / Veh (s)	3.4	0.9	30.0	4.2	22.3	10.4	4.5
Stop Delay (hr)	0.2	0.0	0.1	0.2	0.0	0.0	0.6
St Del/Veh (s)	1.9	0.8	25.9	1.4	20.7	10.0	2.3
Total Stops	50	1	15	41	5	13	125
Stop/Veh	0.13	0.12	1.00	0.09	0.83	0.93	0.14
Travel Dist (mi)	7.7	0.2	1.7	53.6	0.5	1.3	65.1
Travel Time (hr)	0.6	0.0	0.2	1.9	0.1	0.1	2.8
Avg Speed (mph)	14	13	10	28	9	14	23
Fuel Used (gal)	0.7	0.0	0.1	2.8	0.0	0.1	3.8
Fuel Eff. (mpg)	10.9	16.9	11.9	18.8	11.8	15.1	16.9
HC Emissions (g)	2	0	0	9	0	0	12
CO Emissions (g)	69	0	9	368	4	8	459
NOx Emissions (g)	8	0	1	28	0	1	38
Vehicles Entered	382	8	15	467	6	15	893
Vehicles Exited	381	8	15	465	6	14	889
Hourly Exit Rate	1524	32	60	1860	24	56	3556

22: Ramon & Performance by movement

Movement	EBL	EBT	EBR	WBT	NBT	NBR	All
Total Delay (hr)	0.6	4.3	0.0	0.4	0.0	1.3	6.5
Delay / Veh (s)	69.4	45.2	8.8	3.0	80.7	419.5	27.9
Stop Delay (hr)	0.5	3.3	0.0	0.0	0.0	1.3	5.2
St Del/Veh (s)	59.0	35.4	5.8	0.3	79.7	419.4	22.1
Total Stops	45	234	2	1	1	15	298
Stop/Veh	1.55	0.69	0.22	0.00	1.00	1.36	0.35
Travel Dist (mi)	3.5	40.5	1.0	38.0	0.0	0.6	83.6
Travel Time (hr)	0.7	5.3	0.1	1.5	0.0	1.3	8.9
Avg Speed (mph)	5	8	18	25	1	0	10
Fuel Used (gal)	0.5	4.7	0.1	5.2	0.0	0.7	11.2
Fuel Eff. (mpg)	6.9	8.6	12.3	7.3	1.8	0.8	7.5
HC Emissions (g)	1	14	0	20	0	2	38
CO Emissions (g)	27	428	15	1243	1	24	1737
NOx Emissions (g)	4	38	1	84	0	3	130
Vehicles Entered	30	351	9	455	1	16	862
Vehicles Exited	28	329	9	454	1	7	828
Hourly Exit Rate	112	1316	36	1816	4	28	3312

23: Ramon & Date Palm Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	2.1	4.5	0.3	2.2	5.1	0.9	3.1	11.2	4.5	3.9	4.1	0.8
Delay / Veh (s)	130.0	79.5	15.8	97.1	55.2	52.8	137.6	236.6	205.8	186.8	91.9	41.6
Stop Delay (hr)	2.0	3.9	0.3	1.9	4.0	0.8	2.9	10.5	4.2	3.7	3.7	0.8
St Del/Veh (s)	120.6	69.4	14.5	85.3	42.8	43.7	130.9	220.7	191.9	176.1	84.3	39.8
Total Stops	82	193	53	105	305	66	97	382	177	143	183	56
Stop/Veh	1.39	0.95	0.79	1.31	0.92	1.06	1.20	2.23	2.27	1.88	1.14	0.81
Travel Dist (mi)	4.7	15.9	5.4	8.0	31.1	6.2	12.3	25.9	11.9	7.1	14.9	6.4
Travel Time (hr)	2.3	4.9	0.5	2.4	5.9	1.2	3.6	12.2	4.9	4.2	4.6	1.1
Avg Speed (mph)	2	3	10	3	5	5	5	3	3	2	4	12
Fuel Used (gal)	1.4	3.3	0.4	1.6	4.9	0.9	2.6	7.8	3.2	2.6	3.5	0.9
Fuel Eff. (mpg)	3.4	4.8	13.2	4.9	6.3	7.1	4.8	3.3	3.7	2.7	4.2	7.4
HC Emissions (g)	3	9	1	4	13	2	10	26	11	8	12	4
CO Emissions (g)	45	148	33	65	321	49	153	323	127	95	192	73
NOx Emissions (g)	7	21	3	9	39	6	16	38	14	13	24	5
Vehicles Entered	61	209	67	81	340	63	83	183	83	80	160	69
Vehicles Exited	58	199	67	77	327	61	81	160	73	72	159	68
Hourly Exit Rate	232	796	268	308	1308	244	324	640	292	288	636	272

23: Ramon & Date Palm Performance by movement

Movement	All
Total Delay (hr)	42.7
Delay / Veh (s)	106.8
Stop Delay (hr)	38.6
St Del/Veh (s)	96.5
Total Stops	1842
Stop/Veh	1.28
Travel Dist (mi)	149.7
Travel Time (hr)	47.7
Avg Speed (mph)	4
Fuel Used (gal)	33.2
Fuel Eff. (mpg)	4.5
HC Emissions (g)	104
CO Emissions (g)	1623
NOx Emissions (g)	195
Vehicles Entered	1479
Vehicles Exited	1402
Hourly Exit Rate	5608

24: Ramon & Cathedral Village Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.6	2.8	0.1	0.8	4.9	0.1	1.8	0.3	1.2	0.3	0.1	0.1
Delay / Veh (s)	69.2	28.6	20.1	70.0	38.9	22.7	184.9	206.0	111.5	74.5	68.5	35.9
Stop Delay (hr)	0.5	1.9	0.1	0.7	3.4	0.1	1.7	0.3	1.1	0.3	0.1	0.1
St Del/Veh (s)	61.8	19.9	14.7	59.2	27.2	17.5	180.0	199.2	108.7	71.0	64.9	34.8
Total Stops	40	216	17	60	372	12	62	10	63	18	6	13
Stop/Veh	1.33	0.62	0.77	1.40	0.83	0.67	1.77	2.00	1.66	1.12	1.20	1.08
Travel Dist (mi)	2.8	32.3	2.0	4.9	52.3	2.1	1.9	0.3	2.1	0.9	0.3	0.7
Travel Time (hr)	0.7	3.7	0.2	1.0	6.1	0.2	1.9	0.3	1.3	0.4	0.1	0.2
Avg Speed (mph)	4	10	11	5	10	12	1	1	3	3	3	4
Fuel Used (gal)	0.6	4.3	0.2	0.8	5.1	0.2	1.2	0.2	0.9	0.3	0.1	0.1
Fuel Eff. (mpg)	5.0	7.5	8.3	6.5	10.3	13.0	1.7	1.7	2.3	3.5	4.2	5.9
HC Emissions (g)	2	13	1	2	16	1	4	1	3	1	0	0
CO Emissions (g)	33	387	22	36	314	12	44	6	35	14	5	9
NOx Emissions (g)	5	43	2	5	33	1	7	1	5	2	1	1
Vehicles Entered	31	350	22	45	459	19	37	5	39	16	6	12
Vehicles Exited	30	350	22	42	441	18	33	5	37	15	5	11
Hourly Exit Rate	120	1400	88	168	1764	72	132	20	148	60	20	44

24: Ramon & Cathedral Village Performance by movement

Movement	All
Total Delay (hr)	13.1
Delay / Veh (s)	46.0
Stop Delay (hr)	10.4
St Del/Veh (s)	36.7
Total Stops	889
Stop/Veh	0.87
Travel Dist (mi)	102.7
Travel Time (hr)	16.0
Avg Speed (mph)	7
Fuel Used (gal)	13.8
Fuel Eff. (mpg)	7.4
HC Emissions (g)	44
CO Emissions (g)	917
NOx Emissions (g)	106
Vehicles Entered	1041
Vehicles Exited	1009
Hourly Exit Rate	4036

25: Ramon & San Eljay Ave. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.4	0.5	0.3	0.0	0.3	0.3	1.8
Delay / Veh (s)	77.9	4.3	2.5	0.2	492.7	46.5	7.0
Stop Delay (hr)	0.4	0.0	0.1	0.0	0.3	0.3	1.1
St Del/Veh (s)	72.6	0.3	0.7	0.0	491.1	46.4	4.2
Total Stops	20	2	15	0	3	24	64
Stop/Veh	1.05	0.01	0.03	0.00	1.50	1.04	0.07
Travel Dist (mi)	2.3	45.0	22.7	0.3	0.2	1.3	71.9
Travel Time (hr)	0.5	1.6	0.9	0.0	0.3	0.4	3.6
Avg Speed (mph)	5	29	27	20	1	4	20
Fuel Used (gal)	0.4	5.0	1.2	0.0	0.2	0.2	7.0
Fuel Eff. (mpg)	5.9	9.1	19.4	27.3	1.1	5.3	10.3
HC Emissions (g)	1	18	5	0	0	1	25
CO Emissions (g)	35	1013	191	1	7	17	1264
NOx Emissions (g)	4	79	13	0	1	2	99
Vehicles Entered	20	382	482	7	3	24	918
Vehicles Exited	18	381	480	7	1	22	909
Hourly Exit Rate	72	1524	1920	28	4	88	3636

26: Ramon & El Toro Rd. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.1	0.2	0.0	0.0	0.0	0.3
Delay / Veh (s)	29.7	0.7	1.5	0.1	118.2	12.0	1.4
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	27.8	0.1	0.2	0.0	117.7	11.9	0.4
Total Stops	2	0	5	0	1	6	14
Stop/Veh	1.00	0.00	0.01	0.00	1.00	1.00	0.02
Travel Dist (mi)	0.1	17.9	26.8	0.1	0.0	0.3	45.3
Travel Time (hr)	0.0	0.5	0.8	0.0	0.0	0.0	1.4
Avg Speed (mph)	5	38	33	22	1	9	33
Fuel Used (gal)	0.0	0.9	1.4	0.0	0.0	0.0	2.3
Fuel Eff. (mpg)	8.2	20.4	19.2	29.7	2.3	11.9	19.4
HC Emissions (g)	0	3	6	0	0	0	9
CO Emissions (g)	1	113	287	0	1	2	404
NOx Emissions (g)	0	10	17	0	0	0	27
Vehicles Entered	2	378	498	2	1	6	887
Vehicles Exited	2	378	497	2	1	6	886
Hourly Exit Rate	8	1512	1988	8	4	24	3544

27: Ramon & Victor Rd. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.1	0.1	0.0	0.0	0.0	0.3
Delay / Veh (s)	23.5	0.9	1.0	0.2	79.2	8.8	1.1
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	22.3	0.1	0.1	0.0	78.3	8.8	0.3
Total Stops	2	0	1	0	1	4	8
Stop/Veh	0.67	0.00	0.00	0.00	1.00	1.00	0.01
Travel Dist (mi)	0.1	20.6	26.2	0.1	0.1	0.2	47.4
Travel Time (hr)	0.0	0.6	0.7	0.0	0.0	0.0	1.4
Avg Speed (mph)	6	38	36	21	2	10	35
Fuel Used (gal)	0.0	0.9	1.4	0.0	0.0	0.0	2.3
Fuel Eff. (mpg)	8.8	23.2	18.9	15.6	3.5	13.4	20.3
HC Emissions (g)	0	3	6	0	0	0	8
CO Emissions (g)	1	96	293	2	1	1	394
NOx Emissions (g)	0	8	17	0	0	0	25
Vehicles Entered	3	382	496	3	1	4	889
Vehicles Exited	3	382	496	3	1	4	889
Hourly Exit Rate	12	1528	1984	12	4	16	3556

28: Ramon & Neuma Dr. Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Total Delay (hr)	0.0	0.1	0.4	0.0	0.0	0.0	0.5
Delay / Veh (s)	24.7	0.7	2.8	1.8	89.6	7.4	2.2
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1
St Del/Veh (s)	23.2	0.0	0.0	0.1	89.1	7.3	0.3
Total Stops	4	0	0	0	1	7	12
Stop/Veh	0.80	0.00	0.00	0.00	1.00	1.00	0.01
Travel Dist (mi)	0.3	20.1	62.2	0.5	0.0	0.3	83.4
Travel Time (hr)	0.0	0.5	1.8	0.0	0.0	0.0	2.5
Avg Speed (mph)	6	38	34	27	2	11	34
Fuel Used (gal)	0.0	0.8	4.7	0.0	0.0	0.0	5.7
Fuel Eff. (mpg)	9.4	25.0	13.1	13.1	2.6	13.5	14.7
HC Emissions (g)	0	2	17	0	0	0	19
CO Emissions (g)	1	85	912	7	1	2	1009
NOx Emissions (g)	0	7	70	1	0	0	78
Vehicles Entered	5	377	490	4	1	7	884
Vehicles Exited	5	377	489	4	1	7	883
Hourly Exit Rate	20	1508	1956	16	4	28	3532

29: Ramon & Via Campanile Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.2	0.7	0.0	0.1	2.4	0.0	0.2	0.0	0.1	0.1	4.0
Delay / Veh (s)	35.7	7.9	3.7	35.1	19.4	2.1	40.2	5.1	35.5	14.9	15.6
Stop Delay (hr)	0.2	0.4	0.0	0.1	0.8	0.0	0.2	0.0	0.1	0.1	1.9
St Del/Veh (s)	32.4	3.9	1.6	25.4	6.3	1.0	37.7	4.8	32.8	14.9	7.4
Total Stops	27	100	6	13	222	6	21	12	10	20	437
Stop/Veh	1.08	0.30	0.50	1.00	0.49	0.32	1.05	0.92	1.00	0.91	0.47
Travel Dist (mi)	1.3	18.0	0.7	2.5	90.9	3.9	0.9	0.6	0.6	1.2	120.7
Travel Time (hr)	0.3	1.2	0.0	0.2	4.3	0.1	0.3	0.1	0.1	0.2	6.7
Avg Speed (mph)	4	16	15	13	21	34	4	12	5	8	18
Fuel Used (gal)	0.2	1.7	0.0	0.2	4.8	0.2	0.2	0.0	0.1	0.1	7.6
Fuel Eff. (mpg)	6.5	10.5	13.7	15.7	18.8	19.4	4.9	13.1	5.8	9.1	15.8
HC Emissions (g)	1	5	0	1	16	1	1	0	0	0	25
CO Emissions (g)	9	232	3	11	446	48	9	4	7	14	783
NOx Emissions (g)	2	20	0	1	40	2	2	0	1	1	71
Vehicles Entered	25	337	12	13	456	19	20	13	10	22	927
Vehicles Exited	25	336	12	13	451	19	20	13	10	22	921
Hourly Exit Rate	100	1344	48	52	1804	76	80	52	40	88	3684

30: Ramon & Charter Hospital Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Total Delay (hr)	0.0	0.3	0.0	0.0	1.1	0.0	0.2	0.0	0.0	0.0	1.6
Delay / Veh (s)	19.7	3.2	1.9	17.0	8.3	6.3	73.4	7.6	59.8	6.6	6.9
Stop Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2
St Del/Veh (s)	16.6	0.1	0.1	9.3	0.1	0.1	72.1	7.9	58.2	6.7	1.0
Total Stops	3	0	0	4	1	0	8	1	1	5	23
Stop/Veh	0.75	0.00	0.00	0.67	0.00	0.00	1.00	1.00	1.00	1.00	0.03
Travel Dist (mi)	0.7	69.7	1.3	1.2	101.3	0.3	0.4	0.1	0.0	0.2	175.2
Travel Time (hr)	0.0	1.8	0.0	0.1	3.3	0.0	0.2	0.0	0.0	0.0	5.5
Avg Speed (mph)	18	39	33	20	31	31	2	12	2	9	32
Fuel Used (gal)	0.1	5.9	0.1	0.1	10.1	0.0	0.1	0.0	0.0	0.0	16.6
Fuel Eff. (mpg)	10.3	11.7	10.7	10.7	10.0	9.5	3.2	14.2	3.2	12.9	10.6
HC Emissions (g)	0	24	1	0	38	0	0	0	0	0	64
CO Emissions (g)	15	1576	41	19	2281	9	5	0	1	1	3949
NOx Emissions (g)	1	96	2	2	160	0	1	0	0	0	263
Vehicles Entered	4	349	7	6	475	1	9	1	1	5	858
Vehicles Exited	4	347	7	6	475	1	8	1	1	5	855
Hourly Exit Rate	16	1388	28	24	1900	4	32	4	4	20	3420

32: Ramon & Da Vall Dr. Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (hr)	0.3	3.0	0.3	1.5	5.2	0.6	2.6	1.8	0.6	2.3	3.8	0.8
Delay / Veh (s)	72.3	34.6	27.5	150.9	46.7	35.0	150.4	104.6	50.4	154.4	179.4	174.0
Stop Delay (hr)	0.2	2.0	0.2	1.4	4.0	0.5	2.5	1.7	0.6	2.3	3.7	0.8
St Del/Veh (s)	64.2	23.2	20.6	142.9	35.5	28.9	144.6	99.0	49.9	150.7	172.3	169.2
Total Stops	17	233	35	77	354	55	96	71	35	57	92	21
Stop/Veh	1.21	0.75	0.81	2.14	0.88	0.90	1.55	1.13	0.88	1.06	1.19	1.24
Travel Dist (mi)	2.9	63.6	8.8	2.6	29.3	4.5	3.3	3.4	2.2	2.8	4.0	0.9
Travel Time (hr)	0.4	4.3	0.6	1.6	5.9	0.8	2.7	2.0	0.7	2.4	4.0	0.9
Avg Speed (mph)	8	15	15	2	5	6	2	3	10	2	2	2
Fuel Used (gal)	0.3	3.8	0.5	1.0	4.4	0.5	1.8	1.4	0.5	1.5	2.5	0.5
Fuel Eff. (mpg)	11.3	16.9	17.3	2.7	6.7	8.2	1.9	2.5	4.5	1.8	1.6	1.7
HC Emissions (g)	1	12	2	3	11	1	6	5	2	7	10	2
CO Emissions (g)	16	253	45	38	181	20	61	58	27	54	77	16
NOx Emissions (g)	2	27	4	6	26	3	9	8	2	7	10	2
Vehicles Entered	15	312	43	38	405	62	64	65	40	55	78	17
Vehicles Exited	14	310	43	34	401	61	61	63	40	54	76	17
Hourly Exit Rate	56	1240	172	136	1604	244	244	252	160	216	304	68

32: Ramon & Da Vall Dr. Performance by movement

Movement	All
Total Delay (hr)	22.9
Delay / Veh (s)	69.5
Stop Delay (hr)	19.9
St Del/Veh (s)	60.5
Total Stops	1143
Stop/Veh	0.97
Travel Dist (mi)	128.2
Travel Time (hr)	26.2
Avg Speed (mph)	6
Fuel Used (gal)	18.6
Fuel Eff. (mpg)	6.9
HC Emissions (g)	62
CO Emissions (g)	846
NOx Emissions (g)	104
Vehicles Entered	1194
Vehicles Exited	1174
Hourly Exit Rate	4696

33: Ramon & Performance by movement

Movement	EBL	EBT	WBT	WBR	SBR	All
Total Delay (hr)	0.1	0.4	0.5	0.0	0.1	1.0
Delay / Veh (s)	21.1	3.7	3.8	1.9	15.6	4.2
Stop Delay (hr)	0.1	0.0	0.0	0.0	0.1	0.2
St Del/Veh (s)	18.3	0.3	0.1	0.1	15.2	0.7
Total Stops	9	6	1	0	19	35
Stop/Veh	0.82	0.02	0.00	0.00	1.00	0.04
Travel Dist (mi)	1.4	48.0	26.4	0.9	1.9	78.6
Travel Time (hr)	0.1	1.5	1.1	0.1	0.2	3.0
Avg Speed (mph)	13	33	23	18	12	27
Fuel Used (gal)	0.1	1.7	3.4	0.1	0.2	5.4
Fuel Eff. (mpg)	16.5	28.4	7.9	12.1	12.4	14.6
HC Emissions (g)	0	6	11	0	0	18
CO Emissions (g)	5	141	603	7	17	774
NOx Emissions (g)	1	12	52	1	1	68
Vehicles Entered	11	374	472	16	19	892
Vehicles Exited	11	374	472	16	19	892
Hourly Exit Rate	44	1496	1888	64	76	3568

Total Network Performance

Total Delay (hr)	192.9
Delay / Veh (s)	211.8
Stop Delay (hr)	161.1
St Del/Veh (s)	176.9
Total Stops	8549
Stop/Veh	2.61
Travel Dist (mi)	2286.9
Travel Time (hr)	257.8
Avg Speed (mph)	11
Fuel Used (gal)	270.2
Fuel Eff. (mpg)	8.5
HC Emissions (g)	983
CO Emissions (g)	32511
NOx Emissions (g)	2580
Vehicles Entered	3455
Vehicles Exited	3101
Hourly Exit Rate	12404

Arterial Level of Service: EB Ramon

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	237.2	242.2	0.1	8
	13.9	20.6	0.1	13
Candlewood	1.6	13.1	0.1	35
Shift Sands	1.3	6.5	0.1	32
Wh. Palms	13.8	19.6	0.1	12
Roundup	7.9	17.2	0.1	21
Cathedral Canyon	114.8	127.7	0.1	4
Ximino	6.4	15.8	0.1	23
Cyn Vista	1.1	6.5	0.1	32
Yermo	8.6	20.1	0.1	23
Desert Vista	3.4	5.2	0.0	15
Rancho Vista	45.3	56.3	0.1	8
Date Palm	79.6	86.8	0.1	4
	32.5	40.2	0.1	11
San Eljay Ave.	4.8	14.5	0.1	30
El Toro Rd.	0.7	4.6	0.0	38
Victor Rd.	0.9	5.3	0.1	38
Neuma Dr.	0.7	5.1	0.1	38
	3.7	14.2	0.1	33
Outdoor Resorts	7.9	12.3	0.1	16
Desert Shadows	3.4	18.4	0.2	40
	34.5	49.8	0.2	15
	4.1	9.7	0.1	28
Total	628.2	811.6	2.2	14

Arterial Level of Service: WB Ramon

Cross Street	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	11.7	15.4	0.0	12
Da Vall Dr.	46.7	52.7	0.1	5
Charter Hospital	9.7	25.5	0.2	30
Via Campanile	19.4	34.3	0.2	21
	4.0	8.6	0.1	23
Neuma Dr.	2.8	13.3	0.1	35
Victor Rd.	1.0	5.3	0.1	36
El Toro Rd.	1.5	5.9	0.1	34
San Eljay Ave.	2.5	6.4	0.0	27
Cathedral Village	39.2	48.8	0.1	10
Date Palm	55.5	63.2	0.1	6
	4.0	11.8	0.1	27
Desert Vista	4.2	14.8	0.1	29
Yermo	0.9	2.9	0.0	26
Alvera	14.6	26.0	0.1	18
Ximino	15.0	20.2	0.1	10
Maravilla	52.7	61.4	0.1	6
Roundup	5.9	19.1	0.1	27
Wh. Palms	22.8	31.7	0.1	12
Shift Sands	3.3	9.2	0.1	26
Candlewood	1.6	6.9	0.1	30
Landau	53.0	63.7	0.1	8
	3.6	10.6	0.1	25
Total	375.7	557.9	2.2	14

Intersection: 1: Ramon & Landau

Movement	EB	EB	EB	B10	B10	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	TR	T	T	L	T	T	R	L	TR	L
Maximum Queue (ft)	156	387	368	279	273	37	563	570	357	36	54	223
Average Queue (ft)	150	382	236	271	193	10	429	434	145	11	23	183
95th Queue (ft)	158	392	448	282	364	42	622	634	373	37	59	252
Link Distance (ft)		312	312	255	255		588	588	588	602	602	
Upstream Blk Time (%)		56	5	47	6		2	2	0			
Queuing Penalty (veh)		0	0	0	0		11	13	1			
Storage Bay Dist (ft)	125					125						200
Storage Blk Time (%)	58	1					45					14
Queuing Penalty (veh)	446	10					5					30

Intersection: 1: Ramon & Landau

Movement	SB	SB
Directions Served	LT	R
Maximum Queue (ft)	388	451
Average Queue (ft)	248	288
95th Queue (ft)	472	483
Link Distance (ft)	756	756
Upstream Blk Time (%)	0	0
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)	19	
Queuing Penalty (veh)	38	

Intersection: 2: Ramon & Candlewood

Movement	EB	WB	WB	WB	WB	NB
Directions Served	TR	L	T	T	T	R
Maximum Queue (ft)	1	60	54	54	12	52
Average Queue (ft)	0	30	11	11	2	30
95th Queue (ft)	4	66	69	71	26	57
Link Distance (ft)	588		243	243	243	232
Upstream Blk Time (%)				0		
Queuing Penalty (veh)				0		
Storage Bay Dist (ft)		60				
Storage Blk Time (%)		1	1			
Queuing Penalty (veh)		9	0			

Intersection: 4: Ramon & Shift Sands

Movement	EB	EB	WB	NB
Directions Served	T	TR	T	R
Maximum Queue (ft)	1	2	0	71
Average Queue (ft)	0	0	0	40
95th Queue (ft)	3	5	3	75
Link Distance (ft)	243	243	287	240
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Ramon & Wh. Palms

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	TR	L	TR
Maximum Queue (ft)	148	226	198	187	165	381	395	351	105	280	99	150
Average Queue (ft)	89	144	131	122	91	248	267	228	88	157	67	76
95th Queue (ft)	154	237	208	198	175	408	421	376	121	341	108	157
Link Distance (ft)		287	287	287		470	470	470		451		385
Upstream Blk Time (%)		0		0		0	0	0		2		
Queuing Penalty (veh)		1		0		1	1	0		0		
Storage Bay Dist (ft)	150				150				75		75	
Storage Blk Time (%)	1	4			1	13			35	18	13	8
Queuing Penalty (veh)	5	9			6	23			65	31	18	8

Intersection: 8: Ramon & Roundup

Movement	EB	EB	EB	WB	WB	WB	WB	NB
Directions Served	T	T	TR	L	T	T	T	R
Maximum Queue (ft)	149	114	92	66	33	18	4	40
Average Queue (ft)	45	27	20	31	5	2	0	16
95th Queue (ft)	194	148	121	72	57	35	17	45
Link Distance (ft)	470	470	470		679	679	679	241
Upstream Blk Time (%)	0	0	0					
Queuing Penalty (veh)	2	1	1					
Storage Bay Dist (ft)				60				
Storage Blk Time (%)				2	0			
Queuing Penalty (veh)				16	0			

Intersection: 11: Ramon & Maravilla

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	TR	L	T	T	TR	L	LT	R	LT
Maximum Queue (ft)	144	670	654	626	206	511	493	466	310	851	703	801
Average Queue (ft)	82	577	536	507	198	468	402	352	296	769	360	641
95th Queue (ft)	169	765	746	725	216	535	552	520	325	1018	774	965
Link Distance (ft)		679	679	679		448	448	448		835	835	810
Upstream Blk Time (%)		11	6	5		52	12	5		32	4	22
Queuing Penalty (veh)		67	35	30		354	84	32		0	0	0
Storage Bay Dist (ft)	120				175				280			
Storage Blk Time (%)	5	65			68	16			47	54		75
Queuing Penalty (veh)	23	100			321	71			225	173		98

Intersection: 11: Ramon & Maravilla

Movement	SB
Directions Served	R
Maximum Queue (ft)	200
Average Queue (ft)	110
95th Queue (ft)	235
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	175
Storage Blk Time (%)	1
Queuing Penalty (veh)	4

Intersection: 13: Ramon & Ximino

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	T	TR	L	R
Maximum Queue (ft)	146	159	122	56	269	263	202	236	78
Average Queue (ft)	84	36	24	10	203	126	62	146	33
95th Queue (ft)	167	222	180	116	349	309	217	283	108
Link Distance (ft)		448	448	448	244	244	244	309	309
Upstream Blk Time (%)		2	1	0	32	6	2	7	1
Queuing Penalty (veh)		13	8	1	228	40	11	0	0
Storage Bay Dist (ft)	150								
Storage Blk Time (%)	10								
Queuing Penalty (veh)	64								

Intersection: 14: Ramon & Alvera

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	T	T	TR	L	T	T	TR	R	R
Maximum Queue (ft)	5	2	5	84	503	416	242	59	49
Average Queue (ft)	0	0	1	55	229	144	53	34	21
95th Queue (ft)	11	4	8	97	596	470	265	65	54
Link Distance (ft)	244	244	244		617	617	617	222	305
Upstream Blk Time (%)					4	1	0		
Queuing Penalty (veh)					31	4	0		
Storage Bay Dist (ft)				60					
Storage Blk Time (%)				11	28				
Queuing Penalty (veh)				76	30				

Intersection: 18: Ramon & Yermo

Movement	EB	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	T	TR	R
Maximum Queue (ft)	107	306	230	141	25	11	6	82
Average Queue (ft)	56	121	80	35	6	1	1	47
95th Queue (ft)	113	339	248	145	32	16	9	88
Link Distance (ft)		617	617	617	53	53	53	299
Upstream Blk Time (%)		0	0		3	1	0	0
Queuing Penalty (veh)		1	0		25	4	1	0
Storage Bay Dist (ft)	100							
Storage Blk Time (%)	2	10						
Queuing Penalty (veh)	15	14						

Intersection: 19: Ramon & Desert Vista

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	T	T	TR	L	T	T	T	L	R
Maximum Queue (ft)	71	80	63	89	174	132	102	41	56
Average Queue (ft)	50	51	35	44	54	36	31	19	30
95th Queue (ft)	84	90	74	92	189	144	109	49	58
Link Distance (ft)	53	53	53		568	568	568	504	504
Upstream Blk Time (%)	17	11	4		0				
Queuing Penalty (veh)	116	74	31		2				
Storage Bay Dist (ft)				135					
Storage Blk Time (%)					2				
Queuing Penalty (veh)					2				

Intersection: 22: Ramon &

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	T	T	TR	T	T	T	T	R
Maximum Queue (ft)	148	560	526	433	8	6	2	29	220
Average Queue (ft)	87	382	316	174	1	1	0	8	124
95th Queue (ft)	166	698	643	524	27	20	15	65	266
Link Distance (ft)		568	568	568	352	352	352	248	248
Upstream Blk Time (%)		10	4	1	0			1	18
Queuing Penalty (veh)		69	24	7	0			0	0
Storage Bay Dist (ft)	125								
Storage Blk Time (%)	3	44							
Queuing Penalty (veh)	19	76							

Intersection: 23: Ramon & Date Palm

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	T	T	TR	L	L	T	T
Maximum Queue (ft)	166	410	401	238	266	503	506	487	187	803	817	819
Average Queue (ft)	156	377	364	108	244	440	406	390	118	587	712	728
95th Queue (ft)	183	427	427	243	308	557	556	540	206	1014	949	956
Link Distance (ft)		352	352	352		447	447	447		800	800	800
Upstream Blk Time (%)		56	43	0		22	7	8		5	15	24
Queuing Penalty (veh)		351	268	2		159	55	61		0	0	0
Storage Bay Dist (ft)	135				235				235			
Storage Blk Time (%)	60	44			30	24			0	1		64
Queuing Penalty (veh)	330	157			126	95			1	1		245

Intersection: 23: Ramon & Date Palm

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (ft)	154	232	506	496	196
Average Queue (ft)	134	224	451	395	102
95th Queue (ft)	180	243	587	582	202
Link Distance (ft)			492	492	492
Upstream Blk Time (%)			25	4	0
Queuing Penalty (veh)			0	0	0
Storage Bay Dist (ft)	120	200			
Storage Blk Time (%)	24	65	17		
Queuing Penalty (veh)	103	224	59		

Intersection: 24: Ramon & Cathedral Village

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	TR	L	LT	R	L
Maximum Queue (ft)	166	460	462	111	214	535	495	402	101	288	107	92
Average Queue (ft)	103	334	332	42	141	380	310	233	63	210	81	57
95th Queue (ft)	180	523	529	118	252	607	544	422	121	365	133	105
Link Distance (ft)		447	447			545	545	545		276		
Upstream Blk Time (%)		4	5			6	0	0		31		
Queuing Penalty (veh)		33	42			40	3	1		0		
Storage Bay Dist (ft)	150			100	190				75		75	75
Storage Blk Time (%)	3	21	27	0	2	34			14	54	14	16
Queuing Penalty (veh)	25	37	33	1	14	67			42	144	28	11

Intersection: 24: Ramon & Cathedral Village

Movement	SB
Directions Served	TR
Maximum Queue (ft)	132
Average Queue (ft)	64
95th Queue (ft)	150
Link Distance (ft)	298
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	10
Queuing Penalty (veh)	6

Intersection: 25: Ramon & San Eljay Ave.

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	TR	L	R
Maximum Queue (ft)	125	54	44	120	75	18	65	125
Average Queue (ft)	72	10	8	29	14	3	30	66
95th Queue (ft)	143	115	102	130	84	35	82	153
Link Distance (ft)		545	545	183	183	183	290	290
Upstream Blk Time (%)		0	0	2	0	0		1
Queuing Penalty (veh)		2	1	14	1	0		0
Storage Bay Dist (ft)	150							
Storage Blk Time (%)	4							
Queuing Penalty (veh)	38							

Intersection: 26: Ramon & El Toro Rd.

Movement	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	TR	L	R
Maximum Queue (ft)	31	61	33	9	20	41
Average Queue (ft)	8	10	5	1	6	19
95th Queue (ft)	32	76	51	20	27	46
Link Distance (ft)		220	220	220	291	291
Upstream Blk Time (%)		0	0	0		
Queuing Penalty (veh)		3	0	0		
Storage Bay Dist (ft)	75					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 27: Ramon & Victor Rd.

Movement	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	TR	L	R
Maximum Queue (ft)	31	14	7	1	20	35
Average Queue (ft)	9	2	0	0	5	13
95th Queue (ft)	35	27	16	6	23	39
Link Distance (ft)		213	213	213	283	283
Upstream Blk Time (%)		0				
Queuing Penalty (veh)		0				
Storage Bay Dist (ft)	75					
Storage Blk Time (%)	0					
Queuing Penalty (veh)	1					

Intersection: 28: Ramon & Neuma Dr.

Movement	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	TR	L	R
Maximum Queue (ft)	42	2	1	1	20	40
Average Queue (ft)	16	0	0	0	5	20
95th Queue (ft)	45	9	6	3	25	48
Link Distance (ft)		618	618		273	273
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	75			75		
Storage Blk Time (%)	0					
Queuing Penalty (veh)	1					

Intersection: 29: Ramon & Via Campanile

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	R	L	TR	L
Maximum Queue (ft)	120	218	210	131	51	104	386	397	40	74	69	55
Average Queue (ft)	68	114	106	66	15	42	236	242	17	48	28	27
95th Queue (ft)	126	229	215	146	52	104	408	422	49	83	81	59
Link Distance (ft)		227	227				998	998	998		242	
Upstream Blk Time (%)		1	1									
Queuing Penalty (veh)		13	9									
Storage Bay Dist (ft)	125			100	100	150				50		50
Storage Blk Time (%)	1	4	5	2	0		11			19	0	4
Queuing Penalty (veh)	7	6	31	10	0		6			10	0	3

Intersection: 29: Ramon & Via Campanile

Movement	SB
Directions Served	TR
Maximum Queue (ft)	67
Average Queue (ft)	34
95th Queue (ft)	72
Link Distance (ft)	288
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	3
Queuing Penalty (veh)	1

Intersection: 30: Ramon & Charter Hospital

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	R	L	T	L	TR	L	TR
Maximum Queue (ft)	32	0	38	0	59	20	21	36
Average Queue (ft)	10	0	14	0	30	4	5	14
95th Queue (ft)	34	2	41	2	68	20	22	40
Link Distance (ft)				1054		232		197
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100	100	100		60		60	
Storage Blk Time (%)					6			0
Queuing Penalty (veh)					0			0

Intersection: 32: Ramon & Da Vall Dr.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	B5	B5	B5	NB
Directions Served	L	T	T	TR	L	T	T	TR	T	T	T	L
Maximum Queue (ft)	146	353	350	334	267	390	387	385	159	154	136	250
Average Queue (ft)	63	248	242	232	196	361	349	324	98	87	60	222
95th Queue (ft)	153	380	373	361	324	444	444	444	214	207	176	291
Link Distance (ft)		1054	1054	1054		315	315	315	149	149	149	
Upstream Blk Time (%)						31	24	18	13	8	4	
Queuing Penalty (veh)						0	0	0	0	0	0	
Storage Bay Dist (ft)	200				250							220
Storage Blk Time (%)	0	15			13	30						36
Queuing Penalty (veh)	2	10			75	46						99

Intersection: 32: Ramon & Da Vall Dr.

Movement	NB	NB	SB	SB
Directions Served	T	R	L	TR
Maximum Queue (ft)	298	116	253	296
Average Queue (ft)	255	63	176	282
95th Queue (ft)	364	130	282	327
Link Distance (ft)	280	280	273	273
Upstream Blk Time (%)	29	0	5	61
Queuing Penalty (veh)	0	0	0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)	10			
Queuing Penalty (veh)	29			

Intersection: 33: Ramon &

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	R
Maximum Queue (ft)	64	63	50	1	5	72
Average Queue (ft)	29	11	9	0	1	41
95th Queue (ft)	68	69	64	4	8	76
Link Distance (ft)		618	618	227	227	511
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	150					
Storage Blk Time (%)	0	0				
Queuing Penalty (veh)	0	0				

Network Summary

Network wide Queuing Penalty: 6537

Intersection: 1: Ramon & Landau

Phase	1	2	4	5	6	8
Movement(s) Served	WBL	EBT	SBTL	EBL	WBT	NBTL
Maximum Green (s)	4.0	104.5	16.5	53.0	55.0	6.0
Minimum Green (s)	4.0	10.0	4.0	4.0	10.0	4.0
Recall	None	Min	None	None	Min	None
Avg. Green (s)	6.6	117.8	17.3	50.9	52.5	7.0
g/C Ratio	0.01	0.78	0.11	0.34	0.35	0.03
Cycles Skipped (%)	75	0	0	0	0	40
Cycles @ Minimum (%)	25	0	0	0	0	0
Cycles Maxed Out (%)	25	60	100	83	67	40
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 151.1

Number of Complete Cycles : 5

Intersection: 6: Ramon & Wh. Palms

Phase	1	2	4	5	6	8
Movement(s) Served	WBL	EBT	SBTL	EBL	WBT	NBTL
Maximum Green (s)	8.0	25.5	11.0	8.0	25.5	11.0
Minimum Green (s)	3.0	10.0	4.0	3.0	10.0	4.0
Recall	None	Min	None	None	Min	None
Avg. Green (s)	9.2	26.1	11.3	8.7	24.8	11.3
g/C Ratio	0.11	0.43	0.19	0.13	0.41	0.19
Cycles Skipped (%)	27	0	0	13	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	53	60	93	60	67	93
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 60.1

Number of Complete Cycles : 14

Intersection: 11: Ramon & Maravilla

Phase	1	2	3	4	5	6
Movement(s) Served	WBL	EBT	SBTL	NBTL	EBL	WBT
Maximum Green (s)	27.0	41.0	20.0	27.0	16.0	52.0
Minimum Green (s)	4.0	10.0	4.0	4.0	4.0	10.0
Recall	None	Min	None	None	None	Min
Avg. Green (s)	31.4	46.2	23.5	31.9	27.0	56.2
g/C Ratio	0.21	0.31	0.16	0.21	0.18	0.38
Cycles Skipped (%)	0	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0
Cycles Maxed Out (%)	100	100	100	100	100	60
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 149.7

Number of Complete Cycles : 5

Intersection: 19: Ramon & Desert Vista

Phase	1	2	4	6
Movement(s) Served	WBL	EBT	NBL	WBT
Maximum Green (s)	6.0	20.0	8.0	30.0
Minimum Green (s)	6.0	8.0	8.0	8.0
Recall	None	Min	None	Min
Avg. Green (s)	6.3	51.8	8.0	104.5
g/C Ratio	0.06	0.70	0.06	0.84
Cycles Skipped (%)	25	0	42	40
Cycles @ Minimum (%)	75	0	58	0
Cycles Maxed Out (%)	75	75	58	30
Cycles with Peds (%)	0	0	0	0

Controller Summary

Average Cycle Length (s): 74.2

Number of Complete Cycles : 11

Intersection: 23: Ramon & Date Palm

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	EBL	WBT	SBL	NBT	WBL	EBT	NBL	SBT
Maximum Green (s)	23.0	37.5	22.0	26.5	25.0	35.5	18.0	30.5
Minimum Green (s)	4.0	10.0	4.0	10.0	4.0	10.0	4.0	10.0
Recall	None	None	None	Min	None	None	None	Min
Avg. Green (s)	23.2	42.3	25.1	29.9	27.8	38.6	22.2	32.9
g/C Ratio	0.15	0.27	0.16	0.19	0.18	0.25	0.14	0.21
Cycles Skipped (%)	0	0	0	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	0	0	0	0
Cycles Maxed Out (%)	50	100	100	100	100	100	100	83
Cycles with Peds (%)	0	0	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 155.0

Number of Complete Cycles : 5

Intersection: 24: Ramon & Cathedral Village

Phase	1	2	5	6	7	8
Movement(s) Served	WBL	EBT	EBL	WBT	SBTL	NBTL
Maximum Green (s)	11.0	46.5	12.0	45.5	6.0	6.0
Minimum Green (s)	4.0	7.5	4.0	7.5	6.0	6.0
Recall	None	Min	None	Min	None	None
Avg. Green (s)	14.8	46.7	9.8	51.6	6.4	6.1
g/C Ratio	0.17	0.52	0.11	0.57	0.07	0.07
Cycles Skipped (%)	0	0	0	0	0	0
Cycles @ Minimum (%)	0	0	0	0	100	100
Cycles Maxed Out (%)	78	67	33	100	100	100
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 89.8

Number of Complete Cycles : 9

Intersection: 29: Ramon & Via Campanile

Phase	1	2	4	5	6	8
Movement(s) Served	WBL	EBT	NBTL	EBL	WBT	SBTL
Maximum Green (s)	5.0	34.5	4.0	6.0	33.5	4.0
Minimum Green (s)	4.0	10.0	4.0	4.0	10.0	4.0
Recall	None	Min	None	None	Min	None
Avg. Green (s)	13.8	33.9	4.1	6.1	34.5	4.1
g/C Ratio	0.11	0.60	0.06	0.08	0.61	0.05
Cycles Skipped (%)	53	0	20	21	0	27
Cycles @ Minimum (%)	0	0	80	0	0	73
Cycles Maxed Out (%)	47	27	80	57	60	73
Cycles with Peds (%)	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 56.6

Number of Complete Cycles : 15

Intersection: 32: Ramon & Da Vall Dr.

Phase	1	2	3	4	5	6	7	8
Movement(s) Served	WBL	EBT	NBL	SBT	EBL	WBT	SBL	NBT
Maximum Green (s)	7.1	34.5	13.9	21.5	5.0	36.6	18.2	17.2
Minimum Green (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Recall	None	Min	None	None	None	Min	None	None
Avg. Green (s)	7.9	35.6	15.5	24.1	5.7	40.2	16.8	22.9
g/C Ratio	0.08	0.36	0.16	0.24	0.05	0.41	0.17	0.23
Cycles Skipped (%)	0	0	0	0	14	0	0	0
Cycles @ Minimum (%)	0	0	0	0	86	0	0	0
Cycles Maxed Out (%)	100	88	100	100	86	100	50	100
Cycles with Peds (%)	0	0	0	0	0	0	0	0

Controller Summary

Average Cycle Length (s): 99.2

Number of Complete Cycles : 8

APPENDIX D: VOLUME WORKSHEETS

Future scenario volumes were projected using background growth factors, future development projects, and Riverside County and Cathedral City general plan buildout estimates.

D.1 MEDIUM TERM

Medium term volumes were calculated using a 10% background growth factor for existing volumes. In addition, project volumes from thirty future developments were included to estimate medium conditions.



Table D-1 Cumulative Projects Trips

INTERSECTION	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Ramon/Landau				33				133			165	27
Ramon/Candlewood			3					166		5	192	
Ramon/La Paloma								169			197	3
Ramon/Shifting Sands			3					169			200	
Ramon/La Gaviota								172			200	3
Ramon/Whispering Palms	8	2	7	13	4			157	15	18	195	5
Ramon/Sky Blue Water			3					177			218	3
Ramon/Roundup			3					180		5	221	
Ramon/El Mundo								183			226	3
Ramon/El Pueblo								183			229	3
Ramon/Maravilla-Cathedral Canyon	42	14	91	33	3			175	8	48	190	5
Ramon/Valdez								299			243	0
Ramon/Ximino				16				299			243	3
Ramon/Alvera-Canyon Vista			3					315		5	246	3
Ramon/Monte Vista			3					318			254	
Ramon/Juarez								321			254	3
Ramon/Aurora Vista			3					321			257	
Ramon/Del Yermo								324			257	5
Ramon/Desert Vista			7					324		13	262	
Ramon/Cielo Vista			3					331			275	
Ramon/Los Ninos								334			275	3
Ramon/Rancho Vista			3					334			278	
Ramon/Date Palm*	71	71	217	107	67	21	24	246	67	164	186	86
Ramon/Cathedral Village							1	567	2	3	355	1
Ramon/San Eljay							3	564			359	4
Ramon/El Toro							2	562			363	2
Ramon/Victor							2	560			365	2
Ramon/Nuema							3	557			367	5
Ramon/Outdoor Resort-Campanile						50	99	450	8	10	293	60
Ramon/Desert Shadow							1	449			404	2
Ramon/Da Vall				79				449			406	

Table D-2 Year 2009 Agua Caliente Casino Trips

INTERSECTION	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
Ramon/Landau								24			11	
Ramon/Candlewood								24			11	
Ramon/La Paloma								24			11	
Ramon/Shifting Sands								24			11	
Ramon/La Gaviota								24			11	
Ramon/Whispering Palms			4	8				24		2	11	2
Ramon/Sky Blue Water								36			15	
Ramon/Roundup								36			15	
Ramon/El Mundo								36			15	
Ramon/El Pueblo								36			15	
Ramon/Maravilla-Cathedral Canyon			8	16				36		4	15	4
Ramon/Valdez								60			23	
Ramon/Ximino				8				60			23	1
Ramon/Alvera-Canyon Vista								68			24	
Ramon/Monte Vista								68			24	
Ramon/Juarez								68			24	
Ramon/Aurora Vista								68			24	
Ramon/Del Yermo								68			24	
Ramon/Desert Vista								68			24	
Ramon/Cielo Vista								68			24	
Ramon/Los Ninos								68			24	
Ramon/Rancho Vista								68			24	
Ramon/Date Palm*			29	19				68		10	24	7
Ramon/Cathedral Village								116			41	
Ramon/San Eljay								116			41	
Ramon/El Toro								116			41	
Ramon/Victor								116			41	
Ramon/Nuema								116			41	
Ramon/Outdoor Resort-Campanile								116			41	
Ramon/Desert Shadow								116			41	
Ramon/Da Vall								116			41	

D.2 LONG TERM

Long term volumes were projected using Cathedral City build-out model plots in conjunction with the ACCE TIA and Riverside County build-out model. The following pages detail growth rates and projections of turning movements based on approach and departure volumes of intersection legs.

Worksheets are provided to detail Year 2030 projections based on Riverside County and Cathedral City build-out conditions. In addition, a minimum 15% growth rate was applied to existing turning movement counts if projections indicated little or no growth. With the expected rise in population, vehicle volumes are likely to rise as well.

A growth factor of 15% was applied to side street turning movement counts between Landau and Date Palm. Build-out projections indicated a low growth rate for this area, as a majority of parcels have been developed by 2007. However, a growth factor of 35% was applied to side street turning movement counts between Date Palm and Landau. In existing conditions, a majority of parcels may still be developed, and it is assumed side street traffic east of Date Palm will grow linearly with the city population.

Table D-3 and **Table D-4** describe the contents and calculations for cells. **Table D-5** through **Table D-12** illustrate volume projections for Ramon and Landau, Ramon and Cathedral Canyon, Ramon and Date Palm, and Ramon and Da Vall.



Table D-3 Year 2030 Growth Estimation – Description

RAMON AND LANDAU	LEG	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
2006		AM	PM	AM	PM	AM	PM	AM	PM
Pk Hr Counts	Approach	(1) Data collected by Advantec							
	Departure								
CVAG Pk Hr	Approach	(2) Peak Hour link volumes collected by CVAG							
	Departure								
ADT	2-way	(3) ADT volumes collected by CVAG, or estimated ADT using equation: ADT = (1) * () / ()							
	Approach								
	Departure								
Buildout		AM	PM	AM	PM	AM	PM	AM	PM
Gen Plan ADT	2-way	(4) Two way build-out ADT from Cathedral City General Plan							
RCTC Peak Hr	Approach	(5) Peak hour projections from RCTC build-out model							
	Departure								
RCTC ADT	2-WAY	(6) ADT volumes from RCTC build-out model							
	Approach								
	Departure								
Avg Pk Hr Growth	Approach	(7) = (5) / Average[(1),(2)]							
	Departure								
Gen Plan ADT Growth	2-WAY	(8) = (4) / (3)							
RCIP ADT Growth	2-WAY	(9) = (6) / (3)							
	Approach								
	Departure								
Projected Growth		AM	PM	AM	PM	AM	PM	AM	PM
Peak Hr	Approach	(10) = Max[1.15,(7)]							
	Departure								
ADT	Approach	(11) = Max[1.15,Average[(8),(9)]							
	Departure								



Table D-4 Year 2030 Traffic Projection – Description

RAMON AND LANDAU			Buildout AM				Buildout PM					
Movement	2006		PK HR		ADT		PK HR		ADT			
	AM	PM	Approach	Departure	Approach	Departure	Approach	Departure	Approach	Departure	AM	PM
NBL	(1) Data collected by Advantec		(12) = (1) * (10) of specific approach leg	(13) = (1) * (10) of specific departure leg	(14) = (1) * (11) of specific approach leg	(15) = (1) * (11) of specific departure leg	(16) = (1) * (10) of specific approach leg	(17) = (1) * (10) of specific departure leg	(18) = (1) * (11) of specific approach leg	(19) = (1) * (11) of specific departure leg	Average of (12),(13), (14),(15)	Average of (16),(17, (18)(19)
NBT												
NBR												
SBL												
SBT												
SBR												
EBL												
EBT												
EBR												
WBL												
WBT												
WBR												
SUM												

Leg	Direction	2006	2030	2-Way
North Leg	NB	(3) Data collected by CVAG	(20) = (3)*(11)	Sum of both directions in (20)
	SB			
South Leg	NB			
	SB			
East Leg	EB			
	WB			
West Leg	EB			
	WB			



Table D-5 Year 2030 Growth Estimation – Ramon and Landau

RAMON AND LANDAU	LEG	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
2006		AM	PM	AM	PM	AM	PM	AM	PM
Pk Hr Counts	Approach	888	727	0	0	1137	1355	789	1648
	Departure	484	911	0	0	906	1416	1424	1403
CVAG Pk Hr	Approach							1091	1650
	Departure							1785	1702
CVAG ADT	2-way	18495				39062		43473	
	Approach	10000				19942		20490	
	Departure	8495				19121		22983	
Buildout		AM	PM	AM	PM	AM	PM	AM	PM
Gen Plan ADT	2-way	12300				47100		59100	
RCTC Pk Hr	Approach	475	817			1560	1814	2047	2237
	Departure	629	849			1521	1515	1932	2504
RCTC ADT	2-WAY	17000				52000		66000	
	Approach	8000				27000		32000	
	Departure	9000				25000		34000	
Avg Pk Hr Growth	Approach	0.535	1.124			1.372	1.339	2.178	1.357
	Departure	1.300	0.932			1.679	1.070	1.204	1.613
Gen Plan ADT Growth	2-WAY	0.665				1.206		1.359	
RCIP ADT Growth	2-WAY	0.919				1.331		1.518	
	Approach	0.800				1.354		1.562	
	Departure	1.059				1.307		1.479	
Projected Growth									
Pk Hr	Approach	1.150	1.124	1.150		1.372	1.339	2.178	1.357
	Departure	1.300	1.150	1.050		1.679	1.150	1.204	1.613
ADT	Approach	1.150				1.297		1.480	
	Departure	1.150				1.281		1.452	



Table D-6 Year 2030 Traffic Projection – Ramon and Landau

RAMON AND LANDAU			Buildout AM				Buildout PM					
	2006		PK HR		ADT		PK HR		ADT			
Movement	AM	PM	Approach	Departure	Approach	Departure	Approach	Departure	Approach	Departure	AM	PM
NBL	0	0	0	0		0	0	0		0	0	0
NBT	0	0	0	0		0	0	0		0	0	0
NBR	0	0	0	0		0	0	0		0	0	0
SBL	377	314	434	633	434	483	353	361	361	402	496	379
SBT	0	0	0	0	0		0	0	0		0	0
SBR	511	413	588	615	588	742	464	666	475	600	634	552
EBL	260	546	566	338	385	299	741	628	808	628	397	702
EBT	529	1102	1152	888	783	678	1495	1267	1631	1412	876	1452
EBR	0	0	0	0	0		0	0	0		0	0
WBL	0	0	0	0	0		0	0	0		0	0
WBT	913	990	1253	1099	1184	1326	1325	1597	1284	1438	1216	1411
WBR	224	365	307	291	291	258	489	420	473	420	287	451
SUM	2814	3730	4299	3865	3663	3786	4867	4939	5032	4900	3906	4947

Leg	Direction	2006	2030	2-Way
North Leg	NB	8495	9769	21269
	SB	10000	11500	
South Leg	NB	0		
	SB	0		
East Leg	EB	19121	24503	50367
	WB	19942	25864	
West Leg	EB	20490	30321	63700
	WB	22983	33379	



Table D-7 Year 2030 Growth Estimation – Ramon and Cathedral Canyon

RAMON AND CAT. CANYON	LEG	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
2006		AM	PM	AM	PM	AM	PM	AM	PM
Pk Hr Counts	Approach	298	321	566	985	1075	1382	912	1361
	Departure	143	270	550	636	897	1496	1261	1647
CVAG Pk Hr	Approach							1145	1496
	Departure							1053	1548
CVAG ADT	2-way	4532		16053		38648		38659	
	Approach	2962		8292		19502		19483	
	Departure	1570		7761		19146		19176	
Buildout		AM	PM	AM	PM	AM	PM	AM	PM
Gen Plan ADT	2-way			15200		49900		47100	
RCTC Pk Hr	Approach	56	153	372	659	1507	1812	1514	1438
	Departure	74	189	401	652	1483	1469	1492	1752
RCTC ADT	2-WAY	2000		18000		55000		51000	
	Approach	1000		8000		29000		25000	
	Departure	1000		10000		26000		26000	
Avg Pk Hr Growth	Approach	0.188	0.477	0.657	0.669	1.402	1.311	1.472	1.007
	Departure	0.517	0.700	0.729	1.025	1.653	0.982	1.290	1.097
Gen Plan ADT Growth	2-WAY	0.000		0.947		1.291		1.218	
RCIP ADT Growth	2-WAY	0.441		1.121		1.423		1.319	
	Approach	0.338		0.965		1.487		1.283	
	Departure	0.637		1.289		1.358		1.356	
Projected Growth									
Pk Hr	Approach	1.150	1.150	1.150	1.150	1.402	1.311	1.472	1.150
	Departure	1.150	1.150	1.150	1.150	1.653	1.150	1.290	1.150
ADT	Approach	1.150		1.150		1.400		1.274	
	Departure	1.150		1.150		1.357		1.298	



Table D-8 Year 2030 Traffic Projection – Ramon and Cathedral Canyon

RAMON AND CAT. CANYON			Buildout AM				Buildout PM					
Movement	2006		PK HR		ADT		PK HR		ADT			
	AM	PM	Approach	Departure	Approach	Departure	Approach	Departure	Approach	Departure	AM	PM
NBL	343	510	394	442	394	445	587	587	587	662	420	606
NBT	78	125	90	90	90	90	144	144	144	144	90	152
NBR	145	350	167	240	167	197	403	403	403	475	193	484
SBL	66	88	76	109	76	90	101	101	101	119	88	146
SBT	163	129	187	187	187	187	148	148	148	148	188	149
SBR	69	104	79	89	79	90	120	120	120	135	85	124
EBL	61	123	90	70	78	70	141	141	157	141	77	146
EBT	686	1058	1010	1134	874	931	1217	1217	1347	1436	988	1375
EBR	165	180	243	190	210	190	207	207	229	207	209	213
WBL	222	327	311	255	311	255	429	376	458	376	284	412
WBT	849	1033	1190	1095	1189	1102	1354	1188	1447	1341	1144	1342
WBR	4	22	6	5	6	5	29	25	31	25	6	34
SUM	2851	4049	3843	3906	3661	3651	4879	4656	5171	5210	3765	4979

Leg	Direction	2006	2030	2-Way
North Leg	NB	1570	1806	5212
	SB	2962	3406	
South Leg	NB	8292	9536	18461
	SB	7761	8925	
East Leg	EB	19146	25989	53300
	WB	19502	27311	
West Leg	EB	19483	24813	49700
	WB	19176	24887	

Table D-9 Year 2030 Growth Estimation – Ramon and Date Palm

RAMON AND CAT. CANYON	LEG	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
2006		AM	PM	AM	PM	AM	PM	AM	PM
Pk Hr Counts	Approach	1284	871	577	1005	738	1116	987	1165
	Departure	611	1049	1082	906	905	959	988	1243
CVAG Pk Hr	Approach	1311	987					1091	1650
	Departure	639	1140					1785	1702
CVAG ADT	2-way	25532		26413		29682		32538	
	Approach	13378		12321		15251		16003	
	Departure	12154		14092		14431		16535	
Buildout		AM	PM	AM	PM	AM	PM	AM	PM
RCTC Pk Hr	Approach	33800		33600		41800		49900	
	Departure								
RCTC ADT	2-WAY	1029	1314	1125	1327	1512	1875	1483	1469
	Approach	1046	1222	1007	1370	1589	1582	1507	1812
	Departure	34000		32000		53000		55000	
Avg Pk Hr Growth	Approach	17000		17000		27000		26000	
	Departure	17000		15000		26000		29000	
Gen Plan ADT Growth	2-WAY	0.793	1.414	1.950	1.320	2.049	1.680	1.427	1.044
RCIP ADT Growth	2-WAY	1.674	1.116	0.931	1.512	1.756	1.650	1.087	1.231
	Approach	1.324		1.272		1.408		1.534	
	Departure	1.332		1.212		1.786		1.690	
Projected Growth		1.271		1.380		1.770		1.625	
Pk Hr	Approach	1.399		1.064		1.802		1.754	
	Departure								
ADT	Approach	1.150	1.414	1.950	1.320	2.049	1.680	1.427	1.150
	Departure	1.674	1.150	1.150	1.512	1.756	1.650	1.150	1.231



Table D-10 Year 2030 Traffic Projection – Ramon and Date Palm

RAMON AND CAT. CANYON			Buildout AM				Buildout PM					
	2006		PK HR		ADT		PK HR		ADT			
Movement	AM	PM	Approach	Departure	Approach	Departure	Approach	Departure	Approach	Departure	AM	PM
NBL	145	268	283	167	187	241	354	330	345	445	220	369
NBT	353	633	688	591	455	477	836	728	815	855	553	809
NBR	79	104	154	139	102	132	137	172	134	173	132	361
SBL	207	189	238	363	271	345	267	312	247	315	305	334
SBT	768	481	883	883	1005	908	680	727	630	569	920	652
SBR	309	201	355	355	404	513	284	247	263	334	407	283
EBL	174	259	248	291	281	235	298	298	419	350	264	342
EBT	619	666	884	1087	1000	1031	766	1099	1076	1109	1001	1047
EBR	194	240	277	223	314	229	276	363	388	284	261	331
WBL	120	185	246	138	199	142	311	280	306	219	182	378
WBT	534	774	1094	614	884	886	1300	952	1281	1284	870	1205
WBR	84	157	172	141	139	114	264	181	260	212	142	266
SUM	3586	4157	5522	4992	5240	5252	5774	5688	6164	6148	5252	5943

Leg	Approach	2006	2030	2-Way ADT
North Leg	NB	12154	16425	33933
	SB	13378	17508	
South Leg	NB	12321	15867	32533
	SB	14092	16667	
East Leg	EB	14431	24030	49267
	WB	15251	25236	
West Leg	EB	16003	25864	53300
	WB	16535	27436	

Table D-11 Year 2030 Growth Estimation – Ramon and Da Vall

RAMON AND CAT. CANYON	LEG	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
2006		AM	PM	AM	PM	AM	PM	AM	PM
Pk Hr Counts	Approach	571	217	274	279	743	698	915	768
	Departure	238	213	625	263	954	722	686	764
CVAG Pk Hr	Approach	622	358	298	673			1091	1650
	Departure	236	738	852	752			1785	1702
CVAG ADT	2-way	10187		14189		26773		27060	
	Approach	4662		5496		12147		14152	
	Departure	5525		8693		14626		12908	
Buildout		AM	PM	AM	PM	AM	PM	AM	PM
RCTC Pk Hr	Approach	24300		23000		45800		42100	
	Departure								
RCTC ADT	2-WAY	1024	1524	579	832	2193	3113	1669	1731
	Approach	877	1552	646	835	2293	2701	1649	2113
	Departure	32000		20000		77000		57000	
Avg Pk Hr Growth	Approach	16000		10000		39000		28000	
	Departure	16000		10000		38000		29000	
Gen Plan ADT Growth	2-WAY	1.717	5.301	2.024	1.748	2.952	4.460	1.664	1.432
RCIP ADT Growth	2-WAY	3.700	3.264	0.875	1.645	2.404	3.741	1.335	1.714
	Approach	2.385		1.621		1.711		1.556	
	Departure	3.141		1.410		2.876		2.106	
Projected Growth		3.432		1.820		3.211		1.979	
Pk Hr	Approach	2.896		1.150		2.598		2.247	
	Departure								
ADT	Approach	1.717	5.301	2.024	1.748	2.952	4.460	1.664	1.432
	Departure	3.700	3.264	1.150	1.645	2.404	3.741	1.335	1.714



Table D-12 Year 2030 Traffic Projection – Ramon and Da Vall

RAMON AND CAT. CANYON			Buildout AM				Buildout PM					
	2006		PK HR		ADT		PK HR		ADT			
Movement	AM	PM	Approach	Departure	Approach	Departure	Approach	Departure	Approach	Departure	AM	PM
NBL	117	147	237	156	189	230	257	252	238	290	204	260
NBT	110	111	223	407	178	309	194	362	179	312	280	262
NBR	47	21	95	113	76	113	37	79	34	50	100	162
SBL	220	68	378	529	657	527	360	254	203	163	523	246
SBT	314	123	539	361	938	438	652	202	367	171	569	349
SBR	37	26	64	49	110	73	138	45	78	51	75	78
EBL	30	28	50	111	56	84	40	91	53	79	76	66
EBT	687	633	1143	1651	1292	1645	906	2368	1190	1516	1433	1496
EBR	198	107	329	228	372	276	153	176	201	149	302	205
WBL	113	33	334	130	294	157	147	54	86	46	229	146
WBT	532	591	1570	710	1383	1048	2636	1013	1536	1164	1178	1588
WBR	98	74	289	363	255	275	330	242	192	208	296	243
SUM	2503	1962	5250	4808	5800	5175	5851	5138	4357	4198	5265	5101

Leg	Approach	2006	2030	2-Way ADT
North Leg	NB	5525	15512	29433
	SB	4662	13922	
South Leg	NB	5496	8885	21000
	SB	8693	12115	
East Leg	EB	14626	35028	66600
	WB	12147	31572	
West Leg	EB	14152	26609	52033
	WB	12908	25424	

APPENDIX E: DAILY CAPACITY CALCULATIONS

In place of using Riverside County general daily capacities, capacity analysis was performed for specific links within the study corridor. The flow chart displayed in Figure E-1 illustrates procedures taken to calculate the capacity seen on a daily basis. Riverside County daily capacities are purely for long range planning purposes, and contain many assumptions. Road segment capacity is dependent on a number of factors, including: side street volumes, average green time, number of approach lanes, and the density of signalized intersections.

For a worse case estimate, the 24 hour daily counts are compared to 16 hour capacity estimates. Analyzing hourly counts for the 24 hour periods, as much as 90% of daily traffic traveled through the study corridor from 6AM to 10PM. Therefore, a 16 hour capacity period was used to obtain segment level of service.

Assumptions and definitions:

g/C = green time / cycle time

n = number of approach lanes

s = saturation flow in vehicles per hour (assumed to be 1,800 vehicles per hour)

v/c = volume to capacity ratio

Figure E-1 Daily Capacity Calculation Procedure

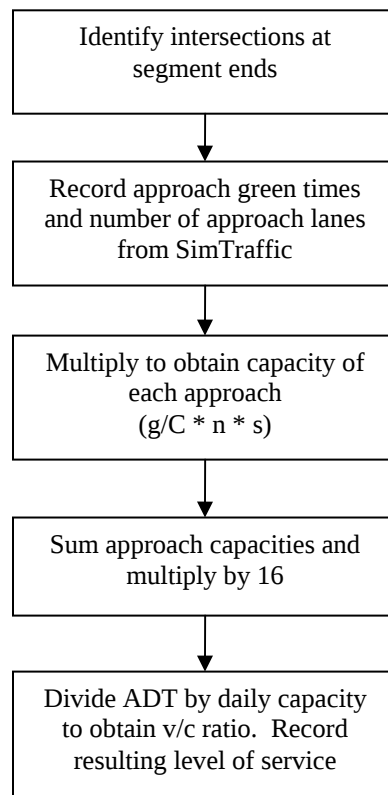


Table E-1 Year 2006 Daily Capacity Calculations

	Reference Intersection		g/C						# lanes						Hourly Capacity			
Ramon Road	Westbound	Eastbound	WBT	SBR		EBT	EBL		WBT	SBR		EBT	EBL		WB	EB	Two-way	16-hour
West of Landau	Landau	Landau	0.35	0.12		0.79	0.33		2	1		2	0.5		1,476	2,808	4,284	68,550
Pedestrian = 33% of cycles			0.31	0.2		0.54	0.21											
	Westbound	Eastbound	WBT	WBL		EBT	EBL		WBT	WBL		EBT	EBL					
West of Cathedral Canyon	Wh Palms	Cat Canyon	0.42	0.11		0.31	0.14		3	1		3	1		2,466	1,926	4,392	70,272
West of Date Palm	Desert Vista	Date Palm	0.84	0.06		0.26	0.14		3	1		2.5	1		4,644	1,422	6,066	97,056
East of Date Palm	Date Palm	Cat Village	0.3	0.19		0.45	0.09		3	1		2	1		1,962	1,782	3,744	59,904
West of Da Vall	Outdoor Resorts	Da Vall	0.57	0.04		0.34	0.05		3	1		3	1		3,150	1,926	5,076	81,216
East of Da Vall	Da Vall	Da Vall	0.42	0.09		0.34	0.18		3	1		3	1		2,430	2,160	4,590	73,440
Landau Blvd	Southbound	Northbound	SBT	SBL		WBR	EBL		SBT	SBL		WBR	EBL					
North of Ramon	Landau	Landau	0.12	0.12		0.35	0.33		1	1.5		1	1		540	1,224	1,764	28,224
Cathedral Canyon	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL	NBT	SB	NB		
North of Ramon	Cat Canyon	Cat Canyon	0.16	0.16		0.38	0.14	0.21	0.5	1		0.5	1	1	432	972	1,404	22,464
	Southbound	Northbound	EBR	WBL	SBT	NBT	NBL		EBR	WBL	SBT	NBT	NBL		SB	NB		
South of Ramon	Cat Canyon	Cat Canyon	0.31	0.21	0.16	0.21	0.21		0.5	1	1	1	2		945	1,134	2,079	33,264
Date Palm	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL	NBT	SB	NB		
North of Ramon	Date Palm	Date Palm	0.23	0.17		0.3	0.14	0.18	3	1		0.5	1	2	1,548	1,170	2,718	43,488
	Southbound	Northbound	EBR	WBL	SBT	NBT	NBL		EBR	WBL	SBT	NBT	NBL		SB	NB		
South of Ramon	Date Palm	Date Palm	0.26	0.19	0.23	0.18	0.12		1	1	2	2	2		1,638	1,080	2,718	43,488
Da Vall	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL	NBT	SB	NB		
North of Ramon	Da Vall	Da Vall	0.16	0.14		0.42	0.05	0.18	1	1		0.5	1	1	540	792	1,332	21,312
	Southbound	Northbound	EBR	WBL	SBT	NBT	NBL		EBR	WBL	SBT	NBT	NBL		SB	NB		
South of Ramon	Da Vall	Da Vall	0.34	0.09	0.16	0.18	0.14		0.5	1	1	2	1		756	900	1,656	26,496

Table E-2 Year 2010 Daily Capacity Calculations

	Reference Intersection		g/C						# lanes						Hourly Capacity			
Ramon Road	Westbound	Eastbound	WBT	SBR		EBT	EBL		WBT	SBR		EBT	EBL		WB	EB	Two-way	16-hour
West of Landau	Landau	Landau	0.31	0.12		0.77	0.35		2	1		2	0.5		1,332	3,087	4,419	70,704
Pedestrian = 33% of cycles			0.29	0.19		0.55	0.24											
	Westbound	Eastbound	WBT	WBL		EBT	EBL		WBT	WBL		EBT	EBL					
West of Cathedral Canyon	Wh Palms	Cat Canyon	0.4	0.11		0.23	0.15		3	1		3	1		2,358	1,512	3,870	61,920
West of Date Palm	Desert Vista	Date Palm	0.8	0.07		0.27	0.18		3	1		2.5	1		4,446	1,539	5,985	95,760
East of Date Palm	Date Palm	Cat Village	0.27	0.18		0.35	0.1		3	1		2	1		1,782	1,440	3,222	51,552
West of Da Vall	Outdoor Resorts	Da Vall	0.7	0.04		0.26	0.03		3	1		3	1		3,852	1,458	5,310	84,960
East of Da Vall	Da Vall	Da Vall	0.28	0.04		0.26	0.03		3	1		3	1		1,584	1,458	3,042	48,672
Landau Blvd	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL					
North of Ramon	Landau	Landau	0.12	0.12		0.31	0.35		1	1.5		1	1		540	1,188	1,728	27,648
Cathedral Canyon	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL	NBT	SB	NB		
North of Ramon	Cat Canyon	Cat Canyon	0.11	0.11		0.27	0.15	0.18	0.5	1		0.5	1	1	297	837	1,134	18,144
	Southbound	Northbound	EBR	WBL	SBT	NBT	NBL		EBR	WBL	SBT	NBT	NBL		SB	NB		
South of Ramon	Cat Canyon	Cat Canyon	0.23	0.16	0.11	0.18	0.18		0.5	1	1	1	2		693	972	1,665	26,640
Date Palm	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL	NBT	SB	NB		
North of Ramon	Date Palm	Date Palm	0.21	0.16		0.27	0.18	0.23	3	1		0.5	1	2	1,422	1,395	2,817	45,072
	Southbound	Northbound	EBR	WBL	SBT	NBT	NBL		EBR	WBL	SBT	NBT	NBL		SB	NB		
South of Ramon	Date Palm	Date Palm	0.27	0.18	0.21	0.23	0.13		1	1	2	2	2		1,566	1,296	2,862	45,792
Da Vall	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL	NBT	SB	NB		
North of Ramon	Da Vall	Da Vall	0.17	0.11		0.28	0.03	0.2	1	1		0.5	1	1	504	666	1,170	18,720
	Southbound	Northbound	EBR	WBL	SBT	NBT	NBL		EBR	WBL	SBT	NBT	NBL		SB	NB		
South of Ramon	Da Vall	Da Vall	0.26	0.04	0.17	0.2	0.14		0.5	1	1	2	1		612	972	1,584	25,344

Table E-3 Year 2020 Daily Capacity Calculations

	Reference Intersection		g/C						# lanes						Hourly Capacity			
Ramon Road	Westbound	Eastbound	WBT	SBR		EBT	EBL		WBT	SBR		EBT	EBL		WB	EB	Two-way	16-hour
West of Landau	Landau	Landau	0.35	0.12		0.78	0.33		2	1		2	0.5		1,476	2,784	4,260	68,164
Pedestrian = 33% of cycles			0.31	0.2		0.54	0.21											
	Westbound	Eastbound	WBT	WBL		EBT	EBL		WBT	WBL		EBT	EBL					
West of Cathedral Canyon	Wh Palms	Cat Canyon	0.42	0.1		0.31	0.16		3	1		3	1		2,448	1,962	4,410	70,560
West of Date Palm	Desert Vista	Date Palm	0.77	0.07		0.27	0.15		3	1		2.5	1		4,284	1,485	5,769	92,304
East of Date Palm	Date Palm	Cat Village	0.32	0.2		0.47	0.09		3	1		2	1		2,088	1,854	3,942	63,072
West of Da Vall	Outdoor Resorts	Da Vall	0.61	0.03		0.34	0.06		3	1		3	1		3,348	1,944	5,292	84,672
East of Da Vall	Da Vall	Da Vall	0.41	0.09		0.34	0.06		3	1		3	1		2,376	1,944	4,320	69,120
Landau Blvd	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL					
North of Ramon	Landau	Landau	0.12	0.12		0.35	0.33		1	1.5		1	1		540	1,224	1,764	28,224
Cathedral Canyon	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL	NBT	SB	NB		
North of Ramon	Cat Canyon	Cat Canyon	0.15	0.15		0.39	0.16	0.21	0.5	1		0.5	1	1	405	1,017	1,422	22,752
	Southbound	Northbound	EBR	WBL	SBT	NBT	NBL		EBR	WBL	SBT	NBT	NBL		SB	NB		
South of Ramon	Cat Canyon	Cat Canyon	0.31	0.21	0.15	0.21	0.21		0.5	1	1	1	2		927	1,134	2,061	32,976
Date Palm	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL	NBT	SB	NB		
North of Ramon	Date Palm	Date Palm	0.21	0.17		0.32	0.15	0.23	3	1		0.5	1	2	1,440	1,386	2,826	45,216
	Southbound	Northbound	EBR	WBL	SBT	NBT	NBL		EBR	WBL	SBT	NBT	NBL		SB	NB		
South of Ramon	Date Palm	Date Palm	0.27	0.2	0.21	0.19	0.15		1	1	2	2	2		1,602	1,224	2,826	45,216
Da Vall	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL	NBT	SB	NB		
North of Ramon	Da Vall	Da Vall	0.15	0.14		0.41	0.06	0.2	1	1		0.5	1	1	522	837	1,359	21,744
	Southbound	Northbound	EBR	WBL	SBT	NBT	NBL		EBR	WBL	SBT	NBT	NBL		SB	NB		
South of Ramon	Da Vall	Da Vall	0.34	0.09	0.17	0.18	0.15		0.5	1	1	2	1		774	918	1,692	27,072

Table E-4 Year 2030 Daily Capacity Calculations

	Reference Intersection		g/C						# lanes						Hourly Capacity			
Ramon Road	Westbound	Eastbound	WBT	SBR		EBT	EBL		WBT	SBR		EBT	EBL		WB	EB	Two-way	16-hour
West of Landau	Landau	Landau	0.35	0.12		0.78	0.34		2	1		2	0.5		1,464	2,862	4,326	69,211
Pedestrian = 33% of cycles			0.3	0.2		0.6	0.21											
	Westbound	Eastbound	WBT	WBL		EBT	EBL		WBT	WBL		EBT	EBL					
West of Cathedral Canyon	Wh Palms	Cat Canyon	0.41	0.11		0.31	0.18		3	1		3	1		2,412	1,998	4,410	70,560
West of Date Palm	Desert Vista	Date Palm	0.84	0.06		0.25	0.15		3	1		2.5	1		4,644	1,395	6,039	96,624
East of Date Palm	Date Palm	Cat Village	0.27	0.18		0.52	0.11		3	1		2	1		1,782	2,070	3,852	61,632
West of Da Vall	Outdoor Resorts	Da Vall	0.61	0.11		0.36	0.05		3	1		3	1		3,492	2,034	5,526	88,416
East of Da Vall	Da Vall	Da Vall	0.41	0.08		0.36	0.05		3	1		3	1		2,358	2,034	4,392	70,272
Landau Blvd	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL					
North of Ramon	Landau	Landau	0.11	0.11		0.35	0.34		1	1.5		1	1		495	1,242	1,737	27,792
Cathedral Canyon	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL	NBT	SB	NB		
North of Ramon	Cat Canyon	Cat Canyon	0.16	0.16		0.38	0.18	0.21	0.5	1		0.5	1	1	432	1,044	1,476	23,616
	Southbound	Northbound	EBR	WBL	SBT	NBT	NBL		EBR	WBL	SBT	NBT	NBL		SB	NB		
South of Ramon	Cat Canyon	Cat Canyon	0.31	0.21	0.16	0.21	0.21		0.5	1	1	1	2		945	1,134	2,079	33,264
Date Palm	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL	NBT	SB	NB		
North of Ramon	Date Palm	Date Palm	0.21	0.16		0.27	0.15	0.23	3	1		0.5	1	2	1,422	1,341	2,763	44,208
	Southbound	Northbound	EBR	WBL	SBT	NBT	NBL		EBR	WBL	SBT	NBT	NBL		SB	NB		
South of Ramon	Date Palm	Date Palm	0.25	0.18	0.21	0.19	0.14		1	1	2	2	2		1,530	1,188	2,718	43,488
Da Vall	Southbound	Northbound	SBT	SBL		WBR	EBL	NBT	SBT	SBL		WBR	EBL	NBT	SB	NB		
North of Ramon	Da Vall	Da Vall	0.24	0.17		0.41	0.05	0.2	1	1		0.5	1	1	738	819	1,557	24,912
	Southbound	Northbound	EBR	WBL	SBT	NBT	NBL		EBR	WBL	SBT	NBT	NBL		SB	NB		
South of Ramon	Da Vall	Da Vall	0.36	0.08	0.17	0.23	0.16		0.5	1	1	2	1		774	1,116	1,890	30,240